Instructions

Please download this Word document (available on the Industrial Commission/Outdoor Heritage Fund Program website at http://www.nd.gov/ndic/outdoor-infopage.htm) to your computer and provide the information as requested. You are not limited to the spacing provided. After completing the report, save it and attach it to an e-mail and send it to outdoorheritage@nd.gov AND print it and mail it to: North Dakota Industrial Commission, ATTN: Outdoor Heritage Fund Program, State Capitol – Fourteenth Floor, 600 East Boulevard Ave. Dept. 405, Bismarck, ND 58505. If you are unable to scan attachments, mail them with your paper copy of the report. You will be sent a confirmation by e-mail of receipt of your report and attachments. The project reports shall be provided to the Commission in both electronic and hard-copy formats with permission for unrestricted distribution. The electronic versions shall be in a suitable format for posting on the Outdoor Heritage Fund/Commission website.

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 Report Date Period Covered by Report								
014-156	11/30/2020			7/1/2020-11/30/2020				
Project Name								
Natural Resou	rce Steward	ship in North I	Dakota	's Parks, Preserves and Natural Areas II				
Project Sponsor N	Name							
North Dakota	Parks and	Recreation						
Responsible Official (Last, First Middle) Responsible Official's Title								
Andrea Travn	Andrea Travnicek Director							
Project Sponsor Address								
1600 East Century Ave.								
City	City State Zip Code Telephone Number							
Bismarck ND 58503 701-328-5357								
Financial Update								

	Funds Spent THIS Reporting Period*	Total Funds Spent to Date	Balance of Remaining Funds
Match Funding	\$0.00	\$562.65	\$10,536.35
In-kind Funding	\$10,825.62	\$16,780.62	\$6,219.38
Sponsor Funding	\$0.00	\$2,218.86	\$1,781.14
OHF Funding	\$2,489.70	\$24,158.26	\$84,521.74
Total			

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

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

If yes, please explain:

^{*}As appropriate please provide copies of receipts for purchases.

Work Completed during Period Covered by Report:

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

See Attached PDF

Natural Resource Stewardship in North Dakota's Parks, Preserves and Natural Areas II

Status Report 3 for:

Work Completed during Period Covered by Report: July 1 - November 30, 2020

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.

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Signature of Responsible Official

Kathy Duttenhedner

*As appropriate please provide copies of receipts for purchases.

Resource Stewardship in North Dakota's Parks, Preserves and Natural Areas II

Work Completed during Period Covered by Report: July 1- November 30, 2020

Project Goals

- 1. Conserve and enhance existing native and restored prairies, woodlands, and 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

- 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.
- 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.
- 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* 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.

Native Prairie Restoration and Enhancements Strategies and Best Management Practices

A multi-site, long-term, collaborative project with a specific goal is to restore, enhance, and sustain a healthy, diverse, and sustainable native prairie, thus enhancing the biodiversity on parklands, preserves, and natural areas optimal visitor experiences. The prairie restoration and enhancement strategies and best management practices will include using various practices, including fire, haying, grazing, tillage, herbicides, and seeding and planting of native grasses and forbs.

Tasks Completed July 1-November 30, 2020

Proper restoration maintenance will allow the prairie restoration sites to flourish productively and sustainably. Summer – fall maintenance strategies include noxious weed control by implementing mechanical and chemical strategies and inter-seeding native forbs and grasses. Vigilant noxious and invasive species control and eradication are paramount to both the immediate and long-term health and success of each restoration site. Site assessments are completed each growing season. Post field season, all restoration plans and budgets are updated, and 2021 management actions are identified.

Table 1 2020 Restoration Expenses and Tasks* July 1-November 30, 2020

Prairie Restoration Expenses/Tasks	In-kind Expenses
Interseeding (approx. 6 hrs.)	\$169.65
Monitoring & (approx. 34 hrs.)	\$912.10
Noxious Weed Control (Milestone & Perspective herbicide)	\$633.27
TOTALS	\$1715.02

^{*}Tasks completed by Natural Resources Division staff

Tree and Shrub Plantings Strategies and Best Management Practices

A multi-site, long-term, collaborative project with a specific goal to enhance existing trees and shrub vegetation habitat acres and biodiversity on parklands, preserves, and natural areas. The project aims to enhance the existing mosaic of tree and shrub complex habitats by planting a diverse selection of native trees and shrubs.

The diverse plantings of trees and shrubs will provide food, living space, cover various wildlife species, and greatly enhance the visitor experience. May-June park staff planted almost 750 trees and shrubs. Individual trees and tree and shrub complexes are mapped using an iPad, GNSS



Figure 1 Fort Abraham Lincoln State Park Tree Planting

receiver, and ESRI GIS Collector mapping software. ArcGis tree planting data have not been post-processed at the time of this status report.

During July-October, trees and shrubs are mulched, staked if needed, weed barrier installed, and weeds controlled both mechanically, manually, and with chemicals. In the fall of the year, bark protectors and deer fences are installed. The majority of the tree and shrub maintenance tasks are completed by seasonal park staff, including weeding, mulching, installing bark protectors, guards, and deer fence. Natural Resource Division staff assisted with deer fence installation. Deer fencing has proven to be an effective means to protect trees and shrubs from deer browsing.



Level 1 Limited Visual Tree Risk Assessment (ANSI A300 Standard) is an ongoing task within all state park campgrounds. The Limited Visual assessment involves a systematic evaluation of trees in designated areas to identify high and extreme risk trees. Assessment includes GIS Collector data and mapping technologies. Tree risk mitigation reports and maps aid park staff in implementing mitigation efforts such as removing and pruning high-risk trees.

Natural resources Division staff assist park staff in tree risk mitigation measures. Over 4,484 trees in 12 state parks and interpretive sites with 432 trees requiring removal mitigation. By November 24, 2020, 77% of these high-risk trees have been removed. Over 500 trees and shrubs

Table 2 Tree planting and maintenance

Tree Planting and Maintenance Expenses & Tasks*	In-Kind Expenses
Tree Risk and Tree Plantings Assessments (approx. 160 hrs.)	\$6,657.60
Deer Fence Installation (approx. 40 hrs.)	\$1,044.00
High tree risk removals and pruning (approx. 54 hrs.)	\$1,409.00
TOTALS	\$9,110.60

^{*}Tasks completed by Natural Resources Division staff

Table 3 Tree planting maintenance supplies

Tree Planting and Maintenance Expenses Description	Quantity/Price	Total OHF Expenses
Plantrar Rigid Mesh Tubes – Tree and Shrub Protector	5 @ \$51.10	\$255.50
Plantra Stretch-Lock Plant Tying System	5 @ \$14.10	\$ 70.50
Plantra Trunk Saver Mower-Trimmer Tree Guards	12 @ \$15.35	\$184.20
DeerBuster.Com 5' X 330' C Flex Select Deer Fence	10 @ \$197.95	\$1979.50
TOTALS		\$2489.70

Table 4 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: Native forb and grass seed	\$25,000.00	\$3,000.00	\$8,000.00	\$0.00	\$0.00	\$36,000.00
Tree and shrub Planting Enhancements: Tree and shrub stock	\$60,000.00	\$5,000.00	\$9,000.005	\$0.00	\$4,000.00	\$78,000.00
Tree and shrub Planting Enhancements Deer fence and rebar posts	\$4,500.00	\$1,000.00	\$0.00	\$0.00	\$0.00	\$5,500.00
Tree and shrub Planting Enhancements Mulch. tubes stakes	\$4,180.00	\$100.00	\$0.00	\$0.00	\$0.00	\$4,280.00
Native Prairie Restorations & Enhancements: Chemical for restorations	\$0.00	\$2,000.00	\$0.00	\$0.00	\$0.00	\$2,000.00
Hazardous Tree removal services	\$15,000.00	\$0.00	\$6,000.00	\$0.00	\$0.00	\$21,000.00
Total Costs	\$108,680.00	\$11,100.00	\$23,000.00	\$0.00	\$4,000.00	\$146,780.00

Table 5 Expenses and matches July 1 - November 30, 2020

Project Task Expenses	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: Native forb and grass seed- Interseeding-Monitoring			\$1,081.753			
Tree and shrub Planting Enhancements/Assessment : Tree and shrub stock						
Tree and shrub Planting Enhancements: Deer fence and rebar posts & installation	\$1,979.50 ¹		\$1,044.004			
Tree and shrub Planting Enhancements tubes, stakes, guards	\$510.20 ²					
Tree and shrub Planting Enhancements mulch						
Native Prairie Restorations & Enhancements: Chemical for restorations			\$633.27 ^{5**}			
Tree Risk and Tree Planting Assessments & Mitigation			\$8,066.60 ⁶			
Native Prairie Restorations & Enhancements Contracted/Equipment Rental Services						
Total Costs	\$2,489,70		\$10,825.62			

¹ DeerBuster.Com 5' X 33' C Flex Select Deer Fence 10 rolls @ \$197.95 = \$1,979.50

² Plantrar Rigid Mesh Tubes – Tree and Shrub Protector 5 @ \$51.10 = \$255.50

² Plantrar Stretch-Lock Plant Tying System 5 @ \$14.10 = \$70.50

²Plantrar Trunk Saver Mower-Trimmer Tree Guards 12 @ \$15.35 = \$184.20

³Labor prairie restoration monitoring–Biologist II – 35 hours @ \$26.10/hr. = \$912.10

³Labor prairie restoration <u>interseeding</u>–Biologist II – 6.5 hours @ \$26.10/hr. = \$169.65

⁴Labor <u>deer fence installation</u> –Biologist II - 40 hours @ \$26.10/hr. = \$1,044.00

⁵Chemical costs for restorations Milestone herbicide \$7 oz./acre @ approx. \$18.10/acre, Perspective 5 oz./acre approx. \$32.30/acre**

⁶Labor tree risk and tree plantings assessment FTE Biologist III 160 hours @ \$41.61/hr. = \$6,657.60

⁶Labor tree risk mitigation critical removals FTE Biologist II 54 hours @ \$26.10/hr. = \$1,409.00

^{**2020} North Dakota Weed Control Guide – NDSU Extension North Dakota Herbicide Compendium pgs. 135-145

Vendor	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
DeerBuster.Com	\$1,979.50					\$1,979.50
Plantra, Inc.	\$510.20					\$510.20
ND Parks and Recreation Natural Resources Staff- Interseeding			\$169.65			\$169.65
ND Parks and Recreation Natural Resources Staff- Monitoring			\$912.10			\$912.10
ND Parks and Recreation Natural Resources Staff- Tree Assessments			\$6,657.60			\$6,657.60
ND Parks and Recreation Natural Resources Staff- Deer Fence Installation			\$1,044.00			\$1,044.00
ND Parks and Recreation Natural Resources Staff- Interseeding			\$1,409.00			\$1,409.00
ND Parks and Recreation Natural Resources – Chemical			\$633.27			\$633.27
Total Costs	\$2,489,70		\$10,825.62			\$13,315.32



Figure 2 Fort Stevenson State Park Restoration

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Kathy Duttenhefner

Signature of Responsible Official