



INDUSTRIAL COMMISSION OF NORTH DAKOTA

Doug Burgum
Governor

Drew H. Wrigley
Attorney General

Doug Goehring
Agriculture Commissioner

Thursday, June 29, 2023

Governor's Conference Room or Microsoft Teams – 12:30 p.m.

Join on your computer or mobile app

[Click here to join the meeting](#)

Or call in (audio only)

[+1 701-328-0950,,474955377#](#)

- I. **North Dakota Insurance Reserve Fund – Brennan Quintus**
 - A. **Consideration of reinsurance policy recommendation for the Excess Loss Reinsurance Coverage – Fire and Tornado Fund**
(Attachment 1 and 1A)
 - B. Other Fire and Tornado Reinsurance Contract Business

(approximately 1:00 p.m.)

- II. **North Dakota Public Finance Agency – DeAnn Ament**
 - A. **Consideration of approval for the following loan applications:**
 - i. **Fargo – Clean Water - \$25,000,000 increase to existing previously approved \$126,500,000 loan** (Attachment 2)
 - ii. **Bismarck – Clean Water - \$45,000,000** (Attachment 3)
 - B. Presentation of State Revolving Fund loans approved by Public Finance Advisory Committee: (Attachment 4)
 - i. Fargo – Clean Water - \$1,000,000 increase to existing previously approved \$20,229,000 loan
 - ii. Bismarck – Drinking Water - \$2,000,000 with \$1,500,000 loan forgiveness
 - iii. Galesburg – Drinking Water - \$606,000
 - C. **Consideration of reappointment of Keith Lund to Public Finance Advisory Committee** (Attachment 5)
 - D. Other Public Finance Authority business

(approximately 1:20 p.m.)

III. North Dakota Housing Finance Agency – David Flohr, Brandon Dettlaff, Jennifer Henderson

- A. **Consideration of increases to annual income limits for FirstHome and Down Payment Closing Cost Assistance (DCA) programs** (Attachment 6)
- B. **Consideration of increases to acquisition cost limits for the FirstHome Standard, Start, HomeAccess, and DCA programs** (Attachment 7)
- C. Report on Authorizing Declaration of Intent to Issue Multifamily Revenue Bonds, Lashkowitz Riverfront 4, Fargo (Attachment 8)
- D. **Consideration of recommendation of reappointment of Ninetta Wandler and Jim Farnsworth to Housing Finance Advisory Board** (Attachment 9)
- E. Housing Finance Agency Legislative Update
- F. Other Housing Finance Agency business

(approximately 1:40 p.m.)

IV. North Dakota Mill and Elevator – Vance Taylor, Cathy Dub

- A. **Consideration of approval of capital projects expenditures – Midds Storage Project Phase III and Industrial Vacuum purchase** (Attachment 10, 10A, 10B, 10C)
- B. **Consideration of approval of Mill and Elevator Profits Transfer for Fiscal Year 2023** (Attachment 11)
- C. Other Mill and Elevator business

(approximately 2:00 p.m.)

V. State Energy Research Center – Reice Haase

- A. **Consideration of modification to Contract No. SERC 2019-01 to incorporate 68th Legislative Assembly changes** (Attachment 12)

(approximately 2:10 p.m.)

VI. North Dakota Outdoor Heritage Fund – Robert “Bob” Kuylen

- A. Presentation of the Outdoor Heritage Fund Project Management and Financial Report – Reice Haase (Attachment 13)
- B. **Consideration of the Outdoor Heritage Fund Advisory Board recommendations for Grant Round 22 applications:**
 - i. **22-2 (C) McLean County Water Resource District: Katz Dam Fish Passage, \$112,572.75** (Attachment 14)
 - ii. **22-3 (D) Coyote Clay Target League: Coyote Clay Target Range, \$293,158** (Attachment 15)

- iii. **22-4 (C) National Wild Turkey Federation: Turkeys Enhancing Water Quality and Wildlife Habitat, \$200,000** (Attachment 16)
- iv. **22-5 (B) North Dakota Conservation District Employees Association: North Dakota Statewide Tree Planting Initiative, \$2,550,000** (Attachment 17)
- v. **22-6 (C) Theodore Roosevelt Presidential Library Foundation: TRPL Prairie Enhancement Land Management Phase I, \$498,374** (Attachment 18)
- vi. **22-7 (B) Pembina County Historical Society: Pembina County Community Orchard, \$8,900** (Attachment 19)
- vii. **22-8 (C) North Dakota Wildlife Federation: The Conservation Capacity Program, \$30,000** (Attachment 20)
- viii. **22-9 (C) North Dakota Natural Resources Trust: North Dakota Partners for Wildlife Project 3, \$1,957,500** (Attachment 21)
- ix. **22-10 (A) American Foundation for Wildlife: Howard Oppegard Landing Improvements, \$50,550** (Attachment 22)
- x. **22-11 (D) Williams County Parks: Epping Springbrook Dam Algae Control, \$131,921** (Attachment 23)
- xi. **22-12 (D) Turtle Mountain Band of Chippewa: TMBCI Belcourt Lake Rejuvenation Phase II, \$105,741** (Attachment 24)
- C. **Consideration of Outdoor Heritage Fund Advisory Board recommendations for amendments to the following contracts:**
 - i. **021-208 Audubon Dakota: UWP Initiative, reallocation of \$45,000 within budget line-items** (Attachment 25)
 - ii. **017-169 Audubon Dakota: ND Conservation Forage Program transition payment timeline** (Attachment 26)
- D. Other Outdoor Heritage Fund business

(approximately 2:30 p.m.)

VII. North Dakota Renewable Energy Program – Reice Haase

- A. Presentation of the Renewable Energy Program Project Management and Financial Report (Attachment 27)
- B. **Consideration of the following Grant Round 51 applications:**
 - i. **R-051-C 4H2, Inc.: DEFC Research and Development, \$346,915** (Attachment 28)
- C. Other Renewable Energy Program business

(approximately 2:40 p.m.)

VIII. North Dakota Department of Mineral Resources – Lynn Helms, Bruce Hicks

A. Consideration of the following cases:

- i. Order 32416 for Case 29808** regarding the termination of the Tracy Mountain-Tyler Unit operated by Northwestern Production, LLC in Billings County, ND, the temporarily abandoned status of wells within the unit, the reclamation status of wells within the unit, and the bond amount required for operation of the unit (Attachment 29)
- ii. Order 32617 for Case 30008** regarding an application of Resonance Exploration, LLC for an enhanced oil recovery pilot project in the West Roth-Madison Pool, Bottineau County, ND (Attachment 30)
- iii. Order 32618 for Case 30009** regarding an application of Resonance Exploration, LLC for an enhanced oil recovery pilot project in the South Westhope-Spearfish/Charles Pool, Bottineau County, ND (Attachment 31)

B. Presentation of Oil and Gas Division Quarterly Report – Bruce Hicks (Attachment 32)

C. Update on Litigation*:

- i. Case No. 31-2020-CV-0018 - Northern Oil and Gas, Inc. vs. Continental Resources, Inc; Board of University and School Lands and ND Industrial Commission et al – Ordinary High Water Mark challenge**
- ii. Blue Appaloosa – appeal of Industrial Commission Order 31208**
- iii. Case No. 27-2022-CV-00305 - Blue Steel Oil and Gas, LLC v. North Dakota Industrial Commission, Slawson Exploration Company, Inc and White Butte Oil Operations, LLC – appeal of Industrial Commission Order 31501**
- iv. Dominek v Equinor et al – allocation of production from overlapping spacing units**
- v. Liberty Resources vs. NDIC et al – appeal of Industrial Commission Order 31792**
- vi. North Dakota Industrial Commission v. U.S. Department of Interior – quarterly lease sales**

D. Update on Dakota Access Pipeline Environmental Impact Statement cooperating agency comments

E. Update on rule revision process

- F. **Consideration of submittal of agency comments in support of the State of Louisiana Application for Underground Injection Control Class VI Primacy** (Attachment 33)
- G. **Consideration of Resolution of the North Dakota Industrial Commission Naming Hearing Examiners** (Attachment 34)
- H. Other Department of Mineral Resources business

* Possible Executive Session under N.D.C.C. 44-04-19.1(9) & 44-04-19.2 for attorney consultation

Meeting Closed to the Public for Executive Session Pursuant to NDCC 6-09-35, 44-04-18.4, 44-04-19.1 and 44-04-19.2

(approximately 3:40 p.m.)

IX. Bank of North Dakota Executive Session – Craig Hanson

- A. **Consideration of approval of one increase in credit line** (Confidential Attachment 35)
- B. Other Bank of North Dakota confidential business (as defined under N.D.C.C. 6-09-35)

(approximately 3:50 p.m.)

X. Department of Mineral Resources Executive Session – Lynn Helms

- A. Attorney Consultation regarding Northwest Landowners vs. NDIC et al (Confidential Attachment 36)

(approximately 4:45 p.m.)

XI. Clean Sustainable Energy Authority Executive Session – Reice Haase

- A. **Consideration of confidentiality requests for Grant Round 4 applications** (Confidential Attachment 37)

Meeting Returns to Public Session

(approximately 4:50 p.m.)

XII. Executive Session Formal Action Taken in Open Session

- A. Motions and votes taken in open session
- B. Other CSEA Administrative business

(approximately 4:55 p.m.)

XIII. Office of the Industrial Commission – Karen Tyler

- A. **Consideration of the May 25th, 2023 Industrial Commission meeting minutes** (Attachment 38)
- B. **Consideration of executive salary adjustments pursuant to legislative recommendation** (Attachment 39)
- C. Other Office of the Industrial Commission business

(approximately 5:00 p.m.)

XIV. Adjournment

Next Meeting – Thursday, July 27th, 2023
Bank of North Dakota Conference Room, Bismarck, ND



NORTH DAKOTA STATE FIRE AND TORNADO FUND
2023 REINSURANCE RECOMMENDATION

ABOUT THE NDIRF

The North Dakota Insurance Reserve Fund (NDIRF) is a nonprofit corporation that provides liability, auto, and public assets (equipment) coverage to North Dakota local government entities.

- Formed in 1986 by North Dakota political subdivisions after the commercial insurance marketplace abandoned local government coverage
- Serves 2,586 North Dakota local governmental entities
- 22 employees representing six departments, including in-house underwriting, claims, and member services
- Administers the North Dakota State Fire and Tornado Fund (NDFT) (June 2019) and State Bonding Fund (June 2019)
- Provides oversight of the ND Public Health Insurance Trust (NDPHIT) (2020)
- Significant cost savings for ND local governmental entities
 - Rates much lower than the traditional marketplace (20-25%)
 - Returned over \$75 million in excess surplus
 - Approximately \$150,000,000 of total savings for ND taxpayers since 1986





Source:
<http://content.time.com/time/covers/0,16641,19860324,00.html>

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NDIRF MEMBER SERVICES

HR Collaborative

- Biennial Conference
- Summer Webinar Series
- HR Reference Guide for Local Government

Law Enforcement Training

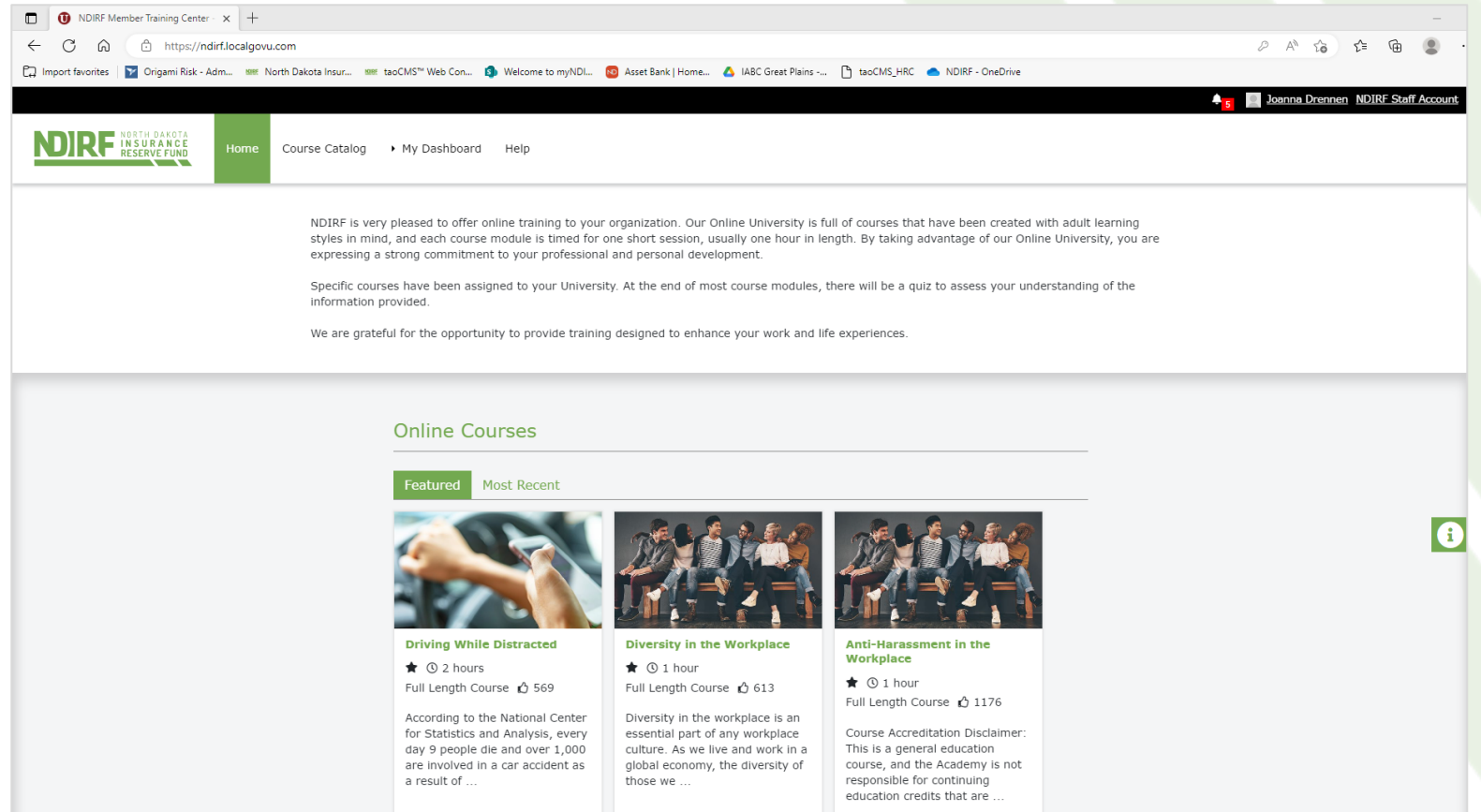
- Reimbursement for hands-on training
- Funding for specific member requests

Online Training

- Thousands of local government professional development courses, POST-certified courses, online DDC (defensive driving courses)

Property site visits and valuations

- Ensure all property is on schedule, data is accurate, and valuations are appropriate



The screenshot displays the NDIRF Member Training Center website. The browser address bar shows the URL <https://ndirf.localgovu.com>. The website header includes the NDIRF logo (North Dakota Insurance Reserve Fund) and navigation links for Home, Course Catalog, My Dashboard, and Help. A user account for Joanna Drennen is logged in. The main content area features a welcome message and a section titled "Online Courses" with tabs for "Featured" and "Most Recent". Three featured courses are displayed:

- Driving While Distracted**: 2 hours, 569 ratings. Description: According to the National Center for Statistics and Analysis, every day 9 people die and over 1,000 are involved in a car accident as a result of ...
- Diversity in the Workplace**: 1 hour, 613 ratings. Description: Diversity in the workplace is an essential part of any workplace culture. As we live and work in a global economy, the diversity of those we ...
- Anti-Harassment in the Workplace**: 1 hour, 1176 ratings. Description: Course Accreditation Disclaimer: This is a general education course, and the Academy is not responsible for continuing education credits that are ...

LocalGovU is available at www.NDIRF.com>Training.

NDIRF MEMBER SERVICES



In-person DDC

518 in-person defensive driving courses (DDC) completed. These courses are offered free through NDIRF membership.



Online DDC

223 online defensive driving courses (DDC) completed. These courses are offered free through NDIRF membership.



LocalGovU

1,327 LocalGovU courses completed. LocalGovU is offered free through NDIRF membership.



Property Surveys

116 property surveys — for a total of **945** total buildings surveyed — for the ND State Fire and Tornado Fund.

NDIRF MEMBER SERVICES



Partnerships and Sponsorships

- ND League of Cities
- ND Association of Counties
- ND School Boards Association
- ND Recreation and Park Association
- ND Township Officers Association
- HR Collaborative for Local Government
- NDLTAP

Topics Covered

- Law enforcement
- Employment policies and procedures
- Contractual risk transfer
- Cybersecurity
- Road maintenance
- Equipment operation
- Playground safety

MEMBER COMMUNICATIONS


The Participator is a quarterly newsletter mailed to all members and agents and is available on our website at www.NDIRF.com>Reference Section>The Participator.



MEMBER COMMUNICATIONS

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THE COMMUNICATOR



WHAT'S INSIDE

P.1
From the CEO

- Three-Year Transition Progress and a Look Ahead

P.2
Preventing Rooftop Ice Jams

2020-2021 Claims Review

Importance of Property Schedule Review

FROM THE CEO

When the NDIRF began administering the North Dakota State Fire and Tornado Fund in June 2019, we established a three-year transition plan to enhance operational efficiencies within the Fund and improve member experience.

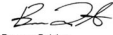
After transitioning operations to the NDIRF in year one, we turned our attention to capturing updated property valuations, enhancing coverage options, and reviewing pricing.


We are now in our third year, and we are excited by how our employees have taken ownership of administering the Fund, which makes it look and feel like the NDIRF.

In the feedback you provided to us in 2021 via surveys, we learned you appreciated our responsive claims services, property valuation assistance, and continued administration of what is becoming the best available property coverage solution for North Dakota state and local government. As you may have guessed, we plan to continue these services in 2022 with some enhancements, including new coverage options that will be introduced prior to the upcoming renewal.

We look forward to another year of serving you, and we encourage you to contact us at (701) 224-1988 to let us know if there is anything we can do to improve your experience.

Thank you for your membership in the North Dakota State Fire and Tornado Fund!

Sincerely,

Brennan Quintus
NDIRF CEO



NORTH DAKOTA
State Fire and Tornado Fund
Administered by the North Dakota Insurance Reserve Fund

THE COMMUNICATOR

Summer 2022



WHAT'S INSIDE

P.1
From the CEO

- 2022 Renewal Underway

P.2
July 1, 2022, Renewal Overview

- Renewal Packet Documents
- Contact Information
- Recorded Webinar Links

Importance of Property Schedule Review

- Property Valuation Guide

FROM THE CEO

This is the third year the NDIRF has managed the ND State Fire and Tornado Fund renewal. Over the past couple of years, we have taken great care in ensuring this process is smooth for the Fund's Members and agents and is effectively communicated.

We appreciate the feedback you provide to us directly or through surveys, which allows us to make adjustments and further understand your coverage needs. Your feedback inspired us to host renewal-specific webinars and add information materials to renewal folders. See page 2 for webinar links and materials list.

Your feedback has also resulted in additional coverage enhancements. This year, we introduced blanket property coverage, and during last year's renewal, we introduced wind/hail per building deductible removal, increase sewer backup limit to \$25,000, and additional per building debris removal limits. For more information or to obtain estimates, please contact our Underwriting Department at (701) 224-1988 or NDFT@ndirf.com.

We look forward to another year of serving you, and we encourage you to contact us at (701) 224-1988 or NDFT@ndirf.com to let us know if there is anything we can do to improve your experience.

Thank you for your membership in the North Dakota State Fire and Tornado Fund!

Sincerely,

Brennan Quintus
NDIRF CEO



NORTH DAKOTA
State Fire and Tornado Fund
Administered by the North Dakota Insurance Reserve Fund

THE COMMUNICATOR

FALL 2022



WHAT'S INSIDE

P.1
From the CEO

- Continue to Review and Update Values — for Buildings, Outdoor Property, and Personal Property

P.2
Coverage Terms Defined: Coinsurance

- What is Coinsurance?
- Example of Coinsurance in Effect
- How to Prevent Coinsurance
- Additional Terms to Know

FROM THE CEO

Since we began administering the ND State Fire and Tornado Fund (NDFT), we have continued to stress the importance of reviewing and verifying building property values. While this is still a major focus, and a big thanks to the Members and local agents who've invested time into ensuring their entity's properties are adequately valued, in this issue of The Communicator, we highlight the importance of ensuring outdoor and personal property are also adequately valued.

Recent severe weather events across our state caused widespread damage to outdoor and personal property covered under the NDFT. As claims trickled in for damaged property, the trend we soon discovered was significantly undervalued property. When covered property isn't adequately valued, a coinsurance penalty may apply.

Check out p. 2 of this newsletter to learn further about coinsurance, including advice from our Director of Claims Keith Pic and Assistant Director of Claims Michelle Lang on how to prevent it.

If you have any questions about NDFT coverage, please contact us at (701) 224-1988 or NDFT@ndirf.com.

Thank you for your membership in the North Dakota State Fire and Tornado Fund!

Sincerely,

Brennan Quintus
NDIRF CEO



NORTH DAKOTA
State Fire and Tornado Fund
Administered by the North Dakota Insurance Reserve Fund

THE COMMUNICATOR

WINTER 2022



WHAT'S INSIDE

P.1
From the CEO

- Conquering the Elements with Preparation, Routine

P.2
Monitoring Your Facilities During Severe Winter Weather

FROM THE CEO

Our North Dakota winter arrived a bit earlier and came on a bit stronger than maybe we wanted, but across our state, we worked together to make it through. This pattern has become somewhat of a time-honored tradition, marking our budding comradery with new faces and strengthening it with familiar ones.

As we endure a few more wintery months, a good routine becomes integral to ensuring your state agency or political subdivision's property smoothly weathers these elements.

On the next page, we share a claim from last year that illustrates one of the ways severe cold temperatures can cause damage. This example is followed by an advisory from the North Dakota Insurance Department about actions you can take to prevent building and property losses during winter months.

If you have any questions about the information on p. 2, please reach out to the NDIRF at NDFT@ndirf.com or (701) 224-1988.

Sincerely,

Brennan Quintus
NDIRF CEO



NORTH DAKOTA
State Fire and Tornado Fund
Administered by the North Dakota Insurance Reserve Fund

BOARD OF DIRECTORS AND MEMBER AFFILIATION

[as of June 1, 2023]



Chad Peterson
Chairperson
Counties



Aaron Birst
Counties



Matt Gardner
Cities



Darcie Huwe
Cities



Tyler Jacobson
Others



Burdell Johnson
Others



Sonya Larson
Schools



Scott Ouradnik
Counties



Chris West
Cities

ABOUT THE CEO

Experience

- Chief Executive Officer, NDIRF (2018-Present)
- Chairperson, North Dakota Public Health Insurance Trust (NDPHIT) (2020-2022)
- Trustee, NDPHIT (2020-Present)
- Risk Services Manager, NDIRF (2015-2018)
- Account Executive/Producer, American Insurance Center (2012-2015)
- Commercial Lines Underwriter, EMC Insurance (2011-2012)
- Agency Marketing Specialist, Federated Insurance (2009-2011)

Education

- Executive Juris Doctor, Concord Law School (2022)
- Master of Business Administration, University of Mary (2009)
- Bachelor of Science, University of Mary (2008)

Insurance Industry Designations

- Chartered Property Casualty Underwriter (CPCU)
- Certified Insurance Counselor (CIC)
- Associate in Underwriting (AU)

Insurance Industry Involvement

- President, North Dakota Roughrider Chapter of the CPCU Society
- National Faculty, Academy of Insurance
- National Faculty, National Alliance for Insurance Education and Research
- Frequent speaker for insurance-related events on a state and national level



Brennan Quintus
NDIRF CEO

PURPOSE OF NDFT

The North Dakota State Fire and Tornado Fund (NDFT) provides building and business personal property insurance coverage to North Dakota state and local government entities.

- Serves over 1,200 state and local government entities
- Protects over \$19.5 billion of Total Insured Value (TIV)
 - State Agencies: \$6.8 billion
 - Local Governments: \$12.8 billion



NORTH DAKOTA
State Fire and Tornado Fund

Administered by the North Dakota Insurance Reserve Fund

CURRENT COVERAGE

- \$250 million excess of \$2 million per occurrence
- Placed with Travelers
- Treaty Period: Aug. 1, 2022, through Aug. 1, 2023
- Rate: .029273 per \$100 of TIV
 - In-force TIV: \$18,363,713,324
 - Deposit: \$5,375,604
- **Excludes coverage for NDSU's heating plant above \$12M**
 - Starr provides 100% of \$37,912,000 million excess \$12 million for \$163,313
- **Excludes explosion coverage for UND's EERC buildings**
 - Starr provides 100% of \$28 million excess \$2 million for \$220,046



2023 Catastrophe Modeling Results

RMS Results

Exposure in Force as of 03/31/2023

Portfolio	Model
All Perils 2022	RMS RiskLink 18.0
2023	RMS RiskLink 21.0

Exposure and Loss shown in Thousands USD

Portfolio	All Perils RMS Exposure Change		% Chg
	2022	2023	
TSI	18,380,001	19,762,338	7.5%
Risk Count	17,384	17,748	2.1%

Return Period	Severe Storm			Winter Storm			All Perils			
	2022	2023	% Chg	2022	2023	% Chg	2022	2023	% Chg	
Occurrence Exceedance Probability (OEP)										
1,000	74,435.3	78,135.8	5.0%	16,047.4	17,335.1	8.0%	74,944.7	78,700.1	5.0%	
500	60,318.7	63,573.0	5.4%	11,380.6	12,292.5	8.0%	60,781.3	64,069.6	5.4%	
250	47,366.2	50,195.2	6.0%	7,977.8	8,613.6	8.0%	47,774.7	50,629.0	6.0%	
200	43,413.5	46,078.0	6.1%	7,109.9	7,675.5	8.0%	43,805.6	46,498.2	6.1%	
100	32,040.3	34,092.3	6.4%	4,953.5	5,347.4	8.0%	32,377.1	34,459.9	6.4%	
50	22,439.0	23,846.1	6.3%	3,396.8	3,668.5	8.0%	22,737.2	24,176.3	6.3%	
25	14,741.2	15,575.0	5.7%	2,245.7	2,428.5	8.1%	15,014.8	15,882.5	5.8%	
20	12,668.6	13,345.5	5.3%	1,942.0	2,101.4	8.2%	12,935.4	13,646.5	5.5%	
10	7,460.6	7,790.9	4.4%	1,166.9	1,265.8	8.5%	7,709.2	8,070.1	4.7%	
5	3,893.5	4,063.5	4.4%	606.4	659.9	8.8%	4,140.6	4,335.1	4.7%	
2	1,021.2	1,097.3	7.5%	141.0	153.0	8.5%	1,265.0	1,355.5	7.2%	
Annual Exceedance Probability (AEP)										
1,000	79,793.3	83,891.6	5.1%	16,726.5	18,071.6	8.0%	80,944.0	84,998.7	5.0%	
500	65,366.5	68,947.1	5.5%	12,062.1	13,035.5	8.1%	66,462.3	69,995.3	5.3%	
250	52,119.9	55,216.1	5.9%	8,654.0	9,351.1	8.1%	53,166.3	56,209.9	5.7%	
200	48,077.2	50,998.3	6.1%	7,776.9	8,404.3	8.1%	49,106.8	51,977.8	5.8%	
100	36,381.8	38,669.5	6.3%	5,575.1	6,026.1	8.1%	37,362.3	39,611.0	6.0%	
50	26,336.5	27,956.7	6.2%	3,945.8	4,268.2	8.2%	27,281.8	28,883.6	5.9%	
25	18,105.2	19,142.6	5.7%	2,702.4	2,926.7	8.3%	19,026.7	20,069.4	5.5%	
20	15,841.4	16,720.6	5.6%	2,365.3	2,562.7	8.3%	16,755.4	17,648.9	5.3%	
10	9,975.6	10,491.6	5.2%	1,479.2	1,604.5	8.5%	10,854.6	11,411.9	5.1%	
5	5,677.5	5,995.0	5.6%	800.6	869.3	8.6%	6,494.2	6,874.0	5.8%	
2	1,725.8	1,870.9	8.4%	195.1	210.2	7.8%	2,359.8	2,562.7	8.6%	
AAL	4,106.0	4,362.0	6.2%	597.1	646.3	8.3%	4,703.0	5,008.4	6.5%	
StdDv	7,601.7	8,018.2	5.5%	1,497.2	1,612.0	7.7%	7,747.7	8,178.6	5.6%	

2023 Catastrophe Modeling Results

AIR Results

Exposure in Force as of 03/31/2023

Portfolio	Model
All Perils 2022	AIR Touchstone 8.0
2023	AIR Touchstone 9.0

Exposure and Loss shown in Thousands USD

Portfolio	All Perils AIR Exposure change		% Chg
	2022	2023	
TSI	18,379,687.2	19,762,337.9	7.5%
Risk Count	17,381	17,748	2.1%

Return Period	Severe Storm			Winter Storm			All Perils		
	2022	2023	% Chg	2022	2023	% Chg	2022	2023	% Chg
Occurrence Exceedance Probability (OEP)									
1,000	136,414.9	139,833.6	2.5%	10,153.1	10,917.3	7.5%	136,414.9	139,833.6	2.5%
500	80,641.8	88,990.2	10.4%	8,697.4	9,373.2	7.8%	80,641.8	88,990.2	10.4%
250	56,677.0	62,293.8	9.9%	6,723.0	7,206.3	7.2%	56,677.0	62,293.8	9.9%
200	51,998.9	55,593.0	6.9%	6,362.5	6,838.8	7.5%	51,998.9	55,593.0	6.9%
100	37,306.3	40,127.7	7.6%	5,152.3	5,513.1	7.0%	37,306.3	40,127.7	7.6%
50	23,781.9	25,722.0	8.2%	4,094.4	4,360.1	6.5%	23,781.9	25,722.0	8.2%
25	14,235.1	15,614.2	9.7%	2,895.7	3,086.8	6.6%	14,358.7	15,692.5	9.3%
20	12,236.0	13,366.9	9.2%	2,509.1	2,684.8	7.0%	12,352.0	13,466.3	9.0%
10	6,821.8	7,537.4	10.5%	1,225.0	1,327.7	8.4%	7,041.8	7,759.9	10.2%
5	3,606.3	3,929.1	9.0%	402.1	432.1	7.4%	3,893.6	4,230.3	8.6%
2	1,412.1	1,548.3	9.6%	10.6	11.7	10.1%	1,583.0	1,711.2	8.1%
Annual Exceedance Probability (AEP)									
1,000	139,710.8	143,344.6	2.6%	10,153.1	10,917.3	7.5%	140,345.6	144,026.6	2.6%
500	85,125.8	92,749.4	9.0%	9,292.1	9,909.7	6.6%	85,154.6	93,780.7	10.1%
250	61,545.6	65,801.3	6.9%	7,786.4	8,263.9	6.1%	61,545.6	65,801.3	6.9%
200	57,122.1	62,067.5	8.7%	7,213.2	7,763.8	7.6%	57,145.2	62,149.1	8.8%
100	42,043.7	45,339.9	7.8%	5,820.9	6,254.8	7.5%	42,043.7	46,703.3	11.1%
50	29,203.8	31,497.0	7.9%	4,505.8	4,852.1	7.7%	29,923.7	32,346.3	8.1%
25	19,069.6	21,015.5	10.2%	3,173.8	3,390.0	6.8%	19,623.0	21,415.5	9.1%
20	16,778.7	18,315.2	9.2%	2,723.6	2,918.7	7.2%	17,446.1	19,016.2	9.0%
10	10,783.7	11,793.0	9.4%	1,376.8	1,487.5	8.0%	11,509.7	12,548.4	9.0%
5	6,932.2	7,551.2	8.9%	475.1	508.1	6.9%	7,621.0	8,324.8	9.2%
2	3,304.5	3,611.6	9.3%	11.0	12.2	11.5%	3,781.2	4,117.4	8.9%
AAL	5,676.1	6,174.1	8.8%	462.7	496.6	7.3%	6,138.8	6,670.7	8.7%
StdDv	12,680.2	13,274.3	4.7%	1,172.1	1,255.4	7.1%	12,721.5	13,319.3	4.7%

NDFT CLAIMS PERFORMANCE

In 2022, the North Dakota State Fire and Tornado Fund received 297 claims.

Highest Average Cost Per Claim

1. Wind and Hail: \$152,029
2. Water: \$130,218
3. Collapse: \$108,061
4. Fire: \$58,669
5. Lightning: \$40,033
6. Vehicle Damage: \$34,758
7. Equipment Breakdown: \$15,859
8. Vandalism: \$13,623
9. Other: \$8,528
10. Sewer Backup: \$5,000

Highest Frequency

1. Wind and Hail: 93 claims
2. Water: 78 claims
3. Equipment Breakdown: 35
4. Vehicle Damage: 28 claims
5. Other: 19 claims
6. Vandalism: 17 claims
7. Lightning: 9 claims
8. Fire: 6 claims
9. Theft: 5 claims
10. Collapse: 3 claims



2023 TRAVELERS RENEWAL

- \$250 million excess of \$2 million per occurrence
- Treaty Period: Aug. 1, 2023, through Aug. 1, 2024
- Rate: .03316 per \$100 of TIV
- In-force TIV: \$19,621,296,125
- Deposit: \$6,506,490
- Excludes coverage for NDSU's heating plant and UND's EERC buildings



2023 STARR RENEWAL

- Starr has issued non-renewal notices for the NDSU heating plant and UND EERC buildings
- Starr has not offered renewal terms as of June 26, 2023
 - Renewal is likely after underwriting reviews loss control reports
- Starr has indicated that, if renewed, expected rates will be up to 20% higher than last year
 - NDSU heating plant: 100% of full limit @ .48 cent rate (approx. \$240,000)
 - UND EERC: 100% of full limit @ .30 cent rate (approx. \$320,000)



2023 TRAVELERS RENEWAL

- \$250 million excess of \$2 million per occurrence
- Treaty Period: Aug. 1, 2023, through Aug. 1, 2024
- Rate: .03316 per \$100 of TIV
- In-force TIV: \$19,621,296,125
- **Excludes coverage for NDSU's heating plant and UND's EERC buildings**
 - NDSU heating plant: 100% of full limit @ .48 rate (approx. \$240,000) anticipated with Starr
 - UND EERC: 100% of full limit @ .30 rate (approx. \$320,000) anticipated with Starr
- **Total** (includes Travelers and Starr policies)
 - Approximate composite rate: .03586
 - Approximate deposit: \$7,066,490



SHARED AND LAYERED QUOTE

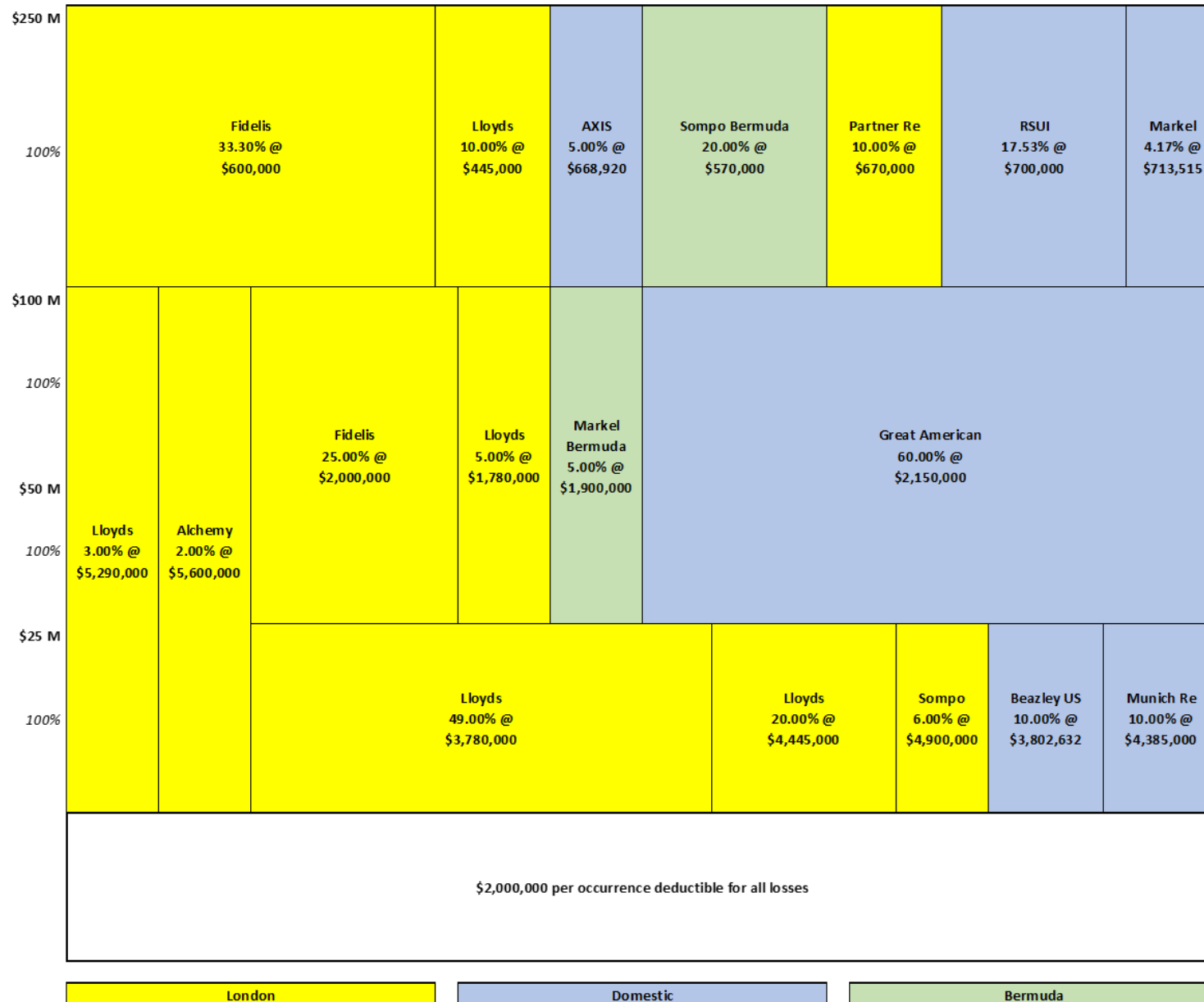
- \$250 million excess of \$2 million per occurrence
- Treaty Period: Aug. 1, 2023, through Aug. 1, 2024
- Rate: .0351 per \$100 of TIV
- In-force TIV: \$19,704,027,873
- Deposit: \$6,918,270
- **Coverage includes all property covered by the North Dakota Fire and Tornado Fund**



NORTH DAKOTA
State Fire and Tornado Fund

Administered by the North Dakota Insurance Reserve Fund

SHARED AND LAYERED STRUCTURE



Sabotage & Terrorism and Cyber Attack @ \$206,250

Event	Limit (Agg)	Carrier
Sabotage & Terrorism	\$100,000,000	Lloyds 100%
S&T Cyber Attack	\$100,000,000	Lloyds 100%

Deductible Applies as per All Risk Placement

SHARED AND LAYERED PRICING

Primary \$25M		\$25,000,000		2023 - 2024		
Company	Issuing Company	Pricing	Rate	Participation	Capacity	Premium
Lloyds of London (Various)	Lloyds of London	\$ 3,780,000	0.01918	49.00%	\$ 12,250,000	\$ 1,852,200
Lloyds of London (Various)	Lloyds of London	\$ 4,445,000	0.02256	20.00%	\$ 5,000,000	\$ 889,000
Beazley US		\$ 3,802,632	0.01930	10.00%	\$ 2,500,000	\$ 380,263
Munich Re		\$ 4,385,000	0.02225	10.00%	\$ 2,500,000	\$ 438,500
Sompo International		\$ 4,900,000	0.02487	6.00%	\$ 1,500,000	\$ 294,000
Total			0.02059	95.00%	\$ 23,750,000	\$ 3,853,963

Primary \$100M		\$100,000,000		2023 - 2024		
Company	Issuing Company	Pricing	Rate	Participation	Capacity	Premium
Lloyds of London (ARK)	Lloyds of London	\$ 5,290,000	0.02685	3.00%	\$ 3,000,000	\$ 158,700
Alchemy Underwriting		\$ 5,600,000	0.02842	2.00%	\$ 2,000,000	\$ 112,000
Total			0.02748	5.00%	\$ 5,000,000	\$ 270,700

\$75 M x \$25 M		\$75,000,000				
Company	Issuing Company	Pricing	Rate	Participation	Capacity	Premium
Great American		2,150,000	0.01091	60.00%	\$ 45,000,000	\$ 1,290,000
Fidelis		2,000,000	0.01015	25.00%	\$ 18,750,000	\$ 500,000
Lloyds of London (QBE)	Lloyds of London	1,780,000	0.00903	5.00%	\$ 3,750,000	\$ 89,000
Markel Bermuda		1,900,000	0.00964	5.00%	\$ 3,750,000	\$ 95,000
Total			0.01055	95.00%	\$ 71,250,000	\$ 1,974,000

\$150 M x \$100 M		\$150,000,000				
Company	Issuing Company	Pricing	Rate	Participation	Capacity	Premium
Fidelis		600,000	0.00305	33.30%	\$ 49,950,000	\$ 199,800
Sompo Bermuda		570,000	0.00289	20.00%	\$ 30,000,000	\$ 114,000
RSUI		700,000	0.00355	17.53%	\$ 26,295,000	\$ 122,710
Lloyds of London (IGO)	Lloyds of London	445,000	0.00226	10.00%	\$ 15,000,000	\$ 44,500
Partner Re		670,000	0.00340	10.00%	\$ 15,000,000	\$ 67,000
AXIS		668,920	0.00339	5.00%	\$ 7,500,000	\$ 33,446
Markel		713,515	0.00362	4.17%	\$ 6,255,000	\$ 29,754
Total			0.00310	100.00%	\$ 150,000,000	\$ 611,210

S&T (\$100M) + CA (\$100M)		\$200,000,000				
Company	Issuing Company	Pricing	Rate	Participation	Capacity	Premium
Lloyds of London (HIS)	Lloyds of London	206,250	0.00105	100.00%	\$ 250,000,000	\$ 206,250
Total			0.00105	100.00%	\$ 250,000,000	\$ 206,250

Total Capacity	Total Costs
\$ 250,000,000	\$ 6,916,123

COMPARISON OF PROGRAM TYPES

Item	Shared and Layered Program	Single Reinsurer (Travelers)
Pooling (Countrywide)	More common in industry in 2023	Less common because Travelers is only major reinsurer offering a single reinsurer approach to pools
Pricing	It can be more expensive because there are more reinsurers in the program. However, the competition a shared and layered program creates within the placement can drive the total price down. This placement is a great example of competition creating price relief. More reinsurers wanted to participate than we needed, so we were able to drive pricing down.	Can be less expensive due the economies of scale that comes with one reinsurer
Stability	More stable over time due to a diverse reinsurance panel that utilizes the global insurance marketplace. For example, our placement is oversubscribed, meaning we have replacement capacity ready to step in when the current capacity moves in a different direction.	It can be stable until it's not. Replacing a single carrier option is extremely disruptive and difficult
Terms and Conditions	More flexible due to the ability to replace individual reinsurers if they force restrictive terms	Restrictive terms are passed on to reinsured with little leverage to negotiate anything different.
Claims	Single Point of Contact	Single Point of Contract
Reinsurance Certificate	Provides reinsurance of the NDFT's form subject to terms and conditions.	Provides reinsurance of the NDFT's form subject to terms and conditions.
EERC and NDSU Heating Plant	EERC and NDSU heating plant included	Excludes EERC and sublimits NDSU heating plant.
Adding New Buildings	Report any new building over \$50,000,000 or BI limit greater than \$5,000,000 with annual "true up". No additional premium or return premium for change in value more than 5%	Report new buildings over \$20,000,000 and any BI limit greater than \$1,000,000 with quarterly reporting and additional premium.

2023 RECOMMENDATION

Shared and Layered Program

- \$250 million excess of \$2 million per occurrence
- Treaty Period: Aug. 1, 2023, through Aug. 1, 2024
- **Coverage includes all property covered by the North Dakota State Fire and Tornado Fund**
- Rate: .0351 per \$100 of TIV
- In-force TIV: \$19,704,027,873
- Deposit: \$6,918,270





Brennan Quintus
NDIRF CEO

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(701) 224-1988

NORTH DAKOTA
NDIRF
INSURANCE
RESERVE FUND

MEMORANDUM

TO: The Honorable Doug Burgum, Governor
The Honorable Drew Wrigley, Attorney General
The Honorable Doug Goehring, Agriculture Commissioner

Cc: Karen Tyler, Interim Executive Director, N.D. Industrial Commission

FROM: Brennan Quintus, CEO, North Dakota Insurance Reserve Fund, on behalf of
Insurance Commissioner Jon Godfread

DATE: June 26, 2023

SUBJECT: Excess Loss Reinsurance Coverage – State Fire & Tornado Fund

BACKGROUND

The State Fire and Tornado Fund (“Fund”) provides property insurance coverage to over 1,200 state agencies and local governments and protects over \$19.5 billion of total insured value (“TIV”). The North Dakota Insurance Reserve Fund (“NDIRF”) administers the Fund through a contract with the North Dakota Insurance Department. The contract has been in place since June 2019. The NDIRF is a member-owned nonprofit corporation that provides liability, automobile, and equipment coverage to North Dakota local governments.

Under NDIRF’s administration, the Fund’s administrative expenses have been reduced, and its TIV has grown by nearly \$5 billion. The increase in TIV represents the NDIRF’s commitment to collecting updated property values and adding missing property to property schedules. These tasks, which NDIRF employees perform, ensure that state and local government property, and ultimately North Dakota taxpayers, are protected if a partial or total loss occurs.

Currently, the Fund has excess loss reinsurance for claims over \$2 million up to \$250 million through Travelers. The deposit premium paid on this reinsurance was approximately \$5.4 million based on over \$18 billion of property values as of August 1, 2022, which translates to a rate of .029273 per \$100 of insured value. However, Travelers excluded coverage for the NDSU heating plant and the EERC buildings on UND’s campus at the start of last year’s policy term. NDIRF staff worked with reinsurance brokers to secure coverage for those buildings through Starr at a cost to the Fund of \$383,359. So, the total deposit premium for the Fund in 2022 was nearly \$5.8 million.

The last reinsurance claim the Fund experienced was on July 10, 2016. This claim involved eight policyholders with wind and hail damage to multiple buildings in the Killdeer area. The Fund paid out losses of over \$1.3 million for the damaged property. The Fund carried reinsurance coverage for losses exceeding \$1 million in 2016.

In August 2007, the Fund experienced its largest catastrophic loss and recovered approximately \$7.8 million through reinsurance for property damage from a tornado that struck Northwood.

N.D. Cent. Code § 26.1-22-21 requires the Insurance Commissioner to procure excess loss reinsurance with the approval of the Industrial Commission. The Fund’s current excess loss reinsurance treaty expires at midnight on July 31, 2023.

2023 REINSURANCE QUOTES

Travelers quoted a limit of \$250 million over a \$2 million retention per occurrence at a rate of .03316 per \$100 of TIV. Based on a TIV of \$19,621,296,125, the deposit premium with Travelers is \$6,506,490. Like in 2022, Travelers has excluded coverage completely for the NDSU heating plant. They have also completely excluded coverage for the EERC buildings on UND’s campus. Starr has not offered renewal quotes for those policies, as of June 26, 2023. Therefore, I cannot provide the Commission with a firm deposit premium quote for all Fund properties with this option.

Due to the change in terms made by Travelers in 2022, NDIRF staff began work on finding alternative options for the Fund shortly after the 2022 renewal. NDIRF staff, through a reinsurance broker, approached reinsurance companies all over the world. We were able to compile a shared and layered structure that includes multiple reinsurance companies taking different portions of a \$250 million limit above a \$2 million retention per occurrence at a rate of .0351 per \$100 of TIV. Based on a TIV of \$19,704,027,873, the deposit premium for this structure is \$6,918,270. The main benefit of this structure is that all NDFT properties will be covered through the same program, and the Fund will not need to buy reinsurance coverage for separate properties.

RECOMMENDATION

It is recommended that the Fund accept the shared and layered structure. This structure will guarantee that all Fund property is reinsured in the short term. The structure will also provide long-term stability because no single carrier can dictate terms like Travelers has done over the past two years. Aside from multiple reinsurers participating in the program, the terms offered in the shared and layered structure are either better or the same as the terms Travelers has provided.

The shared and layered reinsurance structure is common for large commercial enterprises seeking insurance and reinsurance. This will be the first time the NDFT has taken this approach to meet the Fund’s reinsurance requirements. The Century Code specifies that insurance is purchased from “authorized” insurance companies, but the Century Code does not specify whether non-admitted companies qualify as “authorized” companies. However, this same section of the century code, N.D.C.C. § 26.1-22-21, provides a general exception that, among other things, authorizes the Commissioner and the Industrial Commission to disregard the authorized insurance company requirement with the approval of the Industrial Commission.

Excess loss reinsurance continues to impact the Fund significantly, but this coverage is essential for proper claims management and the Fund’s financial strength and stability. The Fund’s TIV has increased by nearly \$5 billion in the past four years and will continue to grow due to the continued work of NDIRF staff, new construction, and cost increases in materials and labor. In addition, the concentration of property at various locations around the State, like the Capitol complex and our 11 universities and college campuses, requires the Fund to have adequate excess loss reinsurance to recover from a catastrophic event.

June 21, 2023

PUBLIC FINANCE AUTHORITY ADVISORY COMMITTEE

RECOMMENDATION TO THE INDUSTRIAL COMMISSION

The Advisory Committee, at its June 21, 2023 meeting reviewed and discussed, and recommends approval of a \$25,000,000 increase to a previously approved \$126,500,000 (total \$151,500,000) Clean Water State Revolving Fund Program loan to the City of Fargo.

North Dakota Public Finance Authority
Advisory Committee

Keith Lund, Chairman
Linda Svihovec
John Phillips



Memorandum

TO: DeAnn Ament, Executive Director
North Dakota Public Finance Authority

FROM: PFM Financial Advisors LLC

DATE: June 16, 2023

RE: Marketplace Analysis - Clean Water State Revolving Fund Program
City of Fargo

The City of Fargo (“City”) has presented a request to the Authority and the North Dakota Department of Environmental Quality (“Department”) for a \$25,000,000 increase to their previously approved \$126,500,000 loan for a total of \$151,500,000 under the Clean Water State Revolving Fund Program (“CWSRF Program”). The CWSRF Program is used to make subsidized interest rate loans to political subdivisions for the purpose of constructing various wastewater treatment projects and landfill projects as approved by the Department in accordance with federal and state regulations and an updated Intended Use Plan prepared by the Department.

The City intends to use the proceeds to accommodate growth, regionalization and future regulations by improving the wastewater treatment plant.

The municipal securities to be acquired by the Authority will be revenue bonds payable from wastewater user fees and sales tax revenues. The City’s average annual payment under the proposed loan will be approximately \$6,605,073 indicating a 110% net revenue coverage requirement of approximately \$7,265,580. The City will be required to deposit \$7,244,325 into a reserve fund with payments of \$1,448,865 per year for the first five years of the loan. Net operating coverage of the wastewater fund was 6.15x, 5.74x, 4.60% and 2.71x for 2019-2022, respectively. The City reviews their sewer rates annually and adjusts the rates biannually. The excess sales tax dedicated to SRF financing was \$5.8, \$6.8, \$7.3, \$9.2, and \$10.6 million for 2018-2022, respectively. The wastewater fund, sales tax revenues and rate increases will provide sufficient net revenues to meet the 110% coverage requirement.

As of December 31, 2022, the City has outstanding improvement obligations of \$458,990,000, general obligation bonds of \$29,035,000, sales tax revenue bonds of \$54,244,000, and outstanding appropriation bonds of \$35,938,000. The City currently has two CFP loans with an outstanding amount of \$54,244,000, and ten CWSRF and four DWSRF loans with a total outstanding amount of \$268,074,001. The City is current in its payments for its outstanding Authority loans.

Funding for the construction of the City's projects has been included in a list of approved projects as prepared and updated by the Department. As an authorized participant in the CWSRF Program, the City will benefit substantially from the subsidized fixed rate loans made under the Program. Consequently, no other financing mechanism can provide a greater cost advantage than that offered by the CWSRF Program.

Memorandum

To: Industrial Commission

From: Kylee Merkel, Business Banker
Bank of North Dakota

Date: June 9, 2023

RE: City of Fargo
Clean Water State Revolving Fund Program

ND Public Finance Authority has delivered to BND their memo which recommends approval of a \$25,000,000 increase to an existing loan (from \$126,500,000 to \$151,500,000) to the City of Fargo under the Clean Water State Revolving Fund (CWSRF). The entire cost of the project is \$172,729,000, with CWSRF financing the full project, which included a separate CWSRF loan for the engineering for \$21,229,000.

Proceeds of the loan will be used to finance construction to expand the wastewater treatment facility to accommodate growth, regionalization and future regulations. The requested loan term is 30 years. The City will issue a revenue bond payable from sales tax collections and sewer user fees. The annual payment will average \$6,605,073.

The City collects a 2% sales tax, of which ½ of 1% is dedicated to clean water and drinking water state revolving fund financed infrastructure. The sales tax sunsets in 2028. If the city sales tax collections would be insufficient to meet the required 110% net operating coverage, or should the city sales tax not be extended, the City would utilize sewer user fees and implement any necessary rate increases.

½ of 1% City Sales Tax Debt Service Coverage:

	2018	2019	2020	2021	2022
2% City Sales Tax Collections	48,038,202	49,623,454	51,720,983	60,456,732	65,918,347
1/2 of 1%	12,009,551	12,405,864	12,930,246	15,114,183	16,479,587
CW WWTP Engineering	860,029	860,029	860,029	860,029	860,029
CW WWTP Construction	6,605,073	6,605,073	6,605,073	6,605,073	6,605,073
Total Debt Payments	7,465,102	7,465,102	7,465,102	7,465,102	7,465,102
Debt Service Coverage	160.88%	166.18%	173.21%	202.46%	220.76%

Wastewater Debt Service Coverage:

Wastewater Fund	2019	2020	2021
Operating Revenue	11,276,502	12,266,270	14,491,086
Interest Revenue	10,581	0	63,902
Operating Expenses	-14,459,967	-13,457,308	-14,834,215
Net Operating Revenue	-3,172,884	-1,191,038	-279,227
Plus: Depreciation	5,241,155	5,712,917	5,929,463
Adjusted Net Operating Revenue	2,068,271	4,521,879	5,650,236
Current Annual Debt Service	336,434	787,683	1,228,935
Debt Service Coverage	614.76%	574.07%	459.77%

The City currently serves 27,951 residential connections and 5,200 commercial connections. All users pay a monthly base rate of \$21.50. In addition, commercial users pay a usage fee of \$2.40/1,000 gallons. The City annually reviews and adjusts rates as needed to meet the coverage requirements.


Outstanding Debt (as of December 31, 2022):

	Original Amount	Amount Outstanding
Governmental Activities		
Improvement Bonds	\$672,420,000	\$458,990,000
GO Bonds	38,745,000	29,035,000
Sales Tax Revenue Bonds	83,887,000	54,244,000
Taxable Appropriation Bonds	28,840,000	27,835,000
Appropriation Bonds	8,103,000	8,103,000
SRF Notes Payable	102,125,936	47,757,074
TIF Revenue Notes	4,821,633	4,461,642
Direct Bank Loan	6,000,000	2,687,316
Mercantile Parking Garage	2,000,000	2,000,000
BND Infrastructure Loan	15,000,000	11,708,348
	961,942,569	646,821,380
Business-Type Activities		
Revenue Bonds	2,875,000	1,659,480
Direct Bank Loan	3,000,000	600,000
SRF Notes Payable	268,679,000	220,316,927
Appropriation Bonds	7,810,000	4,145,000
	282,364,000	226,721,407
Total Debt	\$1,244,306,569	\$873,542,787

Average annual debt service requirements are estimated at \$85,212,102, which is an average of \$677.08 per resident.

Historical census populations for the City of Fargo were 125,853 in 2020, 106,024 in 2010 and 91,324 in 2000. The largest employers in the City are Sanford Health Facilities, North Dakota State University and Essentia Health.

Based upon the PFA recommendation and the benefits obtained with this project, BND concurs with their evaluation and support of the request.



Kylee Merkel
Business Banker

Industrial Commission
of North Dakota

Doug Burgum
GOVERNOR

Drew H. Wrigley
ATTORNEY GENERAL

Doug Goehring
AGRICULTURE COMMISSIONER



North Dakota Public Finance Authority

Memorandum

To: Public Finance Authority Advisory Committee
Miles Silbert, Public Financial Management
Kylee Merkel, Bank of North Dakota

From: DeAnn Ament, Executive Director

Date: June 8, 2023

Re: City of Fargo
Clean Water State Revolving Fund

Purpose of the Project: Wastewater treatment plant improvements to accommodate growth, regionalization and future regulations.

Project Amount:

CWSRF Request - Construction	\$ 25,000,000
CWSRF Original Request - Construction	126,500,000
CWSRF Engineering	21,229,000
Project Total	\$172,729,000

Population to Benefit from the Project: 170,311; \$1,014 per person

Population Served by the System: 170,311

Is the Project Area Within the Extraterritorial Jurisdiction of a City: No

The requested term for the Clean Water State Revolving Fund (CWSRF) loan is 30 years. The City of Fargo will issue revenue bonds payable with wastewater user fees and sales tax revenues. The average annual payment for the revenue bonds will be \$6,605,073. The 110% coverage requirement will be \$7,265,580 and the required debt service reserve will be \$7,244,325.

The City has 27,951 residential users that pay a monthly sewer base rate of \$21.50 and 5,200 commercial users that pay \$2.40/1,000-gallon charge with a minimum monthly sewer charge of \$21.50. The City annually reviews the sewer rates and biannually adjusts the sewer rates.

Wastewater Fund:

	Unaudited			
	2019	2020	2021	2022
Interest Revenue	\$10,581	\$--	\$63,902	\$27,241
Operating Revenue	11,276,502	12,266,270	14,491,086	15,530,744
Operating Expenses	14,459,967	13,457,308	14,834,215	16,294,767
Net Operating Expenditures	-3,172,884	-1,191,038	-279,227	-736,782
Depreciation	5,241,155	5,712,917	5,929,463	6,052,727
Adjusted Net Operating Income	\$2,068,271	\$4,521,879	\$5,650,236	\$5,315,945
Revenue Bond Payments ¹	\$336,434	\$787,683	\$1,228,935	\$1,964,442
Net Operating Coverage	615%	574%	460%	271%

¹ Currently, this loan and its' related engineering loan are the only debt paid from the wastewater fund.

City Sales Tax:

The City collects a 2% sales tax and ½ of 1% is dedicated to CWSRF and DWSRF financed infrastructure.

	2018	2019	2020	2021	2022
2% City Sales Tax	\$48,038,202	\$49,623,454	\$51,720,983	\$60,456,732	\$65,918,347
1/2 of 1%	\$12,009,550	\$12,405,864	\$12,930,246	\$15,114,183	\$16,479,587
SRF Debt Service	-\$6,186,541	-\$5,618,117	-\$5,636,083	-\$5,930,876	-\$5,882,880.0
Excess Sales Tax	\$5,823,009	\$6,787,747	\$7,294,163	\$9,183,307	\$16,479,587

Projected Wastewater Net Operating Coverage:

	2023	2024	2025	2026	2027
Gross Revenue	\$ 19,491,646	\$ 19,491,646	\$ 19,491,646	\$ 19,491,646	\$ 19,491,646
Sales Tax ²	8,239,793	8,239,793	8,239,793	8,239,793	8,239,793
	<u>\$ 27,731,439</u>	<u>\$ 27,731,439</u>	<u>\$ 27,731,439</u>	<u>\$ 27,731,439</u>	<u>\$ 27,731,439</u>
Existing O&M	\$ 8,448,587	\$ 8,448,587	\$ 8,448,587	\$ 8,448,587	\$ 8,448,587
SRF Debt Service	8,819,235	10,725,170	10,814,400	10,805,425	10,813,750
	<u>\$ 17,267,822</u>	<u>\$ 19,173,757</u>	<u>\$ 19,262,987</u>	<u>\$ 19,254,012</u>	<u>\$ 19,262,337</u>
Excess Revenue	<u>\$ 10,463,617</u>	<u>\$ 8,557,682</u>	<u>\$ 8,468,452</u>	<u>\$ 8,477,427</u>	<u>\$ 8,469,102</u>

² Sales tax is ½ of the ½ of 1% since this is only a wastewater projection.

The existing net operating revenues and city sales coverage coupled with the regular rate increases will be sufficient to meet the 110% net operating coverage.

The City's outstanding indebtedness as of December 31, 2022:

	<u>Original Amount</u>	<u>Amount Outstanding</u>
Governmental Activities		
Improvement Bonds	\$ 672,420,000	\$ 458,990,000
GO Bonds	38,745,000	29,035,000
Sales Tax Revenue Bonds *	83,887,000	54,244,000
Taxable Appropriation Bonds	28,840,000	27,835,000
Appropriation Bonds	8,103,000	8,103,000
SRF Notes Payable *	102,125,936	47,757,074
TIF Revenue Notes	4,821,633	4,461,642
Direct Bank Loan	6,000,000	2,687,316
Mercantile Parking Garage	2,000,000	2,000,000
BND Infrastructure Loan	15,000,000	11,708,348
	<u>\$ 961,942,569</u>	<u>\$ 646,821,380</u>
Business-Type Activities		
Revenue Bonds	\$ 2,875,000	\$ 1,659,480
Direct Bank Loan	3,000,000	600,000
SRF Notes Payable *	\$ 268,679,000	\$ 220,316,927
Appropriation Bonds	7,810,000	4,145,000
	<u>\$ 282,364,000</u>	<u>\$ 226,721,407</u>

*All payments have been made as agreed. The City has ten CWSRF and four DWSRF loans with outstanding balances of \$268,074,001 and two CFP loans with outstanding balances of \$54,244,000.

With \$873,542,787 total debt outstanding, the debt per person is \$6,933.

The City of Fargo is located in Cass County at the intersection of Interstate Highways 94 and 29. Based on the 2020 census, the total population is 125,990; this is an increase of 20,441 from the 2010 census. The largest employers in the City are Sanford Health Facilities with 9,349 employees, North Dakota State University has 5,961 employees and Essentia Health employs 2,690.

K-12 School Enrollment:

				Projected
2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
26,042	24,760	25,441	25,948	26,042

The City's 2022 taxable valuation was \$720,885,823. This is an increase of \$142,209,214 over the 2018 taxable valuation.

Property Tax Collections 5/31/2023:

Levy Year	Dollar Amount of Levy	Amount Collected to Date of Application	Percentage Collected
2022	\$40,652,011	\$37,273,766	92%
2021	\$36,279,891	\$34,369,338	95%
2020	\$35,441,809	\$33,519,000	95%

Special Assessment Collections 5/31/2023:

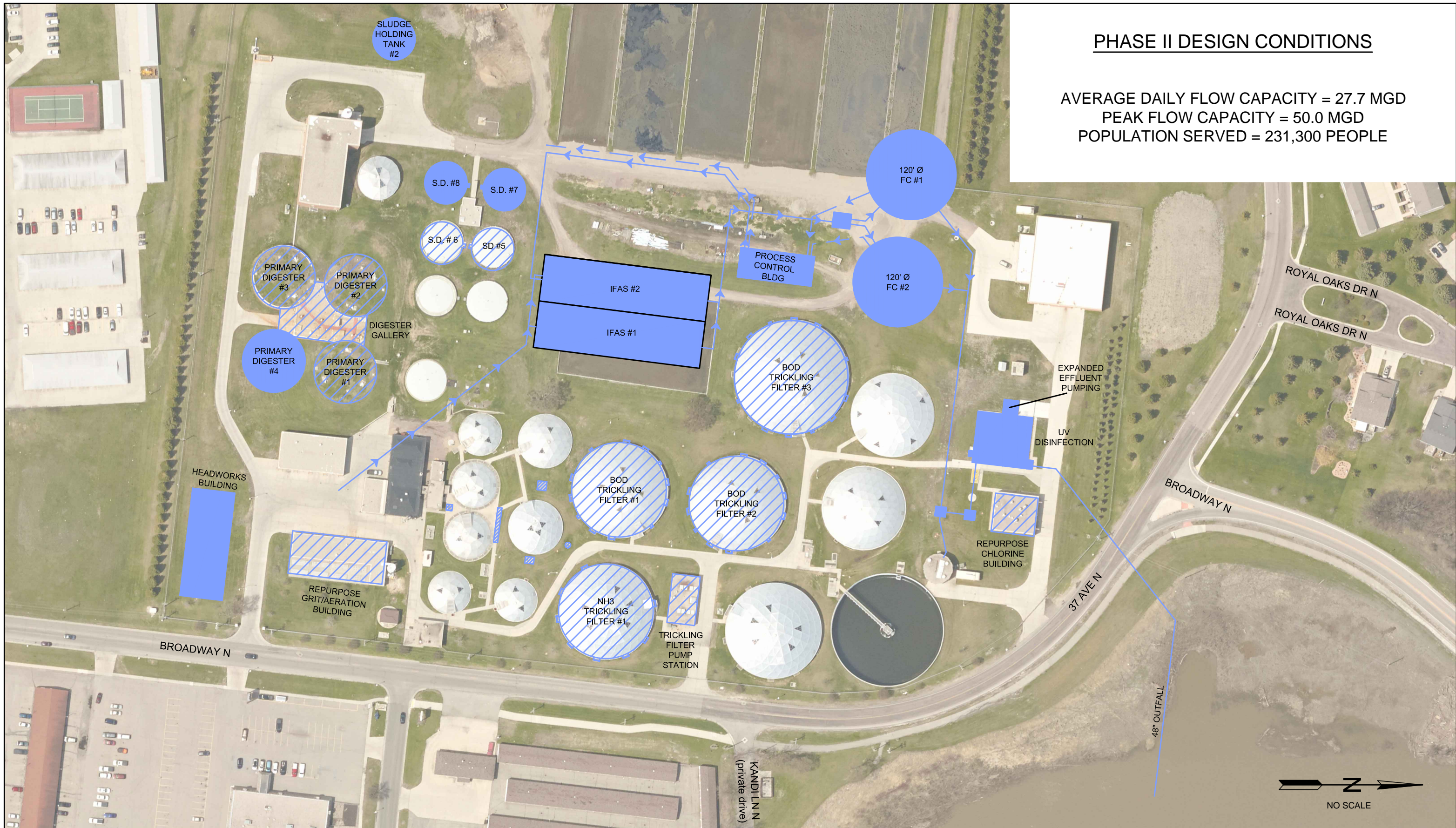
Year	Dollar Amount	Amount Collected to Date of Application	Percentage Collected
2022	\$39,463,391	\$37,819,243	96%
2021	\$38,099,705	\$37,731,663	99%
2020	\$37,809,484	\$37,542,708	99%

Mill Levy History:

Year	City	School	Park District	State and County	Other	Total for Each Year
2022	55.00	154.38	38.09	48.00	6.03	301.50
2021	53.00	154.38	33.85	48.75	6.03	296.01
2020	53.00	154.38	29.60	48.92	6.22	292.12
2019	53.00	154.38	28.67	50.00	6.39	292.44
2018	51.00	154.13	27.83	49.00	6.64	288.60

PHASE II DESIGN CONDITIONS

AVERAGE DAILY FLOW CAPACITY = 27.7 MGD
 PEAK FLOW CAPACITY = 50.0 MGD
 POPULATION SERVED = 231,300 PEOPLE



SYMBOLS LEGEND

- NEW CONSTRUCTION
- REHABILITATION



CITY OF FARGO WASTEWATER TREATMENT FACILITY

PROPOSED PHASE II IMPROVEMENTS

RESOLUTION APPROVING
LOAN FROM CLEAN WATER STATE REVOLVING FUND

WHEREAS, the Industrial Commission has heretofore authorized the creation of a Clean Water State Revolving Fund Program (the "Program") pursuant to N.D.C.C. chs. 6-09.4, and 61-28.2; and

WHEREAS, the State Revolving Fund is governed in part by the Master Trust Indenture dated as of July 1, 2011 (the "Indenture"), between the North Dakota Public Finance Authority (the "NDPFA") and the Bank of North Dakota (the "Trustee"); and

WHEREAS, the City of Fargo (the "Political Subdivision") has requested a \$25,000,000 loan increase to a previously approved \$126,500,000 loan (total \$151,500,000) from the Program for wastewater treatment plant improvements to accommodate growth, regionalization, and future regulations; and

WHEREAS, NDPFA's Advisory Committee is recommending approval of the Loan; and

WHEREAS, there has been presented to this Commission a form of Loan Agreement proposed to be adopted by the Political Subdivision and entered into with the NDPFA;

NOW, THEREFORE, BE IT RESOLVED by the Industrial Commission of North Dakota as follows:

1. The Loan is hereby approved, as recommended by the Advisory Committee.
2. The form of Loan Agreement to be entered into with the Political Subdivision is hereby approved in substantially the form on file and the Executive Director is hereby authorized to execute the same with all such changes and revisions therein as the Executive Director shall approve.
3. The Executive Director is authorized to fund the Loan from funds on hand in the Clean Water Loan Fund established under the Indenture upon receipt of the Municipal Securities described in the Political Subdivisions bond resolution, to submit to the Trustee a NDPFA Request pursuant to the Indenture, and to make such other determinations as are required under the Indenture.
4. The Commission declares its intent pursuant to Treasury Regulations '1.150-2 that any Loan funds advanced from the Federally Capitalized Loan Account shall be reimbursed from the proceeds of bonds issued by the NDPFA under the Indenture.

Adopted: June 29, 2023

Governor Doug Burgum, Chairman

Attest:

Karen Tyler, Interim Executive Director and Secretary
Industrial Commission of North Dakota

June 21, 2023

PUBLIC FINANCE AUTHORITY ADVISORY COMMITTEE

RECOMMENDATION TO THE INDUSTRIAL COMMISSION

The Advisory Committee, at its June 21, 2023 meeting reviewed and discussed, and recommends approval of a \$45,000,000 Clean Water State Revolving Fund Program loan to the City of Bismarck.

North Dakota Public Finance Authority
Advisory Committee

Keith Lund, Chairman
Linda Svihovec
John Phillips



Memorandum

TO: DeAnn Ament, Executive Director
North Dakota Public Finance Authority

FROM: PFM Financial Advisors LLC

DATE: June 16, 2023

RE: Marketplace Analysis - Clean Water State Revolving Fund Program
City of Bismarck

The City of Bismarck (“City”) has presented a request to the Authority and the North Dakota Department of Environmental Quality (“Department”) for a \$45,000,000 loan under the Clean Water State Revolving Fund Program (“CWSRF Program”). The CWSRF Program is used to make subsidized interest rate loans to political subdivisions for the purpose of constructing various wastewater treatment projects and landfill projects as approved by the Department in accordance with federal and state regulations and an updated Intended Use Plan prepared by the Department.

The City intends to use the proceeds to relocate the Hay Creek Lift Station, construct a new gravity sewer connecting the existing and new lift stations, and install a new forcemain to the gravity sewer.

The municipal securities to be acquired by the Authority will be revenue bonds payable from sewer user fees. The City’s average annual payment under the proposed loan will be approximately \$2,650,920 indicating a 110% net revenue coverage requirement of approximately \$2,916,012. The City will be required to deposit \$2,730,350 into a reserve fund with payments of \$546,070 per year for the first five years of the loan. Pro forma net operating coverage of the sewer fund was 1.25x, 1.33x, 1.53x and 1.46x for 2019-2022, respectively. The City reviews and adjusts its utility rates as necessary on an annual basis. The existing net operating revenues plus any annual rate adjustments will provide sufficient net revenues to meet the 110% coverage requirement.

As of December 31, 2022, the City has \$18,200,000 of Civic Center Sales Tax Revenue Bonds, \$112,905,000 of Improvement Bonds, \$6,778,670 of Water & Solid Waste Revenue Bonds, \$22,575,489 of Water Revenue Bonds and \$31,805,000 of Sewer Revenue Bonds outstanding. The City currently has two Clean Water SRF loans with an outstanding balance of \$10,835,000 and three Drinking Water SRF loans with an outstanding balance of \$11,912,609. The City is current in its payments for its outstanding Authority loans.

Funding for the construction of the City’s projects has been included in a list of approved projects as prepared and updated by the Department. As an authorized participant in the CWSRF Program, the City will benefit substantially from the subsidized fixed rate loans made under the Program. Consequently, no other financing mechanism can provide a greater cost advantage than that offered by the CWSRF Program.

Memorandum

To: Industrial Commission

From: Kylee Merkel, Business Banker
Bank of North Dakota

Date: June 12, 2023

RE: City of Bismarck
Clean Water State Revolving Fund Program

ND Public Finance Authority has delivered to BND their memo which recommends approval of a \$45,000,000 loan to the City of Bismarck under the Clean Water State Revolving Fund (CWSRF). CWSRF is financing 100% of the project. The proceeds from the loan will be used to relocate the Hay Creek Lift Station, and related sewer lines, lift stations and forcemains. The project will allow for increased capacity and for provide the ability for future expansion.

The City will issue revenue bonds payable with sewer user fees. The annual payment will average \$2,650,920. The requested loan term is 20 years. The City currently serves 20,650 residential connections and 2,125 commercial connections. Residential connections pay a monthly base rate of \$10.77 and a volume charge of \$2.94 per 748 gallons. Commercial connections pay a monthly base rate of \$57.41 and a volume charge of \$4.77 per 748 gallons. The City annually reviews and adjusts utility rates. The City projects having 21,484 residential connections and 2,210 commercial connections within the next two years. Existing revenues will generate sufficient coverage to service both the new and existing debt service requirements.

Debt Service Coverage:

Sanitary Sewer Fund	2019	2020	2021	Projected
Operating Revenue	11,695,571	12,020,917	13,576,512	13,576,512
Interest Revenue	332,347	257,099	58,353	58,353
Operating Expenses	-7,701,350	-7,581,430	-7,800,288	-7,800,288
Net Operating Revenue	4,326,568	4,696,586	5,834,577	5,834,577
Plus: Depreciation	3,703,690	3,757,048	3,833,949	3,833,949
Adjusted Net Operating Income	8,030,258	8,453,634	9,668,526	9,668,526
Current Debt Service	3,374,175	3,334,295	3,308,214	3,688,379
Proposed Debt Service				2,650,920
Total Debt Service				6,339,299
Debt Service Coverage	238%	254%	292%	153%

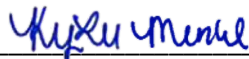
Outstanding Debt (as of December 31, 2022):

	Original Amount	Current Balance
Improvement Bonds	225,645,000	112,905,000
Sales Tax Revenue Bonds	19,615,000	18,200,000
BND IRLF	26,000,000	6,778,670
Water Revenue Bonds	47,452,489	22,575,489
Sewer Revenue Bonds	52,400,000	31,805,000
	371,112,489	192,264,159

Average annual debt service requirements are estimated at \$30,365,946, which is an average of \$406.38 per resident.

Based on the 2020 census, the population was 74,722. Historical census populations were 61,272 in 2010 and 55,532 in 2000. The largest employers in the City are the State of North Dakota, Sanford Health Center and Bismarck Public Schools.

Based upon the PFA recommendation and the benefits obtained with this project, BND concurs with their evaluation and support of the request.



Kylee Merkel
Business Banker

Industrial Commission
of North Dakota

Doug Burgum
GOVERNOR

Drew H. Wrigley
ATTORNEY GENERAL

Doug Goehring
AGRICULTURE COMMISSIONER



North Dakota Public Finance Authority

Memorandum

To: Public Finance Authority Advisory Committee
Miles Silbert, Public Financial Management
Kylee Merkel, Bank of North Dakota

From: DeAnn Ament, Executive Director

Date: June 9, 2023

Re: City of Bismarck
Clean Water State Revolving Fund Program Loan

Purpose of the Project: Relocate the Hay Creek Lift Station, construct a new gravity sewer connecting the existing and new lift stations, and install a new forcemain to the gravity sewer. This will increase capacity to handle projected flows and provide the ability to expand, if needed.

Project Amount:

CWSRF Request	\$ 45,000,000
Project Total	\$ 45,000,000

Population to Benefit from the Project: 82,000; \$549 per person

Population Served by the System: 82,000

Is the Project Area Within the Extraterritorial Jurisdiction of a City: No

The requested loan term is 20 years. The City will issue revenue bonds payable with sewer user fees. The average annual payment for the revenue bonds will be \$2,650,920. The reserve requirement will be \$2,730,350 and the 110% coverage requirement will be \$2,916,012.

The City has 20,650 residential connections and 2,125 commercial connections which respectively pay base rates of \$10.77 and \$57.41 per connection per month and volume charges of \$2.94 and \$4.77 per 748 gallons. Annually, the City reviews and adjusts utility rates as necessary.

Sanitary Sewer Fund:**Unaudited**

	2019	2020	2021	2022
Interest Revenue	\$332,347	\$257,099	\$58,353	-\$73,162
Operating Revenue	11,695,571	12,020,917	13,576,512	14,055,940
Operating Expenses	7,701,350	7,581,430	7,800,288	8,711,739
Net Operating Revenue	4,326,568	4,696,586	5,834,577	5,271,039
Depreciation	3,703,690	3,757,048	3,833,949	3,939,795
Adjusted Net Operating Revenue	\$8,030,258	\$8,453,634	\$9,668,526	\$9,210,834
Revenue Bond Payments	\$3,374,175	\$3,334,295	\$3,308,214	\$3,637,317
Net Operating Coverage	238%	254%	292%	253%
Proforma CWSRF Payment ¹	\$3,031,085	\$3,031,085	\$3,031,085	\$2,650,920
Proforma Net Operating Coverage	125%	133%	153%	146%

¹ For years 2019-2021 payment includes CW loan payment that was not fully funded.

With existing net operating revenue, the City should meet the 110% net operating revenue requirement.

Outstanding Debt 12-31-2022:

	Original Amount	Outstanding Amount
Improvement Bonds	\$225,645,000	\$112,905,000
Civic Center Sales Tax Revenue Bonds	19,615,000	18,200,000
BND IRL Water & Solid Waste Revenue Bonds	26,000,000	6,778,670
Water Revenue Bonds *	47,452,489	22,575,489
Sewer Revenue Bonds *	52,400,000	31,805,000
	<u>\$371,112,489</u>	<u>\$192,264,159</u>

*Payments to the NDPFA have been made as agreed. The City of Bismarck has two CWSRF loans with an outstanding balance of \$10,835,000 and three DWSRF loans that total \$11,912,609.

The City of Bismarck is located in Burleigh County. Based on the 2020 census, the total population is 73,622; this is an increase of 12,350 from the 2010 census. The current estimated population is 74,722. The largest employers in the City are the State of North Dakota with 4,600 employees, Sanford Health with 3,284 employees and Bismarck Public Schools with 2,187 employees.

School Enrollment:

				Projected
2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
13,329	13,175	13,443	13,632	13,800

The City's 2022 taxable valuation was \$460,624,579. This is an increase of \$68,494,972 over the 2018 taxable valuation.

Property Taxes Levied & Collected 5/17/2023:

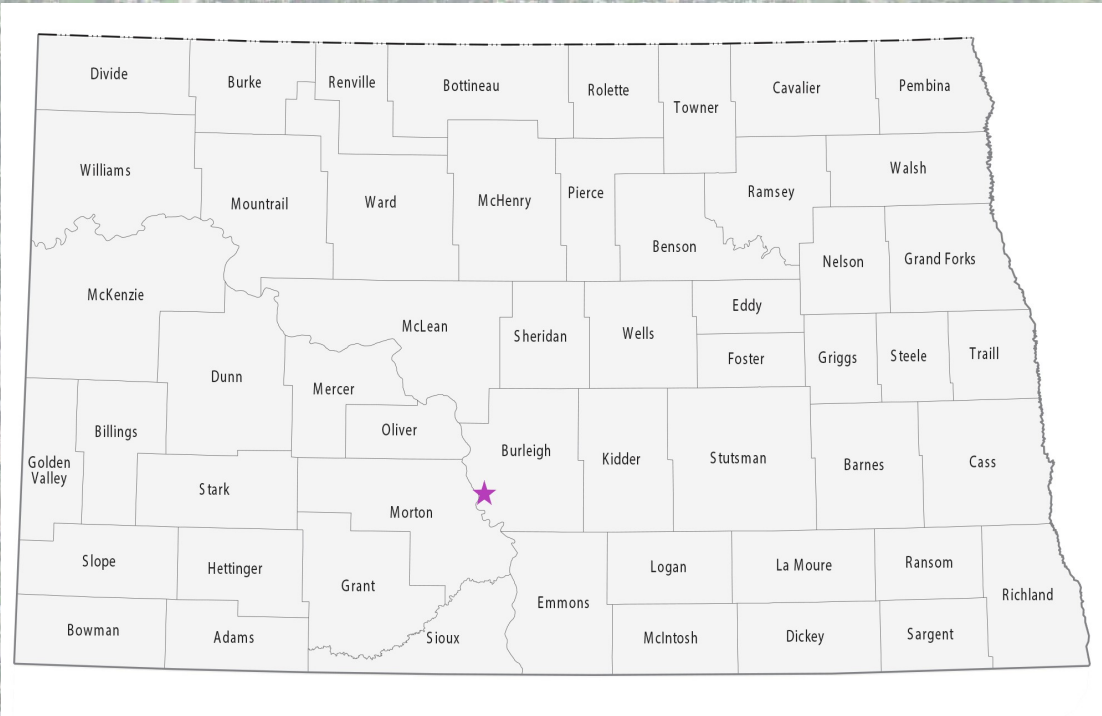
Levy Year	Dollar Amount of Levy	Amount Collected to Date of Application	Percentage Collected
2022	\$35,873,956	\$34,385,059	96%
2021	\$32,744,746	\$32,183,167	98%
2019	\$28,220,202	\$27,821,030	99%

Special Assessments Levied & Collected 5/17/2023:

Year	Dollar Amount	Amount Collected to Date of Application	Percentage Collected
2022	\$17,220,360	\$16,493,496	96%
2021	\$17,429,734	\$17,218,816	99%
2019	\$18,137,044	\$18,039,282	99%

City of Bismarck Mill Levy History:

Year	City	School	Park District and Library	State and County	Total for Each Year
2022	77.88	107.19	33.82	35.26	254.15
2021	77.75	107.19	33.80	35.40	254.14
2020	68.70	107.19	33.69	35.36	244.94
2019	58.88	107.19	34.22	36.30	236.59
2018	56.88	103.91	34.23	32.66	227.68



hay creek 10yr event peak

4,840 gpm - 2018
 6,670 gpm - 2030
 8,060 gpm - 2040

26th st ps

8,060 gpm
 new hay creek ps
 new location

8,060 gpm
 new force main capacity

12,000 gpm
 wachter ps

14,500 gpm
 gravity capacity

Alternative 3

Pump Station

- 26th St PS
- Hay Creek PS (new location)
- Wachter PS

Pipe Type

- Force Main
- Gravity Sewer

RESOLUTION APPROVING
LOAN FROM CLEAN WATER STATE REVOLVING FUND

WHEREAS, the Industrial Commission has heretofore authorized the creation of a Clean Water State Revolving Fund Program (the "Program") pursuant to N.D.C.C. chs. 6-09.4, and 61-28.2; and

WHEREAS, the State Revolving Fund is governed in part by the Master Trust Indenture dated as of July 1, 2011 (the "Indenture"), between the North Dakota Public Finance Authority (the "NDPFA") and the Bank of North Dakota (the "Trustee"); and

WHEREAS, the City of Bismarck (the "Political Subdivision") has requested a \$45,000,000 loan from the Program to relocate the Hay Creek Lift Station, construct a new gravity sewer connecting the existing and new lift stations, and install a new force main to the gravity sewer to increase capacity to handle projected flows and provide the ability to expand; and

WHEREAS, NDPFA's Advisory Committee is recommending approval of the Loan; and

WHEREAS, there has been presented to this Commission a form of Loan Agreement proposed to be adopted by the Political Subdivision and entered into with the NDPFA;

NOW, THEREFORE, BE IT RESOLVED by the Industrial Commission of North Dakota as follows:

1. The Loan is hereby approved, as recommended by the Advisory Committee.
2. The form of Loan Agreement to be entered into with the Political Subdivision is hereby approved in substantially the form on file and the Executive Director is hereby authorized to execute the same with all such changes and revisions therein as the Executive Director shall approve.
3. The Executive Director is authorized to fund the Loan from funds on hand in the Clean Water Loan Fund established under the Indenture upon receipt of the Municipal Securities described in the Political Subdivisions bond resolution, to submit to the Trustee a NDPFA Request pursuant to the Indenture, and to make such other determinations as are required under the Indenture.
4. The Commission declares its intent pursuant to Treasury Regulations '1.150-2 that any Loan funds advanced from the Federally Capitalized Loan Account shall be reimbursed from the proceeds of bonds issued by the NDPFA under the Indenture.

Adopted: June 29, 2023

Governor Doug Burgum, Chairman

Attest:

Karen Tyler, Interim Executive Director and Secretary
Industrial Commission of North Dakota



Memorandum

TO: DeAnn Ament, Executive Director
North Dakota Public Finance Authority

FROM: PFM Financial Advisors LLC

DATE: June 16, 2023

RE: Marketplace Analysis - Clean Water State Revolving Fund Program
City of Fargo

The City of Fargo (“City”) has presented a request to the Authority and the North Dakota Department of Environmental Quality (“Department”) for a \$1,000,000 increase to a previously approved \$20,229,000 loan for a total of \$21,229,000 under the Clean Water State Revolving Fund Program (“CWSRF Program”). The CWSRF Program is used to make subsidized interest rate loans to political subdivisions for the purpose of constructing various wastewater treatment projects and landfill projects as approved by the Department in accordance with federal and state regulations and an updated Intended Use Plan prepared by the Department.

The City intends to use the proceeds for the engineering of the wastewater treatment plant to accommodate growth, regionalization, and future regulations.

The municipal securities to be acquired by the Authority will be revenue bonds payable from wastewater user fees and sales tax revenues. The City’s average annual payment under the proposed loan will be approximately \$913,334 indicating a 110% net revenue coverage requirement of approximately \$1,005,668. The City will be required to deposit \$937,225 into a reserve fund with payments of \$187,445 per year for the first five years of the loan. Net operating coverage of the wastewater fund was 6.15x, 5.74x, 4.60% and 2.71x for 2019-2022, respectively. The City reviews their sewer rates annually and adjusts the rates biannually. The excess sales tax dedicated to SRF financing was \$5.8, \$6.8, \$7.3, \$9.2, and \$10.6 million for 2018-2022, respectively. The wastewater fund, sales tax revenues and rate increases will provide sufficient net revenues to meet the 110% coverage requirement.

As of December 31, 2022, the City has outstanding improvement obligations of \$458,990,000, general obligation bonds of \$29,035,000, sales tax revenue bonds of \$54,244,000, and outstanding appropriation bonds of \$35,938,000. The City currently has two CFP loans with an outstanding amount of \$54,244,000, and ten CWSRF and four DWSRF loans with a total outstanding amount of \$268,074,001. The City is current in its payments for its outstanding Authority loans.

Funding for the construction of the City's projects has been included in a list of approved projects as prepared and updated by the Department. As an authorized participant in the CWSRF Program, the City will benefit substantially from the subsidized fixed rate loans made under the Program. Consequently, no other financing mechanism can provide a greater cost advantage than that offered by the CWSRF Program.

Memorandum

To: Industrial Commission

From: Kylee Merkel, Business Banker
Bank of North Dakota

Date: June 12, 2023

RE: City of Fargo
Clean Water State Revolving Fund Program

ND Public Finance Authority has delivered to BND their memo which recommends approval of a \$1,000,000 increase to an existing loan (from \$20,229,000 to \$21,229,000) to the City of Fargo under the Clean Water State Revolving Fund (CWSRF). The entire cost of the project is \$172,729,000, with CWSRF financing the full project, which includes a separate \$151,500,000 CWSRF loan for the construction.

Proceeds of the loan will be used to for the engineering costs associated to the expansion of the wastewater treatment facility to accommodate growth, regionalization and future regulations. The requested loan term is 30 years. The City will issue a revenue bond payable from sales tax collections and wastewater user fees. The annual payment will average \$913,334.

The City collects a 2% sales tax, of which ½ of 1% is dedicated to clean water and drinking water state revolving fund financed infrastructure. The sales tax sunsets in 2028. If the city sales tax collections would be insufficient to meet the required 110% net operating coverage, or should the city sales tax not be extended, the City would utilize sewer user fees and implement any necessary rate increases.

½ of 1% City Sales Tax Debt Service Coverage:

	2018	2019	2020	2021	2022
2% City Sales Tax Collections	48,038,202	49,623,454	51,720,983	60,456,732	65,918,347
1/2 of 1%	12,009,551	12,405,864	12,930,246	15,114,183	16,479,587
CW WWTP Engineering	860,029	860,029	860,029	860,029	860,029
CW WWTP Construction	6,605,073	6,605,073	6,605,073	6,605,073	6,605,073
Total Debt Payments	7,465,102	7,465,102	7,465,102	7,465,102	7,465,102
Debt Service Coverage	160.88%	166.18%	173.21%	202.46%	220.76%

Wastewater Debt Service Coverage:

Wastewater Fund	2019	2020	2021
Operating Revenue	11,276,502	12,266,270	14,491,086
Interest Revenue	10,581	0	63,902
Operating Expenses	-14,459,967	-13,457,308	-14,834,215
Net Operating Revenue	-3,172,884	-1,191,038	-279,227
Plus: Depreciation	5,241,155	5,712,917	5,929,463
Adjusted Net Operating Revenue	2,068,271	4,521,879	5,650,236
Current Annual Debt Service	336,434	787,683	1,228,935
Debt Service Coverage	614.76%	574.07%	459.77%

The City currently serves 27,951 residential connections and 5,200 commercial connections. All users pay a monthly base rate of \$21.50. In addition, commercial users pay a usage fee of \$2.40/1,000 gallons. The City annually reviews and adjusts rates as needed to meet the coverage requirements.

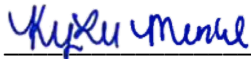
Outstanding Debt (as of December 31, 2022):

	Original Amount	Amount Outstanding
Governmental Activities		
Improvement Bonds	\$672,420,000	\$458,990,000
GO Bonds	38,745,000	29,035,000
Sales Tax Revenue Bonds	83,887,000	54,244,000
Taxable Appropriation Bonds	28,840,000	27,835,000
Appropriation Bonds	8,103,000	8,103,000
SRF Notes Payable	102,125,936	47,757,074
TIF Revenue Notes	4,821,633	4,461,642
Direct Bank Loan	6,000,000	2,687,316
Mercantile Parking Garage	2,000,000	2,000,000
BND Infrastructure Loan	15,000,000	11,708,348
	961,942,569	646,821,380
Business-Type Activities		
Revenue Bonds	2,875,000	1,659,480
Direct Bank Loan	3,000,000	600,000
SRF Notes Payable	268,679,000	220,316,927
Appropriation Bonds	7,810,000	4,145,000
	282,364,000	226,721,407
Total Debt	\$1,244,306,569	\$873,542,787

Average annual debt service requirements are estimated at \$85,212,102, which is an average of \$677.08 per resident.

Historical census populations for the City of Fargo were 125,853 in 2020, 106,024 in 2010 and 91,324 in 2000. The largest employers in the City are Sanford Health Facilities, North Dakota State University and Essentia Health.

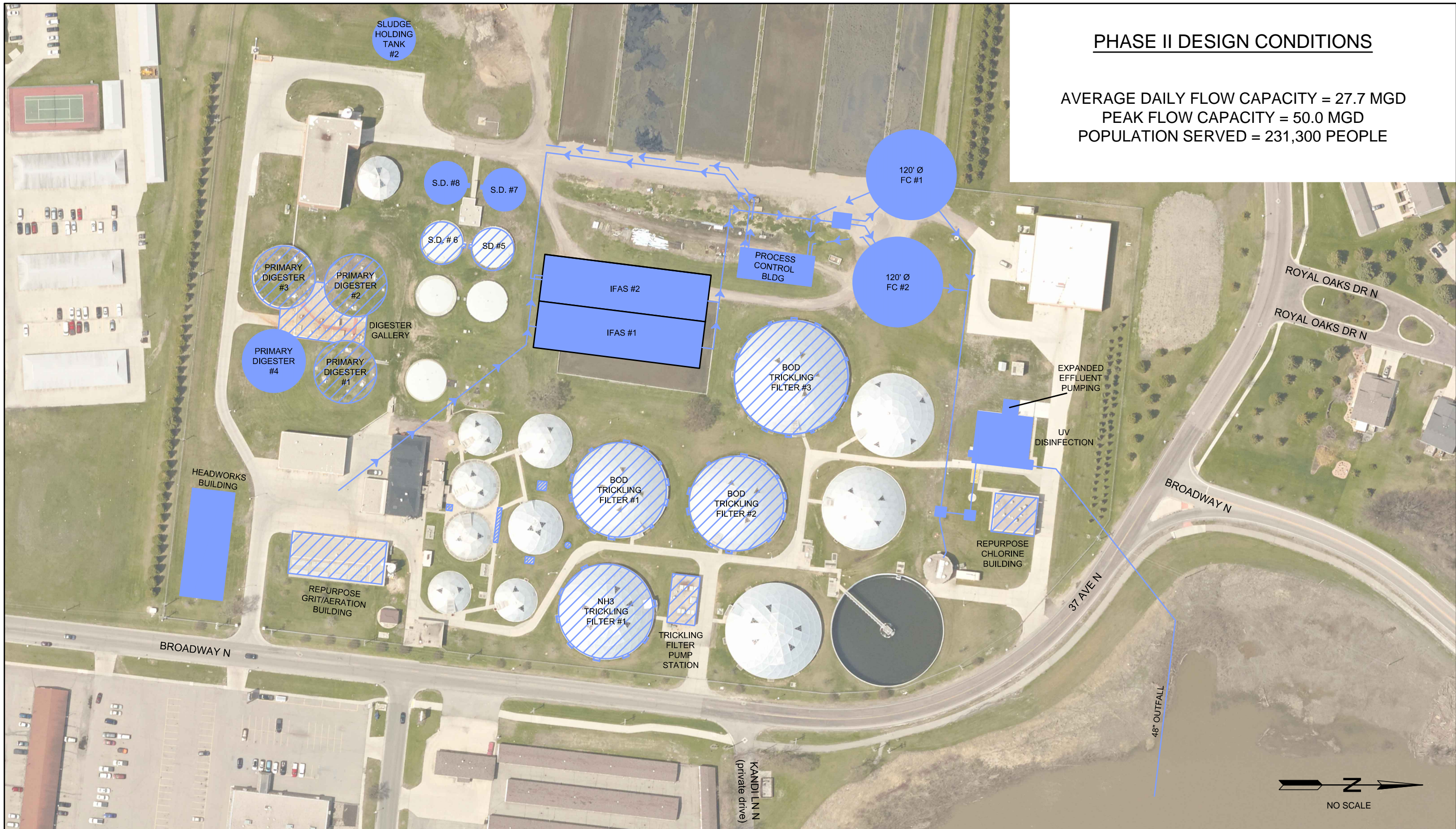
Based upon the PFA recommendation and the benefits obtained with this project, BND concurs with their evaluation and support of the request.



Kylee Merkel
Business Banker

PHASE II DESIGN CONDITIONS

AVERAGE DAILY FLOW CAPACITY = 27.7 MGD
 PEAK FLOW CAPACITY = 50.0 MGD
 POPULATION SERVED = 231,300 PEOPLE



SYMBOLS LEGEND

- NEW CONSTRUCTION
- REHABILITATION



CITY OF FARGO WASTEWATER TREATMENT FACILITY

PROPOSED PHASE II IMPROVEMENTS

Industrial Commission
of North Dakota

Doug Burgum
GOVERNOR

Drew H. Wrigley
ATTORNEY GENERAL

Doug Goehring
AGRICULTURE COMMISSIONER



North Dakota Public Finance Authority

Memorandum

To: Industrial Commission: Governor Doug Burgum, Attorney General Drew H. Wrigley,
Agriculture Commissioner Doug Goehring

From: DeAnn Ament, Executive Director

Date: June 21, 2023

Re: City of Fargo, Clean Water State Revolving Fund
City of Bismarck, Drinking Water State Revolving Fund
City of Galesburg, Drinking Water State Revolving Fund

Under current policy, the Public Finance Authority can make loans under the State Revolving Fund Program in an amount not to exceed \$2,000,000 and under the Capital Financing Program in an amount not to exceed \$500,000 without seeking the final approval of the Industrial Commission. Within this policy, once the loan has been approved, the Public Finance Authority is required to provide the details of the loan to the Industrial Commission. Accordingly, the Public Finance Authority and its Advisory Committee used this policy to approve the following loans.

The committee reviewed a Clean Water State Revolving Fund application from the City of Fargo for a \$1,000,000 increase to a previously approved \$20,229,000 loan towards a \$172,729,000 project. There will be a separate \$151,500,000 CWSRF loan for construction of the project. This will fund the engineering of the wastewater treatment plant improvements to accommodate growth, regionalization and future regulations. The requested term is 30 years. The City will issue revenue bonds payable with wastewater user fees and sales tax revenues.

The committee reviewed a Drinking Water State Revolving Fund (DWSRF) application from the City of Bismarck for a \$2,000,000 loan which is eligible for \$1,500,000 loan forgiveness, so the net loan will be \$500,000. The project will replace lead service lines. The requested term is 20 years. The City will issue revenue bonds payable with water user fees.

The committee reviewed a DWSRF application from the City of Galesburg for a \$606,000 loan towards a \$2,404,000 project. Department of Water Resources cost-share will provide \$1,798,000. The project will replace waterlines and make improvements to and simplification of water facility infrastructure to transition from City customers to East Central Regional Water

District customers which will eliminate operations and maintenance costs for the City. The requested term is 30 years. The City will issue improvement bonds payable with special assessments. The improvement bonds will be a contingent general obligation of the City, backed by the statutory requirement that the City will levy a general deficiency tax in the event that the revenues from the collection of special assessments are not sufficient to pay the debt service on the improvement bonds.

The Public Finance Authority's Advisory Committee approved the loan at their June 21, 2023, meeting.



Memorandum

TO: DeAnn Ament, Executive Director
North Dakota Public Finance Authority

FROM: PFM Financial Advisors LLC

DATE: June 16, 2023

RE: Marketplace Analysis - Clean Water State Revolving Fund Program
City of Bismarck

The City of Bismarck (“City”) has presented a request to the Authority and the North Dakota Department of Environmental Quality (“Department”) for a \$2,000,000 loan of which \$1,500,000 will be loan forgiveness, for a total of \$500,000 under the Drinking Water State Revolving Fund Program (“DWSRF Program”). The DWSRF Program is used to make subsidized interest rate loans to political subdivisions for the purpose of constructing various water treatment, distribution, and storage facilities as approved by the Department in accordance with federal and state regulations and an updated Intended Use Plan prepared by the Department.

The City intends to use the proceeds for lead service line replacement projects.

The municipal securities to be acquired by the Authority will be revenue bonds payable from water user fees. The City’s average annual payment under the proposed loan will be approximately \$25,000 indicating a 110% net revenue coverage requirement of approximately \$27,500. The City will be required to deposit \$25,000 into a reserve fund with payments of \$5,000 per year for the first five years of the loan. Pro forma net operating coverage of the water fund was 1.69x, 2.57x, 3.14x and 2.02x for 2019-2022, respectively. The City reviews and adjusts its utility rates as necessary on an annual basis. The existing net operating revenues plus any annual rate adjustments will provide sufficient net revenues to meet the 110% coverage requirement.

As of December 31, 2022, the City has \$18,200,000 of Civic Center Sales Tax Revenue Bonds, \$112,905,000 of Improvement Bonds, \$6,778,670 of Water & Solid Waste Revenue Bonds, \$22,575,489 of Water Revenue Bonds and \$31,805,000 of Sewer Revenue Bonds outstanding. The City currently has two Clean Water SRF loans with an outstanding balance of \$10,835,000 and three Drinking Water SRF loans with an outstanding balance of \$11,912,609. The City is current in its payments for its outstanding Authority loans.

Funding for the construction of the City's projects has been included in a list of approved projects as prepared and updated by the Department. As an authorized participant in the DWSRF Program, the City will benefit substantially from the subsidized fixed rate loans made under the Program. Consequently, no other financing mechanism can provide a greater cost advantage than that offered by the DWSRF Program.

Memorandum

To: Industrial Commission

From: Kylee Merkel, Business Banker
Bank of North Dakota

Date: June 13, 2023

RE: City of Bismarck
Drinking Water State Revolving Fund Program

ND Public Finance Authority has delivered to BND their memo which recommends approval of a \$2,00,000 loan to the City of Bismarck under the Drinking Water State Revolving Fund (DWSRF). This project is eligible for up to \$1,500,000 of loan forgiveness under the DWSRF, resulting in a net loan of \$500,000. DWSRF is financing 100% of the project. The proceeds from the DWSRF loan will be used to finance replacement of lead service lines.

The City will issue revenue bonds payable with water user fees. The annual payment will average \$25,000. The requested loan term is 20 years. The City currently serves 20,776 residential connections and 2,327 commercial connections. The City projects having 21,615 residential connections and 2,421 commercial connections by 2025. Existing revenues will generate sufficient coverage to service both the new and existing debt service requirements.

Debt Service Coverage:

Water Fund	2019	2020	2021	Projected
Operating Revenue	13,963,761	18,822,596	22,568,341	22,568,341
Interest Revenue	530,677	544,449	-72,818	-72,818
Operating Expenses	-12,033,485	-12,700,712	-13,700,286	-13,700,286
Net Operating Revenue	2,460,953	6,666,333	8,795,237	8,795,237
Plus: Depreciation	4,786,923	4,660,727	4,760,574	4,760,574
Adjusted Net Operating Income	7,247,876	11,327,060	13,555,811	13,555,811
Current Debt Service	3,801,508	3,909,789	3,825,033	4,295,710
Proposed Debt Service				25,000
Total Debt Service				4,320,710
Debt Service Coverage	191%	290%	354%	314%


Outstanding Debt (as of December 31, 2022):

	Original Amount	Current Balance
Improvement Bonds	225,645,000	112,905,000
Sales Tax Revenue Bonds	19,615,000	18,200,000
BND IRLF	26,000,000	6,778,670
Water Revenue Bonds	47,452,489	22,575,489
Sewer Revenue Bonds	52,400,000	31,805,000
	371,112,489	192,264,159

Average annual debt service requirements are estimated at \$30,365,946, which is an average of \$406.38 per resident.

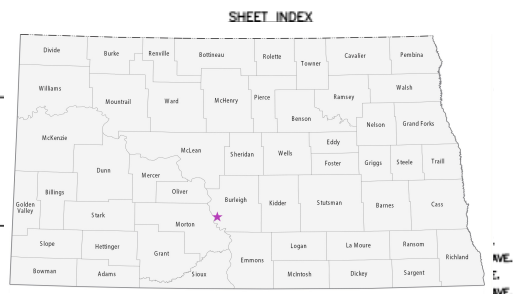
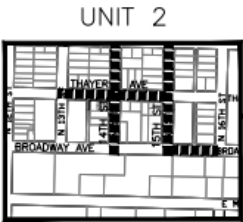
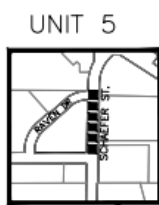
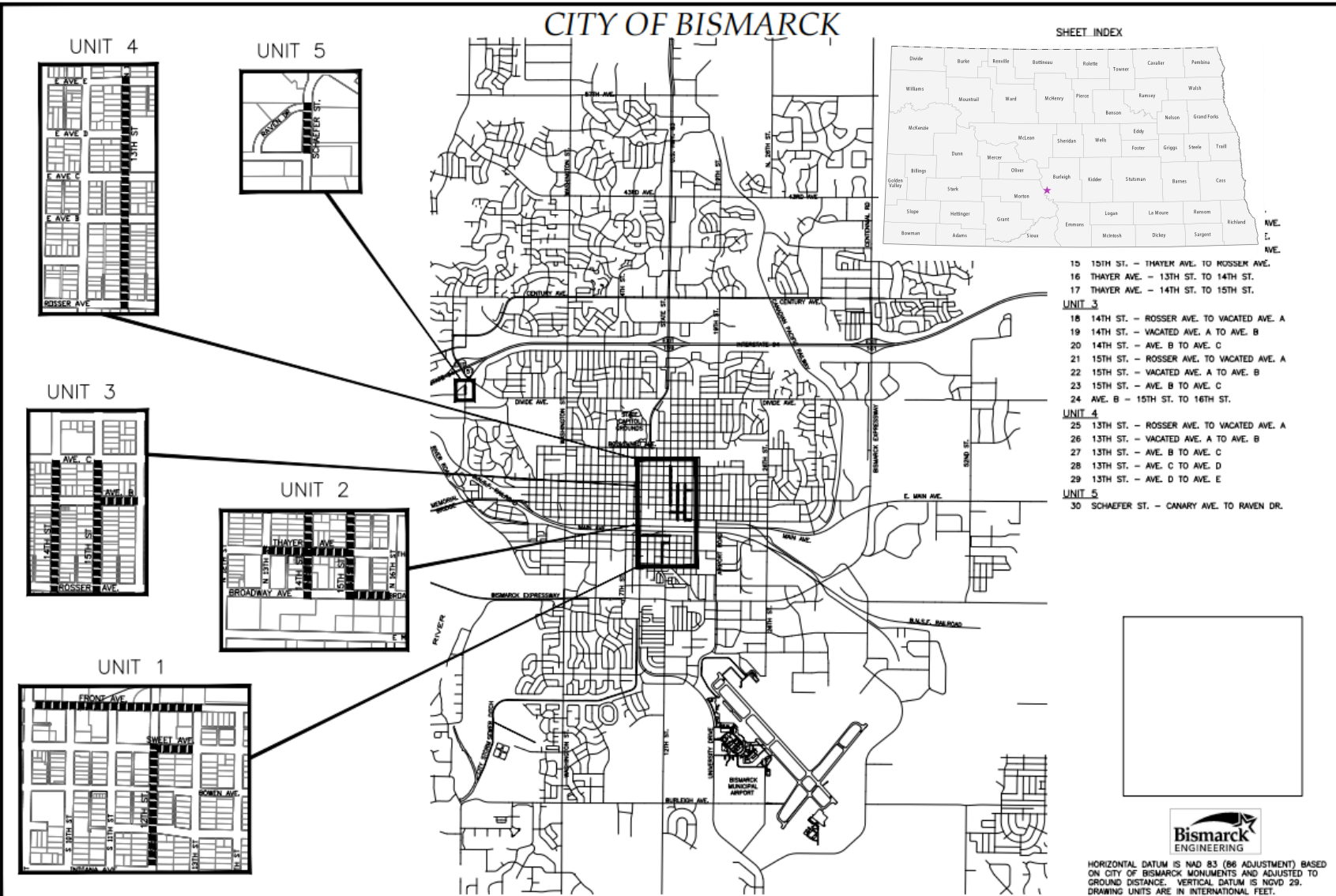
Based on the 2020 census, the population was 74,722. Historical census populations were 61,272 in 2010 and 55,532 in 2000. The largest employers in the City are the State of North Dakota, Sanford Health Center and Bismarck Public Schools.

Based upon the PFA recommendation and the benefits obtained with this project, BND concurs with their evaluation and support of the request.



Kylee Merkel
Business Banker

CITY OF BISMARCK



- 15 15TH ST. - THAYER AVE. TO ROSSER AVE.
- 16 THAYER AVE. - 13TH ST. TO 14TH ST.
- 17 THAYER AVE. - 14TH ST. TO 15TH ST.
- UNIT 3**
- 18 14TH ST. - ROSSER AVE. TO VACATED AVE. A
- 19 14TH ST. - VACATED AVE. A TO AVE. B
- 20 14TH ST. - AVE. B TO AVE. C
- 21 15TH ST. - ROSSER AVE. TO VACATED AVE. A
- 22 15TH ST. - VACATED AVE. A TO AVE. B
- 23 15TH ST. - AVE. B TO AVE. C
- 24 AVE. B - 15TH ST. TO 16TH ST.
- UNIT 4**
- 25 13TH ST. - ROSSER AVE. TO VACATED AVE. A
- 26 13TH ST. - VACATED AVE. A TO AVE. B
- 27 13TH ST. - AVE. B TO AVE. C
- 28 13TH ST. - AVE. C TO AVE. D
- 29 13TH ST. - AVE. D TO AVE. E
- UNIT 5**
- 30 SCHAEFER ST. - CANARY AVE. TO RAVEN DR.

HORIZONTAL DATUM IS NAD 83 (86 ADJUSTMENT) BASED ON CITY OF BISMARCK MONUMENTS AND ADJUSTED TO GROUND DISTANCE. VERTICAL DATUM IS NGVD 29. DRAWING UNITS ARE IN INTERNATIONAL FEET.



WATER UTILITY PROJECT NO. 140
2023 CAST IRON WATERMAIN REPLACEMENT
 CITY OF BISMARCK - ENGINEERING DEPT.
 Gabriel J. Scheidt, P.E., City Engineer
 221 N. 5th St., P.O. Box 5503 Bismarck, ND 58506-5503
 Phone: 701-355-1505 Fax: 701-222-6593
 Sheet No. 1 of 30

Industrial Commission
of North Dakota

Doug Burgum
GOVERNOR

Drew H. Wrigley
ATTORNEY GENERAL

Doug Goehring
AGRICULTURE COMMISSIONER



North Dakota Public Finance Authority

Memorandum

To: Public Finance Authority Advisory Committee

From: DeAnn Ament, Executive Director

Date: June 15, 2023

Re: City of Galesburg
Drinking Water State Revolving Fund Program Loan

Purpose of the Project: Replace waterlines and make improvements to and simplification of water facility infrastructure to transition from City customers to East Central Regional Water District (District) customers which will eliminate operations and maintenance costs for the City.

Project Amount:

DWSRF Request	\$ 606,000
DWR Cost-Share	1,798,000
Project Total	\$ 2,404,000

Population to Benefit from the Project: 118; \$20,372 per person
Population Served by the System: 118
Is the Project Area in the Extraterritorial Jurisdiction of a City: No

The requested loan term is 30 years. The average annual payment will be \$25,553. The City will issue improvement bonds payable with special assessments. The improvement bonds will be a contingent general obligation of the City, backed by the statutory requirement that the City will levy a general deficiency tax in the event that the revenues from the collection of special assessments are not sufficient to pay the debt service on the improvement bonds.

The City has 57 connections which currently pay a base rate of \$30 per connection per month and \$9/1,000 gallons.

Galesburg Water Fund:

	Unaudited		
	2020	2021	2022
Operating Revenue	\$42,898	\$52,018	\$44,716
Operating Expenses	52,296	30,382	41,907

Net Operating Revenue (Expenditures) \$ -9,398 \$21,636 \$ 2,810

ECRWD:

	Unaudited			
	2019	2020	2021	2022
Interest Revenue	\$37,999	\$49,055	\$24,925	\$15,862
Operating Revenue	4,189,202	4,175,533	4,479,051	4,883,813
Operating Expenses	3,459,327	3,628,809	3,805,188	3,833,860
Net Operating Revenue	767,874	595,779	698,788	1,065,814
Depreciation	849,670	986,769	974,639	--
Adjusted Net Operating Revenue	\$1,617,544	\$1,582,548	\$1,673,427	\$1,065,814
Bond Payments	\$1,236,988	\$654,928	\$765,199	\$615,677
Net Operating Coverage	131%	242%	219%	173%

After completion of the project, ECRWD estimates the monthly rate will be \$60 per connection per month and \$7/1,000 gallons. Annually, this is expected to generate revenues of \$55,404 for the 57 connections and the Capital Component of those revenues will be remitted to the City for payment of the debt service. Should the number of connections fall below 57 and the Capital Component be insufficient to pay the debt service, the City would be required to levy and collect special assessments.

The City will be responsible for the upkeep, operation, maintenance, repair and replacement of the reservoir and pump station as well as the electricity and all other utilities. The City will include a charge on the monthly utility bill to cover the ongoing expenses.

The City has no outstanding debt.

The City of Galesburg is located in Traill County approximately 53 miles northwest of Fargo. The total population according to the 2020 census is 118; this is an increase of 10 from the 2010 census. The largest employers in the area are American Crystal Sugar with 333 employees, Mayville State University which employs 305 and Sanford Health with 247 employees.

May-Port CG K-12 School Enrollment:

				Projected
2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
498	480	496	504	500

The City's 2022 taxable valuation was \$522,518. This is an increase of \$308,993 over the 2018 taxable valuation.

Property Tax Collections as of March 31, 2023:

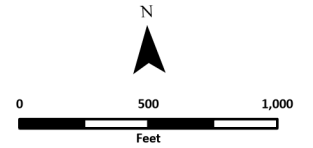
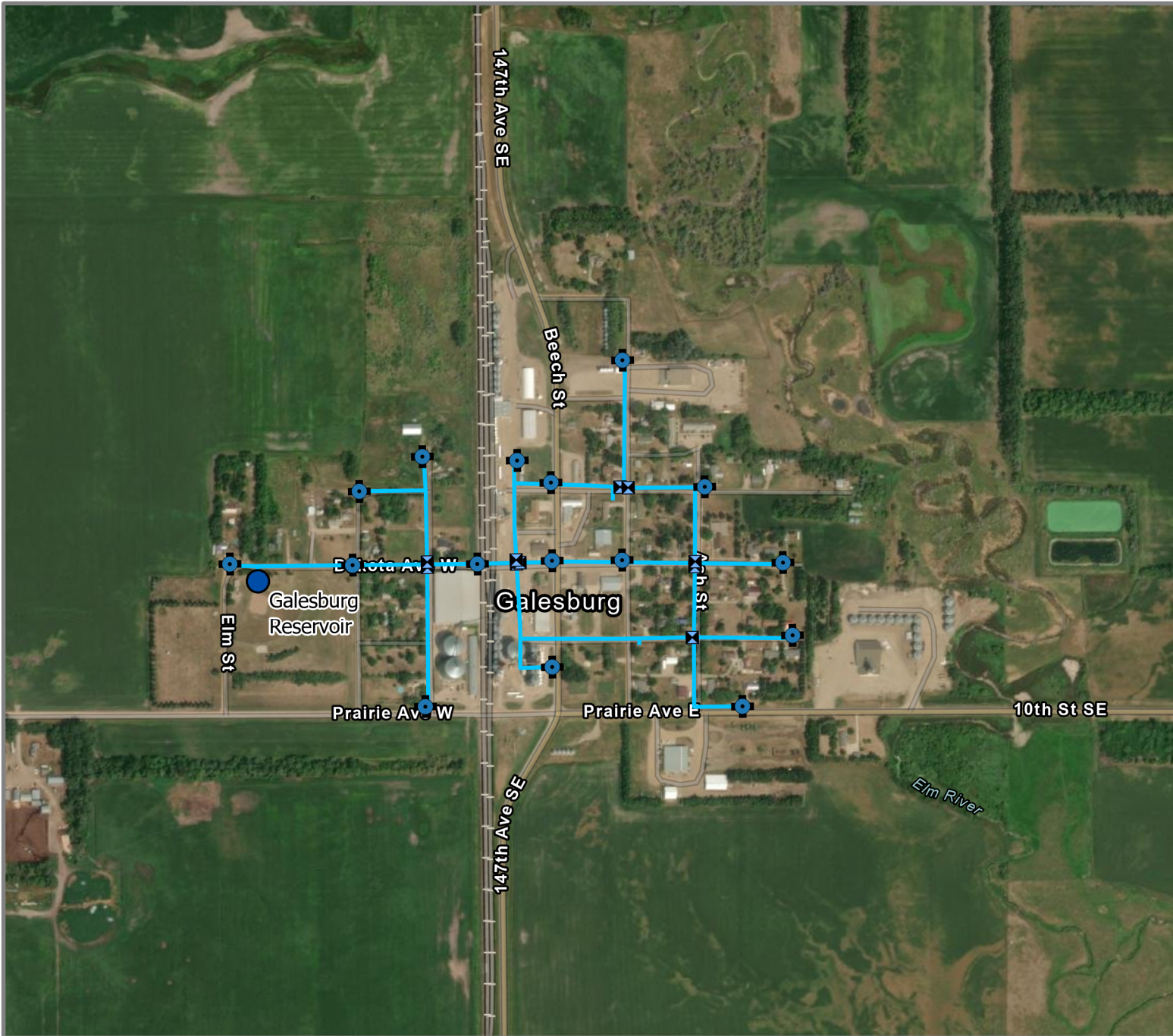
Levy Year	Dollar Amount of Levy	Amount Collected to Date of Application	Percentage Collected
2022	32,284	28,109	87%
2021	29,485	27,180	92%
2020	28,635	28,273	99%

Special Assessment Collections as of March 31, 2023:

Year	Dollar Amount	Amount Collected to Date of Application	Percentage Collected
2022	\$1,289	\$251	19%
2021	--	--	--
2020	--	--	--

Galesburg Mill Levy History:





Year	City	School	State and County	Other	Total for Each Year
2022	61.79	84.00	115.21	5.00	266.00
2021	66.24	84.24	120.01	5.00	275.49
2020	64.97	84.24	111.14	5.00	265.35
2019	65.76	89.24	107.20	1.47	263.67
2018	48.65	84.31	111.98	1.54	246.48



Locator Map Not to Scale

Galesburg
Traill County, ND

GALESBURG INFRASTRUCTURE IMPROVEMENTS WATER SYSTEM

-  Reservoir
-  Fire Hydrant
-  Gate Valve
-  Water Line

Date: 4/28/2022



MEMORANDUM

TO: Governor Doug Burgum, Chairman
Attorney General Drew H. Wrigley
Agriculture Commissioner Doug Goehring

FR: Karen Tyler, Industrial Commission Interim Executive Director

DT: June 29, 2023

RE: Public Finance Authority (PFA) Advisory Committee appointment

The North Dakota Public Finance Authority Policy P-2A states that the Industrial Commission shall appoint a three-member Advisory Committee to review information and make recommendations to the North Dakota Public Finance Authority Executive Director and the North Dakota Industrial Commission.

The policy states that the individuals appointed to this Committee must have background in municipal finance and/or economic development.

The current makeup of the Advisory Committee is:
Keith Lund, Grand Forks
Linda Svihovec, Bismarck
John Phillips, Beulah

Keith Lund's term will expire on July 1, 2023, and he is willing to continue his service to the PFA and Advisory Committee. Keith is the President and CEO of the Grand Forks Region Economic Development Corporation and has served on the Committee since 2011. He brings expertise in municipal finance and economic development and has provided valuable input to the Committee and the PFA Executive Director. Keith has been an active participant in the work of the Committee, and currently serves as Chairman. DeAnn has stated that his knowledge of the needs of urban communities and the complexities they face in funding infrastructure and his understanding of the role of the PFA is important to the work of the Authority. **Therefore, it is my recommendation that Keith Lund be reappointed for a three-year term effective immediately and extending to July 1, 2026.**

Respectfully submitted,

Karen Tyler

TO: Industrial Commission

FR: David A Flohr, Executive Director

RE: **FirstHome (Standard/Start/HomeAccess) and DCA Income Limits**

FirstHome and DCA Income Limit Proposal

The Department of Housing and Urban Development (HUD) published new median income numbers on May 15, 2023. These numbers are used to establish the Annual Income limits for the FirstHome, FirstHome Start, FirstHome DCA, and HomeAccess programs.

The new statewide median income for North Dakota increased \$3,600 (3.72%) to \$100,400 for 2023. This compares to the national median income increase of \$6,200 (6.89%) to \$96,200.

Mortgage Revenue Bond (MRB) regulations allow the use of the greater of county or state median income and those regulations and NDHFA policy limit household incomes as follows:

- FirstHome - 100% of median income - one and two member households by county (MRB regulation)
- FirstHome - 115% of median income - three or more member households by county (MRB regulation)
- DCA limits - 80% of median income by family size and county (NDHFA policy)

The proposed 2023 limits range from \$100,400 to \$127,420 depending on family size and county.

The NDHFA Advisory Board **recommends the Industrial Commission approve, in the form of Program Directive No. 121 per Exhibit 1, new Annual Income limits effective for loan reservations under the FirstHome (Standard/Start/HomeAccess) programs dated on or after July 1, 2023.**

The Advisory Board further recommends changes to the DCA Program limits per Exhibit 2 effective for loan reservations dated on or after July 1, 2023.

**NORTH DAKOTA HOUSING FINANCE AGENCY
HOME MORTGAGE FINANCE PROGRAM (FirstHome)**

PROGRAM DIRECTIVE NO. 121

MAXIMUM ANNUAL INCOME

The following Program Directive will serve as written notice of the applicable Maximum Annual Income (as defined in the 1994 Mortgage Purchase Agreement dated as of August 3, 1994) for an Eligible Mortgagor of a Mortgage Loan. These Maximum Annual Income limits are **effective for Mortgage Loans in which the Reservation is dated on or after the herein effective date July 1, 2023.**

Maximum Annual Income

FirstHome/Start/HomeAccess

County	Family Size	Family Size
	Less than 3	3 or more
Mercer/Williams	\$110,800	\$127,420
Stark	\$109,600	\$126,040
Burleigh/Morton/Oliver	\$108,600	\$124,890
Cass	\$104,100	\$119,715
McKenzie	\$102,700	\$118,105
All Other Counties	\$100,400	\$115,460

Effective date of this Program Directive No. 121: **July 1, 2023**

NORTH DAKOTA HOUSING FINANCE AGENCY

DCA PROGRAM

MAXIMUM ANNUAL INCOME

These Maximum Annual Income limits are **effective for DCA assisted FirstHome Loans in which the Reservation is dated on or after the herein effective date of July 1, 2023.**

DCA INCOME LIMITS

07/01/2023

COUNTY	FAMILY SIZE*							
	1	2	3	4	5	6	7	8
Mercer/Williams	62,100	70,950	79,800	88,650	95,750	102,850	109,950	117,050
Stark	61,400	70,200	78,950	87,700	94,750	101,750	108,750	115,800
Burleigh/Morton/Oliver	60,850	69,550	78,250	86,900	93,900	100,850	107,800	114,750
Cass	58,350	66,650	75,000	83,300	90,000	96,650	103,300	110,000
McKenzie	57,550	65,750	73,950	82,150	88,750	95,300	101,900	108,450
All Other Counties	53,600	61,250	68,900	76,550	82,700	88,800	94,950	101,050

**Larger families, check with NDHFA for limits.*



HOMEOWNERSHIP DIVISION

Brandon Dettlaff, Director

June 2023

TO: Industrial Commission

FR: David A Flohr, Executive Director

RE: **NDHFA FirstHome Acquisition Cost Limits**

Acquisition Cost Limit Increase

The NDHFA Advisory Board **recommends the Industrial Commission approve the Acquisition Cost Limits for the FirstHome Standard, Start, HomeAccess, and DCA programs be adjusted per the attached Program Directive 120, effective July 1, 2023.**

The IRS issues a Revenue Procedure each year that provides the average area purchase price for counties in each state and a nationwide minimum. This is done by adjusting the FHA loan limits to consider the differences between average and median purchase prices. The IRS tax code then requires we set our Acquisition Cost limits at no more than 90% of the applicable average area purchase price as provided in the Revenue Procedure.

The **current** FirstHome acquisition limits are as follows:

Previously Occupied and Unoccupied (1 unit only)

All Counties	<u>1 Unit</u>	<u>2 Unit</u>	<u>3 Unit</u>	<u>4 Unit</u>
	\$349,525	\$447,542	\$540,930	\$672,290

**NORTH DAKOTA HOUSING FINANCE AGENCY
HOME MORTGAGE FINANCE PROGRAM**

PROGRAM DIRECTIVE NO. 120

**Area Limits
(Maximum Acquisition Cost)**

The following Program Directive will serve as written notice of the Area Limits (as defined in the 1994 Mortgage Purchase Agreement dated as of August 3, 1994) for the Acquisition Cost of a Single-Family Residence. These Area Limits are **effective for Mortgage Loans in which the Reservation is dated on or after the herein effective date.**

Previously Occupied

All Counties	<u>1 Unit</u>	<u>2 Unit</u>	<u>3 Unit</u>	<u>4 Unit</u>
	\$481,176	\$616,111	\$744,679	\$925,491

Previously Unoccupied

All Counties	<u>1 Unit Only</u>
	\$481,176

The Agency reserves the right to modify the Area Limits at any time.

Rehabilitated structures are considered to be previously occupied even though not originally designed for residential use.

Effective date of this Program Directive No. 120: **July 1, 2023**

June 29, 2023

TO: Industrial Commission

FR: David Flohr, Executive Director

Report: Authorizing Declarations of Intent to issue Multifamily Revenue Bonds

On May 25, 2023, NDHFA issued a Declaration of "Official Intent" to issue Multifamily Revenue Bonds in the amount not to exceed \$14,000,000. The proceeds of the bonds will be used for the construction of Lashkowitz Riverfront 4, an 83-unit apartment complex located at 101 2nd St South, Fargo, North Dakota. A copy of the declarations is attached.


The issuance of tax-exempt bonds is required for a project to qualify for a non-competitive 4% tax credit allocation. The authority to issue the intent declaration was given by a Resolution Authorizing Declarations of Intent adopted by the Commission on March 24, 2015.

Fargo Housing and Redevelopment Authority, a North Dakota Housing Authority, is proposing the demolition of the existing 248-unit public housing complex known as the Lashkowitz Highrise and replace it with the new construction of 110 units to be developed as a twin 4 percent/9 percent transaction. The 4 percent transaction, for which tax-exempt bonds will be issued, will consist of 83 units and comprise floors 2-4. The remaining units will be financed as a separate asset utilizing 9 percent competitive credits. This transaction will remove units from public housing and replace with traditional affordable housing as part of a repositioning strategy.

The issuance of an official intent memo declares the intention to issue multifamily bonds, however does not obligate the Agency to give final approval for the issuance of the bonds. Final approval for issuance of the bonds can only be authorized by independent action of the Industrial Commission. Prior to final bond issuance, the application must meet underwriting conditions and receive an approval for 4% tax credits. Once underwriting conditions are met, the project will then presented to the Commission with a request to approve the issuance of a Resolution Authorizing Revenue Bonds and approve the substantially drafted bond documents

MEMORANDUM

TO: LASHKOWITZ RIVERFRONT 4

FROM: David Flohr, Executive Director 

DATE: 05/25/2023

RE: Declaration of "Official Intent" with respect to Authorizing Declarations of Intent to Issue Multifamily Revenue Bonds

By the authority granted in a certain resolution entitled "Resolution Authorizing Declarations of Intent to Issue Multifamily Revenue Bonds" and adopted by the Industrial Commission of North Dakota on March 24, 2015, I hereby declare, pursuant to Section 1.150-2 of the Internal Revenue Code Regulations, the Agency's intention to issue bonds in an amount not to exceed \$14,000,000 to provide funds to finance a loan with respect to the Project noted above (a 83 unit family affordable housing rental project located in Fargo, North Dakota), subject to the following:

The declaration of intention stated in the preceding paragraph does not obligate the Agency to give final approval for the issuance of said Bonds. Final approval of the issuance of the Bonds can only authorized by independent action of the Industrial Commission, which may contain such conditions thereto as the Industrial Commission may deem appropriate. The Industrial Commission in its absolute discretion may refuse to give final approval to authorize the issuance of the Bonds and shall not be liable to any person, including, but not limited to, the developer, the borrower or any other applicant, for its refusal or inability to do so.

MEMORANDUM

TO: Governor Doug Burgum, Chairman
Attorney General Drew H. Wrigley
Agriculture Commissioner Doug Goehring

FR: Karen Tyler, Interim Executive Director

DT: June 29, 2023

RE: Housing Finance Agency Advisory Board re-appointments

The North Dakota Century Code 54-17-07.1 states:

54-17-07.1. Advisory board - Rules.

The Industrial Commission shall appoint a six-member advisory board consisting of representatives of lenders, the residential real estate industry, the mobile home and manufactured housing industry, and homeowners and buyers, and in consultation with such board may adopt rules and regulations for the conduct of its housing finance program which may, among other matters, establish requirements for the type and purchase price of dwelling units and multifamily facilities eligible to be financed, the income limits for eligible low or moderate income persons or families, the interest rates and other terms of mortgage loans to be financed, requirements relating to federal or private mortgage insurance or guarantees, and the general terms and conditions for the issuance and security of housing revenue bonds to be issued.

The current terms for HFA Advisory Board members Ninetta Wandler (Real Estate) and Jim Farnsworth (Manufactured Housing) will expire on July 1, 2023. Ms. Wandler was first appointed to the advisory board on January 22, 2004 and currently serves as board Chair. Mr. Farnsworth was first appointed to the board on December 28, 2010. Both members are interested in continuing their service on the advisory board and the full board voted to support this reappointment at the March 10, 2023 advisory board meeting.

I recommend the Industrial Commission accept the recommendation of the HFA Advisory Board and reappoint Ninetta Wandler and Jim Farnsworth for three-year terms, and also reappoint Ninetta Wandler as Chair.

Respectfully submitted,

Karen Tyler

NORTH DAKOTA MILL

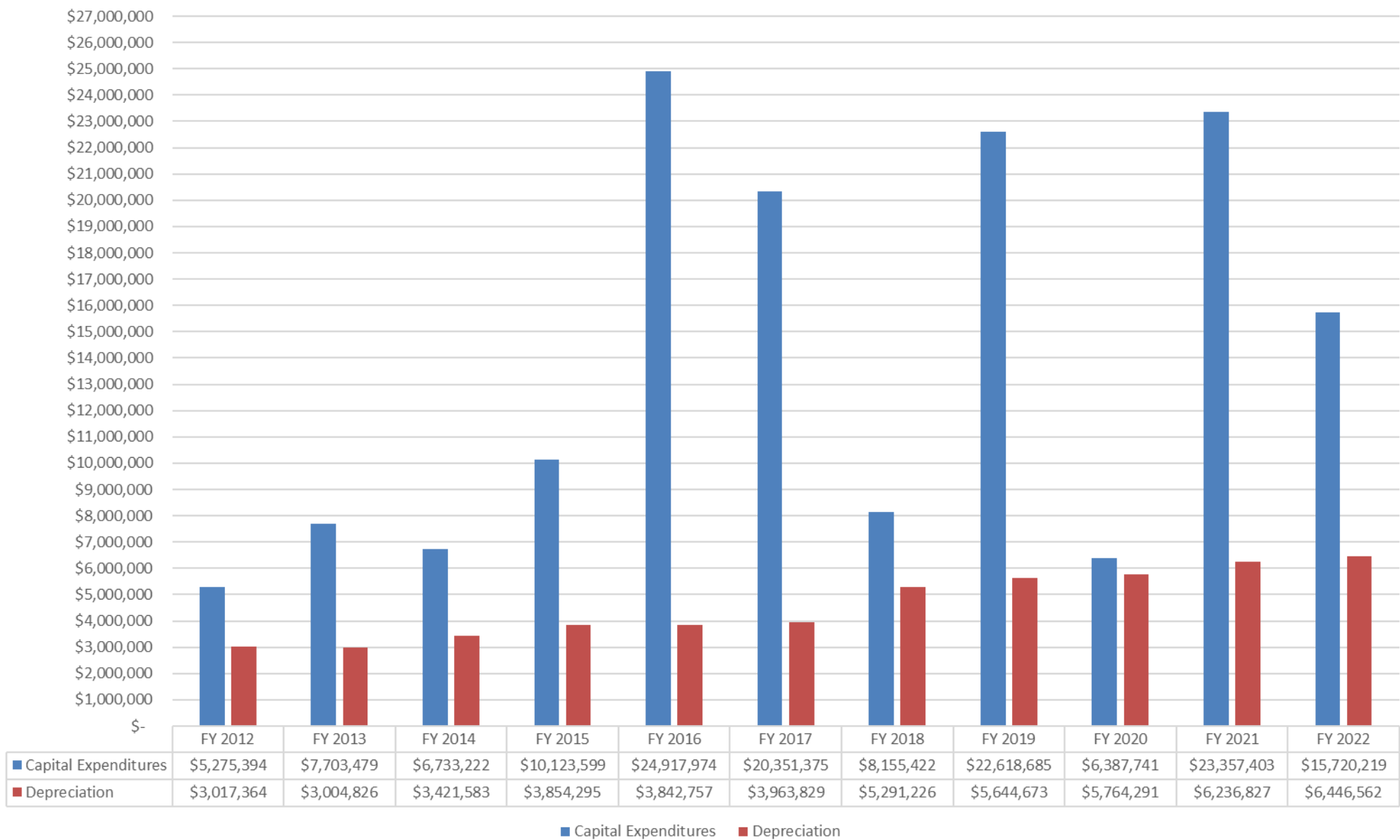
An illustration of a large industrial mill building with multiple towers and a long structure. The sky is blue with white clouds. The entire scene is framed within a semi-circular arch.

Quality Millers Since 1922

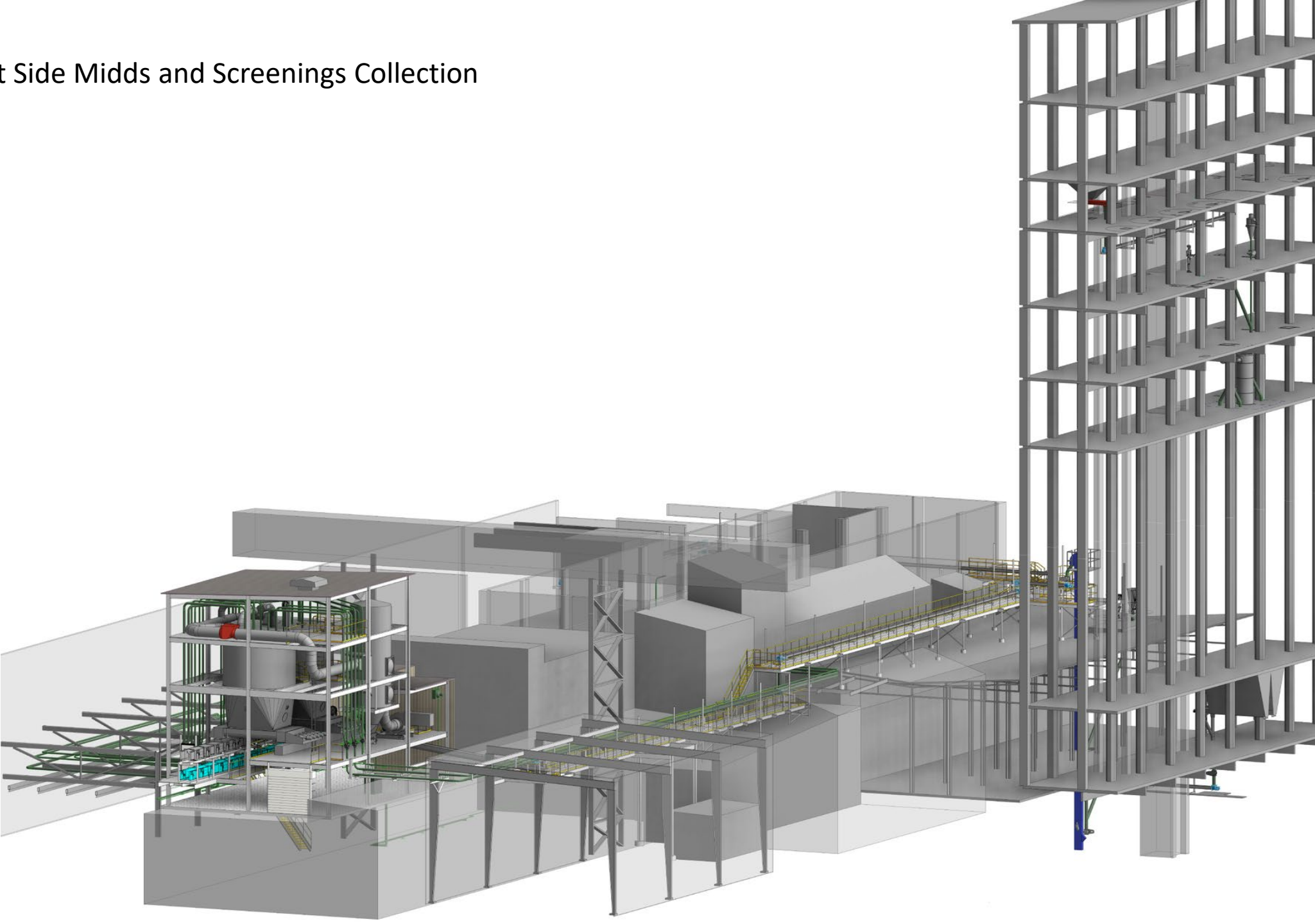
North Dakota Mill & Elevator Major Capital Projects Completed

Fiscal Year 2022:	Completed Amt	Projects in Progress:	Budget Amt	Amt Remaining
Terminal Receiving Scales & Conveyors	\$ 8,303,962.00	Freight Elevator Upgrade	\$ 950,000.00	\$ 121,422.25
Automated Flour Packing System	\$ 2,346,862.00	Upper Bulk Flour Storage Renovation	\$ 635,000.00	\$ 25,154.12
PT 1 Packing System Upgrade	\$ 419,995.00	H & I Mills Expansion	\$ 24,475,000.00	\$ 13,303.59
		D Mill Product Transfer System	\$ 790,000.00	\$ 22,981.73
Fiscal Year 2021:		Rail Track Crossing & Drainage Upgrades	\$ 750,000.00	\$ 1,511.26
Phase II Shuttle Track & Grain Storage	\$ 24,677,424.48	Phase II Bulk Flour Storage Upgrade	\$ 285,000.00	\$ 202,145.00
		Electrical Substation Upgrade	\$ 275,000.00	\$ 15,000.00
Fiscal Year 2020:		Grain Terminal Belt Conveyor Upgrades	\$ 460,000.00	\$ 457,513.76
Grain Receiving Land & Engineering	\$ 3,336,704.25	Midds Storage & Handling Phase I & II	\$ 37,200,000.00	\$ 25,485,342.49
Transformers and Electrical Room	\$ 321,852.59	Asphalt & Concrete Paving	\$ 350,000.00	\$ 273.00
Rail Track & Crossing Upgrade	\$ 582,871.65	K, C, and A Mill Sifter Upgrades	\$ 650,000.00	\$ 165,071.38
		A Mill Roll Conversion	\$ 470,000.00	\$ 312,612.40
Fiscal Year 2019:		K Mill High Pressure Fans	\$ 450,000.00	\$ 450,000.00
Transfer Conveyors & Grain Cleaner	\$ 484,176.50	Packing Flour Transfer Upgrade	\$ 375,000.00	\$ 372,900.00
Yield Management System Upgrade	\$ 324,565.97	A Mill Purifier & Flour Collection Conveyor Upgrade	\$ 325,000.00	\$ 298,894.74
Roll Corrugation Equipment	\$ 335,718.47	Flour Transfer B Filter & Conveyor	\$ 310,000.00	\$ 208,422.93
A, B, and K Mill Sieve Replacement	\$ 289,740.46	Mill PLC Upgrades (6 Mills)	\$ 260,000.00	\$ 174,597.40
		Electrical Generation	\$ 3,500,000.00	\$ 3,012,500.00
Fiscal Year 2018:				
High Speed Rail/Track Wht Unloading System	\$ 9,298,127.85			
Pellet Mill	\$ 439,939.56	Total Projects in Progress	\$ 72,510,000.00	\$ 31,339,646.05
Old Warehouse Roof Upgrade	\$ 299,083.60			
Grain Inspection Building Canopy	\$ 312,960.23			
Grain Separator Replacement	\$ 424,664.30			
CompuWeigh System	\$ 553,990.91			
Automated Flour Packing System	\$ 1,941,996.26	Total Capital Investments	\$ 171,341,550.04	
Rail Track Upgrades & Drainage Improvements	\$ 348,044.44			
Fiscal Year 2017:				
G Mill Expansion Project	\$ 34,354,005.22			
Flour Tank Expansion	\$ 4,385,125.55			
Storm Sewer/Drainage Upgrade	\$ 4,447,896.45			
Rail Cleaning Shed Extension & Doors	\$ 350,941.38			
Rail Track Refurbishment	\$ 250,900.92			
Total Investment - Last 6 Fiscal Years	\$ 98,831,550.04			

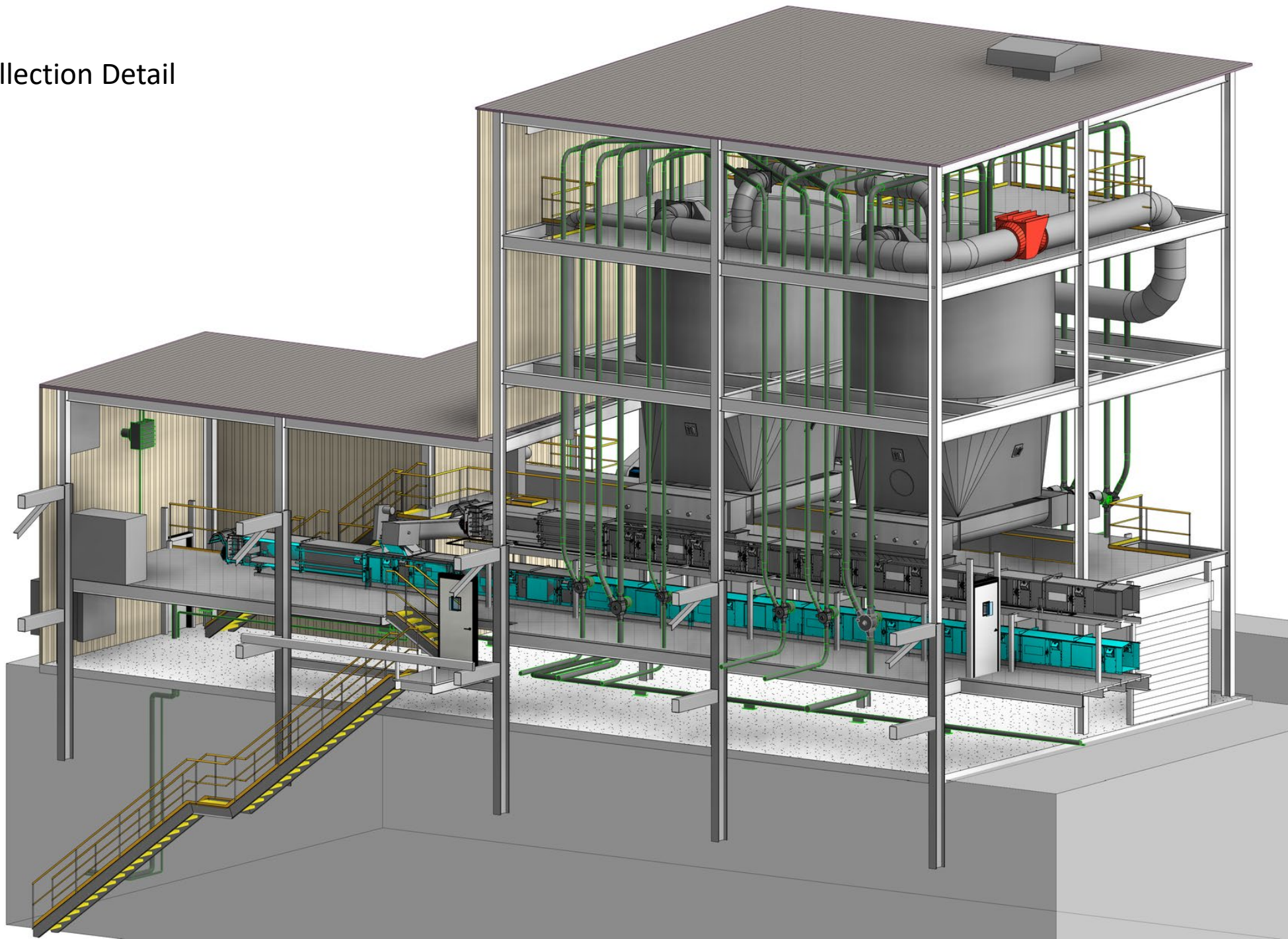
Capital Expenditures vs Depreciation



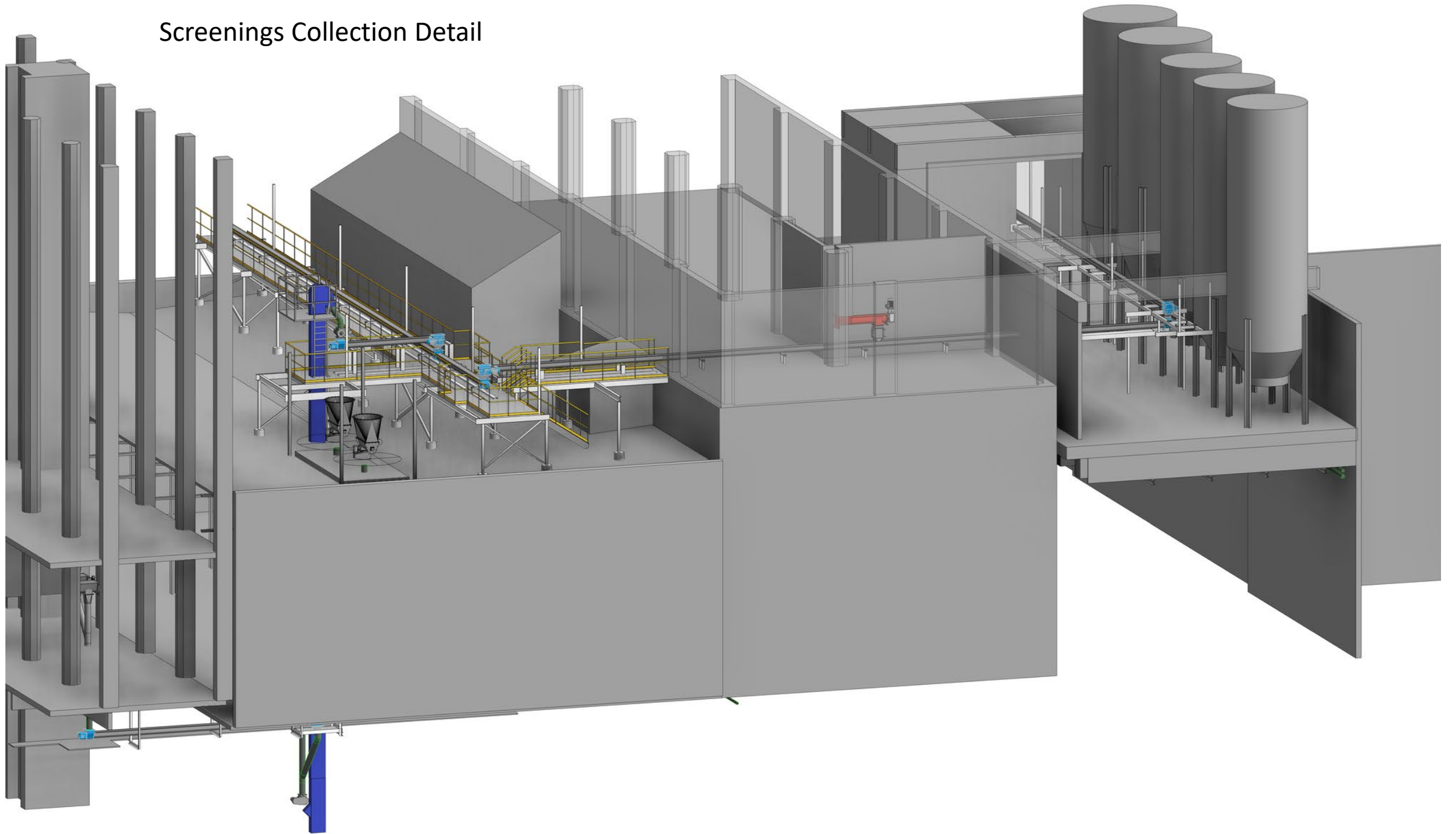
Plant Side Midds and Screenings Collection



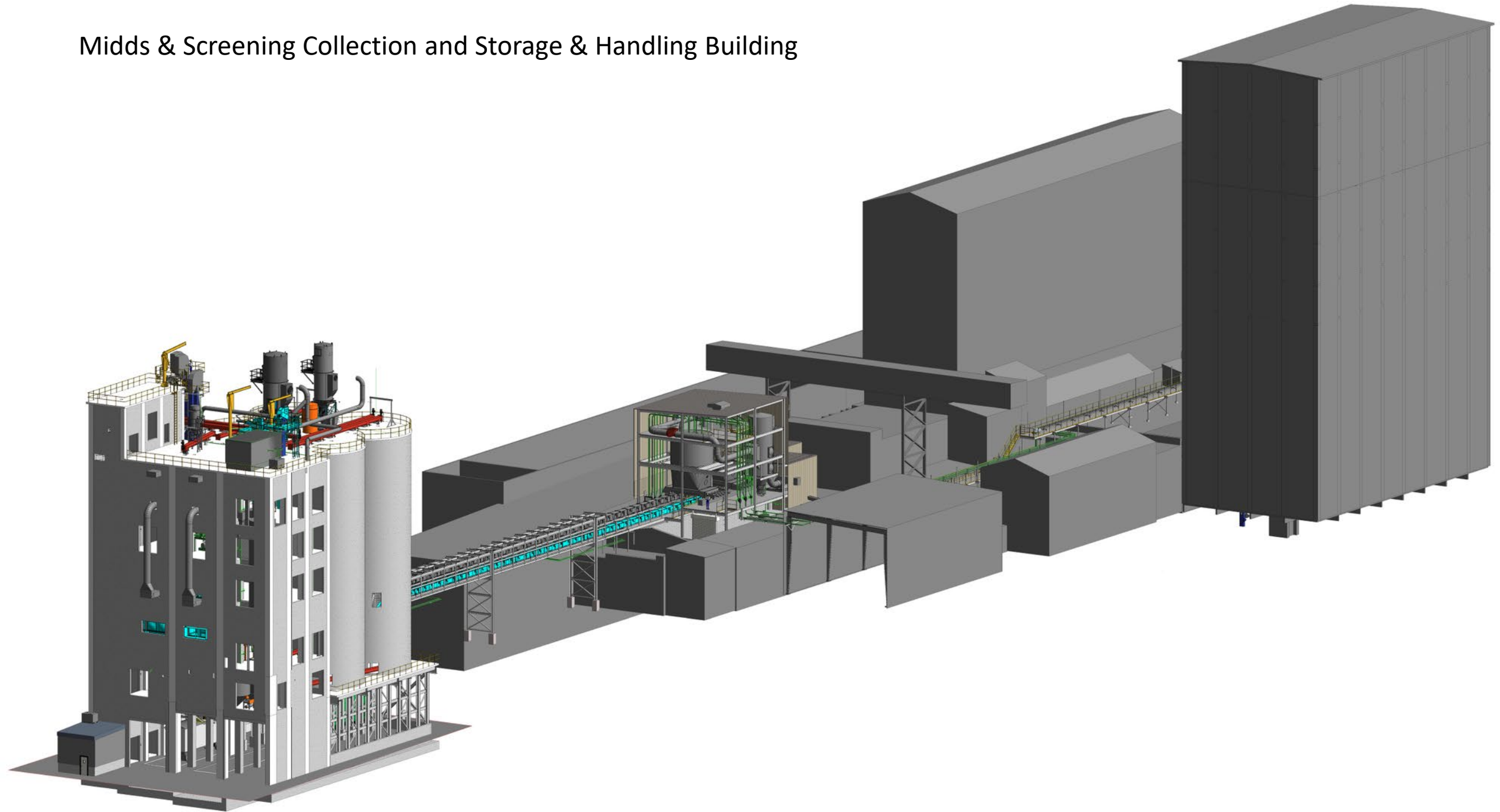
Midds Collection Detail



Screenings Collection Detail



Midds & Screening Collection and Storage & Handling Building



Capital Projects for Consideration

6/29/2023

Midds Storage & Handling System Phase III

\$18,800,000

Phase I of the Midds Storage & Handling System is currently underway. Phase I of the project was approved for \$34,000,000 and included all site work, pile foundation, pile cap and excavation, slip form building, concrete silos and steel bins, all mechanical and equipment installation, air makeup and ductwork, and all contractor supplied equipment.

Phase II of the project was approved for a total of \$3,200,000. This amount covered the owner furnished equipment, long lead time electrical components and engineering.

Phase III of the project will be the final phase and includes electrical for the building and the collection system, steam for the building, and the plant side midds and screening collection system to move the midds and screenings from the milling units to the new midds building to the processed and loaded. With the approval of Phase III the total project cost is \$56,000,000.

Industrial Vacuum

\$175,000

The purchase of a portable industrial vacuum will improve cleaning efficiency, sanitation levels and employee safety throughout the terminal elevator and outside areas of the facility.

UPDATED PROJECT ESTIMATE MODIFIED FOR 3 PHASE PLAN

PHASE I COMPONENTS

1. EQUIPMENT
 - A. Pellet Mills (2)
 - B. Pellet Coolers (2)
 - C. Hammer Mills (2)
 - D. Bag Houses (4)
 - E. Bucket Elevators (5)
 - F. Conveyors
 - G. Laidig Bin Unloaders/reclaimers
 - H. Truck Scale and Truck/Rail Combination Scale

2. Structural
 - A. Pile Foundations, pile cap and excavation
 - B. Building
 - C. Concrete silos, steel bins and supports

3. Site Work
 - A. Site utilities
 - B. Rail work
 - C. Grading and site paving

4. Mechanical
 - A. Make up Air
 - B. Ductwork for Aspiration
 - C. Equipment Installation

Total estimated cost for this bid \$32,500,000

5. Alternate for Freight Elevator \$1,499,143

Total Amount Requested for Approval \$34,000,000

PHASE II COMPONENTS

6. Items to be bid separately
 - A. Owner furnished equipment \$1,800,000
 - B. Long Lead Electrical Components \$1,000,000
 - C. Engineering \$ 400,000

Separate bid subtotal \$3,200,000

(cont'd next page)

PHASE III COMPONENTS

- 7. Items to be bid separately
 - A. Electrical – Phase I & II \$ 3,800,000
 - B. Plant side mids and screenings collection \$ 14,500,000
 - C. Contingency \$ 500,000

Separate bid subtotal \$ 18,800,000

Updated Project Total \$ 56,000,000

MEMORANDUM

TO: Governor Doug Burgum, Chairman
Attorney General Drew H. Wrigley
Agriculture Commissioner Doug Goehring

CC: Susan Sisk, OMB Director

FR: Vance Taylor, State Mill
Karen Tyler, Industrial Commission

DT: June 29, 2023

RE: State Mill transfers

North Dakota Century Code § 54-18-19 and 54-18-21 state the following:

54-18-19. Transfer of North Dakota mill and elevator profits to general fund.

The industrial commission shall transfer to the state general fund fifty percent of the annual earnings and undivided profits of the North Dakota mill and elevator association after any transfers to other state agricultural-related programs. The moneys must be transferred on an annual basis in the amounts and at the times requested by the director of the office of management and budget.

54-18-21. Annual transfer. Within thirty days after the conclusion of each fiscal year, the industrial commission shall transfer five percent of the net income earned by the state mill and elevator association during that fiscal year to the agricultural products utilization fund.

Mill management is planning to close their books on July 21, 2023, and is proposing to make the transfers no later than July 25, 2023. Therefore, we are requesting that the Industrial Commission authorize the transfer of 50% of the Mill FY 2023 profits to the General Fund and the 5% of net income to the Agricultural Products Utilization Fund utilizing unaudited numbers by no later than July 25, 2023, with Mill management reporting the amount of the transfers to the Commission at the next Industrial Commission meeting.

Respectfully submitted,

Vance Taylor
Karen Tyler



June 14, 2023

Mr. Reice Haase
Executive Director and Secretary
North Dakota Industrial Commission
600 East Boulevard Avenue, Department 405
Bismarck, ND 58505-0840

Dear Mr. Haase:

Subject: Requested Modification to North Dakota Industrial Commission Contract No. SERC 2019-01

In 2019, North Dakota's 66th Legislative Assembly established the Energy & Environmental Research Center (EERC) as the State Energy Research Center (SERC) through Senate Bill No. 2249. The legislation included \$5 million of funding per biennium to fulfill three objectives: 1) conduct exploratory, transformational, and innovative research of technologies and methodologies that facilitate the prudent development and clean and efficient use of the state's energy resources; 2) provide greater access to energy experts for timely scientific and engineering studies to support the state's interests; and 3) educate stakeholders on issues related to the state's energy resources through public outreach.

In 2023, North Dakota's 68th Legislative Assembly passed Senate Bill No. 2161 in continuing support of SERC efforts. This bill reaffirms SERC's mandate and directs the following actions:

- Changing the end date of SERC activities and funding from its current end date of June 30, 2027, to June 30, 2029.
- Raising the SERC fund limit from \$5 million per biennium to \$7.5 million per biennium.

In keeping with the directive of Senate Bill No. 2161, the EERC requests a modification to NDIC Contract No. SERC 2019-01 to update the end date to June 30, 2029, and increase the funding amount to \$7.5 million per biennium. The scope of work will remain the same.

In addition to the actions directed by Senate Bill No. 2161, House Bill No. 1014 contained two legislatively directed projects for SERC, specifically a salt cavern underground energy storage research project (Section 15) and a study related to prospective in-state resources of economically feasible accumulations of critical minerals (Section 14). The EERC will submit separate requests for these projects at a later date.

The EERC values the partnership with NDIC and the support of North Dakota's Legislative Assembly, and we look forward to continuing exploratory research to benefit the state. Should you have any questions or require further information concerning this request, please feel free to contact me by phone at (701) 777-5153 or by email at terickson@undeerc.org.

Sincerely,

DocuSigned by:

A handwritten signature in black ink that reads "Thomas Alfred Erickson".

38EA2766DDAC46C...
Thomas A. Erickson
COO

TAE/jan



OUTDOOR HERITAGE FUND PROJECT MANAGEMENT REPORT

Reice Haase, Deputy Executive Director, NDIC

June 29, 2023



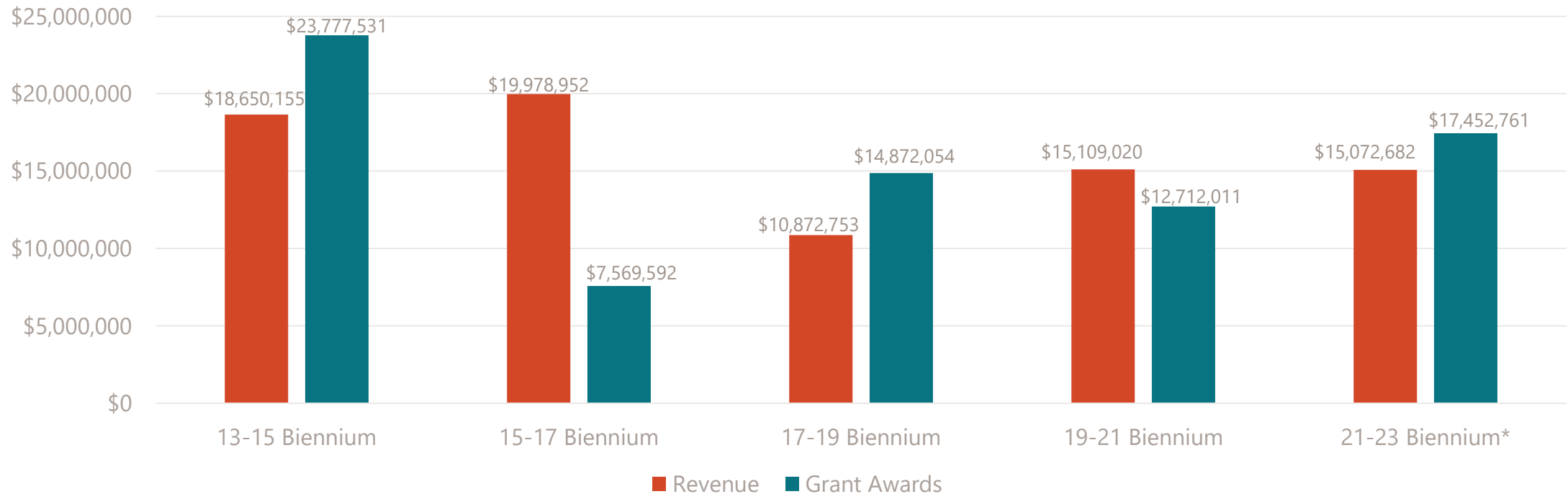
NORTH
Dakota

Be Legendary.™

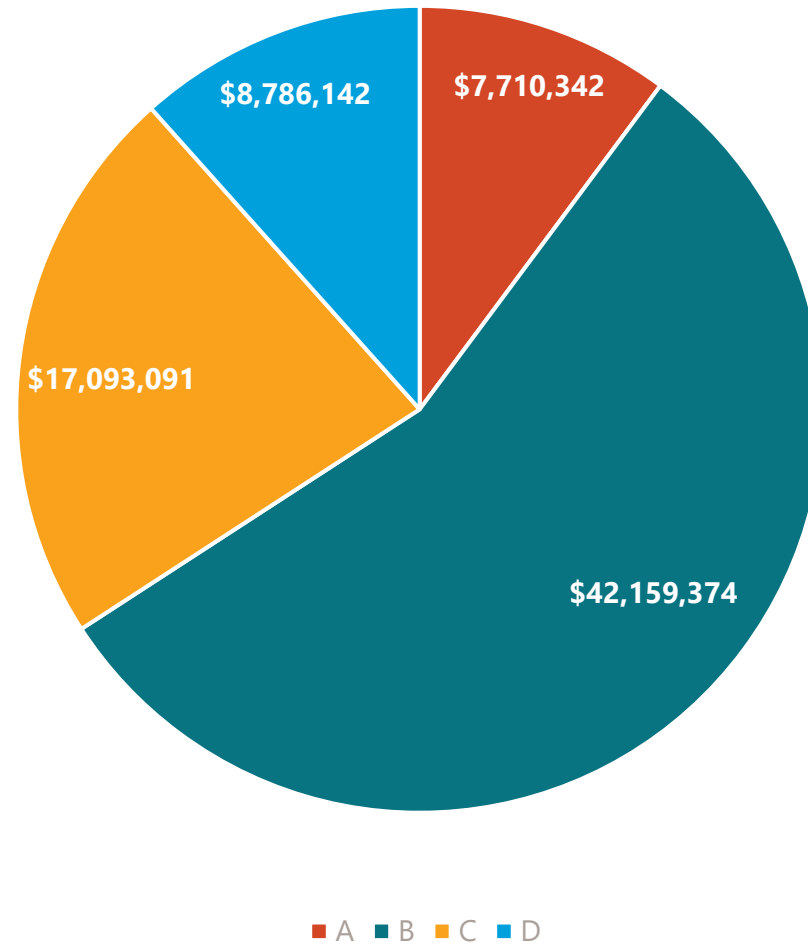
OHF FUNDS RECEIVED AND AWARDED

- The Industrial Commission has awarded funding for 213 projects for a total of \$76,383,949
 - Since its inception, the fund has received a total of \$79,683,562 in income
 - \$4,222,260 of commitments have been returned to date

OHF Funds Received and Awarded



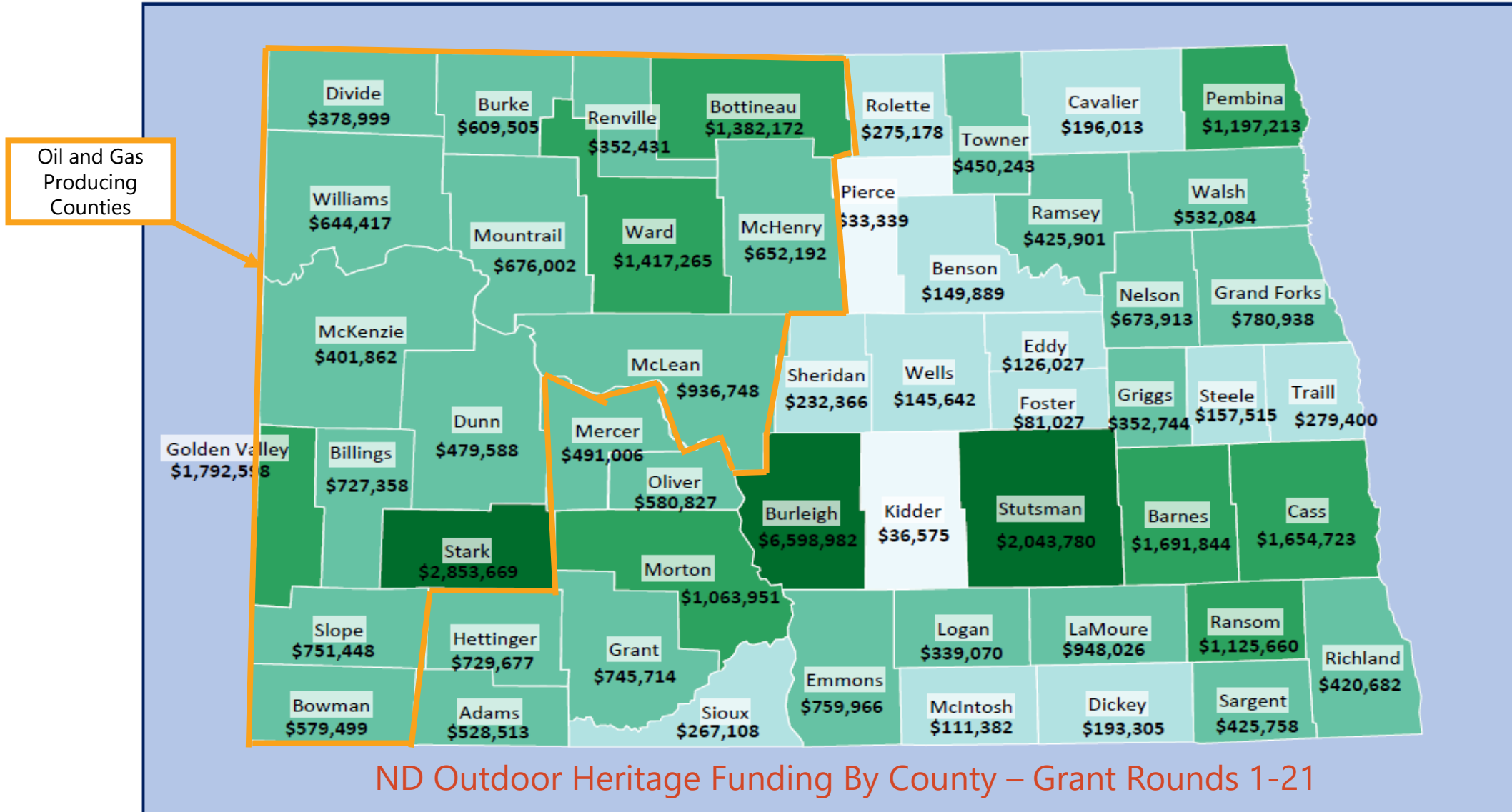
OHF FUNDING BY DIRECTIVE



- A: 10%
- B: 56%
- C: 22%
- D: 12%*

*Industrial Commission Goal:
Minimum of 15% funding to
Directive D

STATEWIDE BENEFITS FROM OIL AND GAS REVENUES



PROJECTS COMPLETED SINCE LAST MEETING:

018-188: Maple River Bank Stabilization Project – Enderlin Park Board

- Installed erosion control at Enderlin Park
- \$37,007 original commitment, \$0 returned



PROJECTS COMPLETED SINCE LAST MEETING:

005-074: Windbreak Renovation Initiative – ND Forest Service

- **Completed windbreak restorations, protecting 268 farmsteads, 1,291.27 acres of cropland, and 4.9 miles of road**
- **\$1.8 million original commitment, \$181,731.96 returned**



PROJECTS COMPLETED SINCE LAST MEETING:

009-105: Kathryn Dam Repurposing Project – Barnes County Water Resource District

- Removed over 10,000 mussels, removed old dam, replaced with rock weirs to allow fish movement
- \$159,505 original commitment, \$0 returned



PROJECTS COMPLETED SINCE LAST MEETING:

001-017: Outdoor Heritage Habitat Initiative

- 19 Save Our Lakes agreements totaling 1,101.4 acres
- 11 PLOTS agreements totaling 3,000 acres
- \$1.9 million original commitment, \$0 returned



PROJECTS COMPLETED SINCE LAST MEETING:

018-186: Clear Lake Park – Mountrail County

- Installed new gazebos, repurposed from grain bins, planted 44 trees
- \$25,370 original commitment, \$17.25 returned



ACTIVE PROJECTS

74

Active Projects

\$13.3 Million

Paid To Date

\$47.9 Million

Awarded Dollars

\$34.3 Million

Payable Dollars

\$6.9 Million

Cash Available for Commitment in
Outdoor Heritage Fund

Active Outdoor Heritage Fund Projects

Contract #	Directive	Project	Company	Original Commitment	Spent to Date	Balance
1-1	C	LSC 20,000 Trees by 2020	Ludden Sportsmen Club	50,000.00	41,913.00	8,087.00
1-5	C	ND Hen House Project I	Delta Waterfowl	34,000.00	26,347.07	7,652.93
2-24	A	Prairie Project	United Prairie Foundation	300,000.00	202,099.48	97,900.52
3-40	A	North Dakota Pheasant Habitat Initiative	ND Game and Fish	3,000,000.00	105,119.00	2,894,881.00
4-59	B	Riparian Grazing Systems Project	Stutsman County Soil Conservation District	253,500.00	248,500.00	5,000.00
4-60	A	Western ND Habitat Enhancement Projects	Mule Deer Foundation	480,900.00	379,428.17	101,471.83
4-62	C	North Dakota Waterbank Program	ND Department of Agriculture	565,000.00	357,213.45	207,786.55
5-82	B	Emmons County Grassland and Cropland Conservation Effort	Emmons County Soil Conservation District	630,000.00	63,000.00	567,000.00
6-87	C	North Dakota Hen House Project II	Delta Waterfowl	26,300.00	26,000.00	300.00
6-90	B	Working Grassland Partnership	ND Natural Resources Trust	1,097,250.00	1,079,015.16	18,234.84
8-97	B	Grasslands Enhancement Pilot Project	Ducks Unlimited/ND Natural Resources Trust	230,000.00	170,133.71	59,866.29
8-100	B	Logan County Natural Resource Program	Logan County Soil Conservation District	210,000.00	44,669.48	165,330.52
8-101	C	Powers Lake Watershed project - Lake Improvement Phase	Management Committee/City of Powers Lake	220,000.00	64,745.79	155,254.21
9-108	B	Red River Riparian Program - Phase 6	Red River Regional Council	584,200.00	4,593.90	579,606.10
9-110	B	Cover Crop & Livestock Integration Project	Ducks Unlimited	625,394.90	446,783.97	178,610.93
10-115	B	Working Grassland Partnership (Phase II)	ND Natural Resources Trust/ND Association of Soil Conservation Districts/Ducks Unlimited/Pheasants Forever	903,750.00	708,023.79	195,726.21
10-117	D	Mayville Nature Trail	Mayville Park Board	48,445.95	0.00	48,445.95
11-123	B	McHenry County Conservation Program	North McHenry Soil Conservation District	250,000.00	192,353.24	57,646.76
11-124	B	Working Grassland Partnership Phase III	ND Natural Resources Trust	396,850.00	320,648.57	76,201.43
11-127	C	NWTF Northern Plains Riparian Restoration Initiative	National Wild Turkey Federation	45,000.00	27,042.25	17,957.75
11-128	C	Bakken Development & Working Lands Program	ND Natural Resources Trust	2,170,000.00	1,655,279.37	514,720.63
11-129	C	Stutsman County Prairie Management Toolbox	Audubon Dakota	943,489.00	480,634.99	462,854.01
11-130	D	Urban Woods and Prairies Initiative Expansion	Audubon Dakota	530,000.00	342,142.18	187,857.82
13-138	D	Crooked Crane Trail Phase 2	City of Dickinson	1,200,000.00	0.00	1,200,000.00
13-141	B	Central Coteau Prairie Management Toolbox	Audubon Dakota	529,874.00	212,138.55	317,735.45
13-142	B	Cover Crop & Livestock Integration Project II	Ducks Unlimited	1,250,790.00	544,295.90	706,494.10

Active Outdoor Heritage Fund Projects

14-150	B	Precision Agriculture: Technology, Conservation, and Habitat	Pheasants Forever	301,875.00	96,206.09	205,668.91
14-151	C	Planting for the Future	ND Petroleum Foundation	88,650.00	58,197.28	30,452.72
14-154	B	Working Grassland Partnership IV	ND Natural Resources Trust	1,225,000.00	751,185.78	473,814.22
14-156	C	Natural Resources Stewardship in ND's Parks, Preserves and Natural Areas II	ND Parks and Recreation	108,680.00	56,403.40	52,276.60
15-157	D	Belcourt Lake Park Rejuvenation Project	Turtle Mountain Band of Chippewa	48,567.00	0.00	48,567.00
15-158	C	Grand Forks Area Prairie Management Toolbox Phase II	Audubon Dakota	78,730.00	58,791.21	19,938.79
15-159	D	Cavlandic Trail Redevelopment	City of Cavalier	310,316.00	275,577.82	34,738.18
15-160	C	North Dakota Grassland Restoration Project 2	ND Natural Resources Trust	100,000.00	79,905.08	20,094.92
15-163	C	Cannonball River Fish Passage at Karey Dam	Hettinger County Water Resource District	253,770.00	210,576.95	43,193.05
16-166	B	Cass County Cover Crop Project	Cass County Soil Conservation District	60,000.00	2,949.00	57,051.00
17-169	B	North Dakota Conservation Forage Program	Audubon Dakota	6,918,306.00	327,523.31	6,590,782.69
17-171	C	Increasing Duck Production-Hen Houses	Delta Waterfowl	105,000.00	35,061.16	69,938.84
17-172	C	Red River Basin Wildlife and Water Quality Enhancement Pilot Program	ND Game and Fish	270,000.00	5,062.69	264,937.31
17-173	B	Bakken Development and Working Lands Program II	ND Natural Resources Trust	3,308,100.00	675,242.96	2,632,857.04
17-174	C	North Dakota Partners For Wildlife Project	ND Natural Resources Trust	716,500.00	558,433.92	158,066.08
17-175	C	Community Pollinator Project	Pheasants Forever	12,000.00	0.00	12,000.00
17-176	B	Southwest Grazing Lands Improvement Project - Phase II	Pheasants Forever	223,900.00	29,174.84	194,725.16
18-178	C	Wildlife and Livestock Dams - Wetlands Creation, Restoration and Enhancement	ND Natural Resources Trust	240,000.00	106,285.27	133,714.73
18-179	B	Grazing Resiliency in the Bakken (GRB)	ND Natural Resources Trust	1,270,000.00	270,168.02	999,831.98
18-180	B	ND Conservation District Employees Association Statewide Tree Planting Initiative	ND Conservation District Employees Association (NDCDEA)	2,550,000.00	278,532.40	2,271,467.60
18-181	B	Medora Grazing Association - Water Well Development Program	Medora Grazing Association	245,800.00	0.00	245,800.00
18-182	B	Little Missouri Grazing Association - Deep Creek Watershed Conservation Project	Little Missouri Grazing Association	196,356.00	0.00	196,356.00
18-183	A	Sheyenne River Water Trail	Barnes County Park Board	170,000.00	0.00	170,000.00
18-184	D	Monson Park and Trail	Barnes County Park Board	42,525.00	0.00	42,525.00
18-185	B	North Dakota Statewide Windbreak Renovation Initiative 2.0	ND Forest Service	300,000.00	11,274.42	288,725.58
18-189	D	Lake Ilo Natural Playscape	Dunn County Park Board	6,471.00	0.00	6,471.00
18-190	D	Center Park Board Lehmkuhl Park New Equipment	Center Park Board	10,000.00	0.00	10,000.00
18-192	C	Urban Woods and Prairies Initiative Expansion Phase II	Audubon Dakota	591,200.00	72,991.25	518,208.75

Active Outdoor Heritage Fund Projects

19-193	D	Playground Equipment Replacement	City of Coleharbor	10,000.00	0.00	10,000.00
19-194	C	Working Grassland Partnership 5	ND Natural Resources Trust	985,000.00	517,472.35	467,527.65
19-195	C	North Dakota Petroleum Foundation Planting for the Future	ND Petroleum Foundation	371,000.00	78,725.57	292,274.43
20-197	C	North Dakota Partners For Wildlife Project 2	ND Natural Resources Trust	1,016,500.00	129,851.99	886,648.01
20-198	B	Grazing Resiliency in the Bakken (GRB) II	ND Natural Resources Trust	1,970,000.00	145,394.85	1,824,605.15
20-199	C	Tongue River Restoration	Pembina County Water Resource District	703,700.00	0.00	703,700.00
20-200	A	Sheyenne River State Forest Access Improvement Project	ND Forest Service	45,000.00	8,173.57	36,826.43
20-201	C	Southwestern North Dakota Pheasant Initiative	Hettinger Research Extension Center	74,297.00	0.00	74,297.00
20-202	C	Odland Dam Sedimentation & Nutrient Removal Project Phase 2	Golden Valley County Water Board	1,286,040.00	527,199.86	758,840.14
20-203	B	Grasslands Enhancement Project Phase II	Ducks Unlimited	315,750.00	8,121.36	307,628.64
20-204	B	Cover Crop & Livestock Integration Project III	Ducks Unlimited	1,609,000.00	9,675.00	1,599,325.00
20-205	D	Playground Renovation	Carrington Area Healthy Communities Coalition	10,000.00	0.00	10,000.00
21-206	B	Livestock Water and Grazing Distribution and Wildlife Haven	Assumption Abbey	34,310.00	0.00	34,310.00
21-207	C	Monarch Core Area Prairie Management Toolbox	Audubon Dakota	301,825.00	0.00	301,825.00
21-208	D	Urban Woods and Prairies: Urban Pollinator Plots Project	Audubon Dakota	142,058.00	0.00	142,058.00
21-209	C	Tioga Dam Trail	City of Tioga	200,000.00	0.00	200,000.00
21-210	B	North Dakota Statewide Windbreak Renovation Initiative 3.0	ND Forest Service	900,000.00	0.00	900,000.00
21-211	C	Working Grasslands Partnership 6	ND Natural Resources Trust	740,000.00	0.00	740,000.00
21-212	D	Reuse of Recycled Water to Reestablish Healthy Soil Conditions and Regenerate Green Space	South Heart Golf Course Building Authority	209,589.00	188,630.00	20,959.00
21-213	D	Outdoor Recreation Bridge	Valley City Parks and Recreation	425,000.00	0.00	425,000.00

TOTAL 47,675,558.85 13,314,908.42 34,360,650.43

Outdoor Heritage Fund (294)
 Financial Report - Cash Balance
2021-2023 Biennium
 June 16, 2023 OHF Advisory Board Meeting

	Cash Balance
July 1, 2021 Balance	\$ 36,056,487.97
Interest Revenue through March 31, 2023	\$ 72,681.93
Revenues through March 31, 2023	\$ 15,000,000.00
Returned Cash through March 31, 2023	\$ -
Grant Expenditures through March 31, 2023	\$ (7,673,614.04)
Administrative Expenditures through March 31, 2023	\$ (97,685.86)
	\$ 43,357,870.00
Outstanding Administrative Expenses (Estimated)	\$ (102,314.14)
Outstanding Project Commitments as of March 31, 2023	\$ (36,325,142.88)
Balance	\$ 6,930,412.98

Senate Bill 2014, (2021 Session)

OIL AND GAS TAX REVENUE ALLOCATIONS - NORTH DAKOTA OUTDOOR HERITAGE FUND. Notwithstanding the provisions of section 57-51-15 relating to the allocations to the North Dakota outdoor heritage fund, for the period beginning September 1, 2021, and ending August 31, 2023, the state treasurer shall allocate eight percent of the oil and gas gross production tax revenue available under subsection 1 of section 57-51-15 to the North Dakota outdoor heritage fund, but not in an amount exceeding \$7,500,000 per fiscal year.

Outdoor Heritage Fund Awards & Revenues July 1, 2013 - June 16, 2023

Grant Round One Awards - 1/29/2014	\$5,848,133.00		
Grant Round Two Awards - 5/27/2014	\$2,509,428.00		
Grant Round Three Awards - 9/17/2014	\$5,752,839.00		
Grant Round Four Awards - 1/9/2015	\$5,202,225.00		
Grant Round Five Awards - 6/3/2015	\$4,464,906.00	\$23,777,531.00	
Grant Round Six Awards - 12/16/2015 & 3/28/2016	\$3,593,093.00		
Grant Round Seven Awards - 5/23/2016	\$1,126,750.00		
Grant Round Eight Awards - 1/17/2017	\$1,091,822.00		
Grant Round Nine Awards - 6/30/2017	\$1,817,927.15	\$7,569,592.15	
Grant Round Ten Awards - 12/14/2017	\$1,073,506.95		
Grant Round Eleven Awards - 6/5/2018	\$4,600,942.00		
Grant Round Twelve Awards - 9/14/2018	\$648,346.00		
Grant Round Thirteen Awards - 12/7/2018	\$3,350,164.00		
Grant Round Fourteen Awards - 6/20/2019	\$5,199,095.00	\$14,872,053.95	
Grant Round Fifteen Awards - 12/17/2019	\$921,478.00		
Grant Round Sixteen Awards - 5/29/2020	\$166,174.00		
Grant Round Seventeen Awards - 11/23/2020	\$11,624,359.00	\$12,712,011.00	
Grant Round Eighteen Awards - 7/27/2021	\$5,803,692.00		
Grant Round Nineteen Awards - 10/19/2021	\$1,666,000.00		
Grant Round Twenty Awards - 4/29/2022	\$6,715,967.00		
Grant Round Twenty-One Awards - 10/20/2022	\$3,267,102.00	\$17,452,761.00	
		\$76,383,949.10	
Returned Commitments			
GR1 - 06 - ND Statewide Tree Planting Initiative	\$1,050.40		
GR1 - 10 - Antelope Creek Wild Rice Corridor Watershed Restoration Project (12/2020)	\$60,524.52		
GR1 - 13 - Artificial Nesting Habitat Improvement	\$5,565.00		
GR1 - 14 - Mapping of Tribal Land for Sportsmen	\$8,568.00		
GR1 - 15 - Trail Restoration & Improvement Program	\$6,896.63		
GR2 - 19 - Bald Hill Creek Watershed Project (12-2018)	\$117,109.18		
GR2 - 22 - Red River Regional Council	\$6,813.32		
GR2 - 23 - Centennial Park Woodland Trail (Phase 1)	\$128,244.86		
GR2 - 25 - Northern Cass Pass (11-2018)	\$49,240.55		
GR2 - 26 - Stutsman County Manure Management Project	\$9.24		
GR2-30 - Turtle Creek Watershed (7-2020)	\$849.90		
GR2 - 32 - Conservation of Grasslands and Long-billed Curlews	\$15,528.00		
GR2 - 33 - North Dakota Pollinator Partnership	\$149,491.18		
GR3 - 36 - Graner Bank Stabilization	\$16,803.18		
GR3 - 45 - Brown Ranch Habitat Enhancement	\$154.31		
GR3 - 47 - Working Wetlands in North Dakota (1-2020)	\$16,369.29		
GR4 - 49 - Harmon Lake Campground Expansion	\$77,296.91		
GR4 - 51 - LaMoure County Memorial Park Streambank Restoration	\$333,150.41		
GR4 - 54 - Norsemen Outdoor Education Center (7-2020)	\$300.00		
GR4 - 58 - Sheyenne River Bank Stability Restoration	\$197,550.00		
GR4 - 61 - Fox Island Boat Ramp Bank Stabilization	\$48,543.93		
GR4 - 62 - North Dakota Waterbank Program (10-2020)	\$635,000.00		
GR4 - 64 - Stump Lake Park Bank Restoration	\$233,153.41		
GR5 - 65 - Big Coulee Dam Repair	\$178,462.07		
GR5 - 68 - Grassland Restoration and Retention Program (2 2021)	\$139,013.55		
GR5 - 71 - Sheyenne River Sedimentation Reduction Phase II	\$639.46		
GR5 - 73 - Homme Dam Watershed 319 Project (12-2018)	\$62,123.42		
GR5 - 74 - ND Statewide Windbreak Renovation Initiative (10-2022)	\$181,731.54		
GR5 - 77 - Beginning Farmer Enhancement	\$40.00		
GR5 - 78 - Tolna Bay Boat Ramp & Recreation Area	\$5,139.43		
GR5 - 79 - ND Youth Pollinator Habitat Program	\$13,061.42		
GR6 - 85 - ND Statewide Conservation Tree Planting Initiative (10-2019 & 1-2020)	\$636,983.89		
GR6 - 89 - Saving Minot Retriever Club Grounds for Future Generations	\$51,280.00		
GR7 - 92 - Woodland Trail Phase 2	\$116,250.00		
GR7 - 95 - Madison Nature & Conservation Classroom ...	\$60,000.00		
GR8 - 96 - Trail Restoration and Improvement Program Part 2	\$27,185.64		
GR8 - 99 - Cass County Cover Crop Project (10-2019)	\$9,950.24		
GR8-102 - LaMoure County Dam Repairs Projects (12/2020)	\$109,341.83		
GR9-103 - Blickensderfer Dam Repair	\$11,700.00		
GR9-104 - Southwest Grazing Lands Improvement Project (8/2022)	\$10.11		
GR9-107 - Pheasant Lake Fishing/Shoreline Restoration Phase 2 (12/20/2020)	\$11,652.56		
GR9-109 - Water Storage and Grass Seeding (11-2020)	\$3,368.50		
GR9-111 - Give Me Back My Acres	\$1,514.47		
GR9-112 - Grand Forks County Prairie Management Toolbox (11-2020)	\$23,867.27		
GR10-116 - Planting for the Future: Tree Habitat Program (12-2021)	\$5,443.25		
GR11-119 - Graner Park Bank Stabilization Phase 2 (11-2018)	\$20,254.35		
GR11-120 - Atkinson Nature Park Improvements (11-2019)	\$12,635.74		
GR11-121 - Cass County Windbreak & Wildlife Planting Initiative (9/2020)	\$3,288.61		
GR11-122 - Middle Sheyenne River Watershed Project (12/2020)	\$31,064.71		
GR11-126 - Riding for Dreams & Hiking Trail (12/2020)	\$10,000.00		
GR12-136 - Sky Chief Park Restroom Facilities Project (8/2022)	\$2,883.10		
GR13-140 - ND Grassland Restoration Project (8/2021)	\$103.19		
GR14-153 - ND Statewide Tree Planting Initiative (9/2022)	\$1,238.26		
GR13-144 - North Central Soil Health Project (1/2022)	\$48,889.26		
GR15-161 - McKenzie Bay Recreation Area Improvements (12/2020)	\$883.19		
GR15-162 - Sheyenne River Fish Passage at Bouret Dam (8/2022)	\$2,858.64		
GR16-165 - Silver Lake Dam Improvements (8/2022)	\$4,107.56		
GR17-170 - McDowell Dam Bank Stabilization (1/2022)	\$1,269.42		
GR18-187 - Bringing Fish To Glen Ullin (1/2022)	\$7,570.00		
GR18-188 - Maple River Bank Stabilization (1/2022)	\$18,243.00		
GR19-196 - Soil Health Cover Crop Grant Program (6/2022)	\$300,000.00		
	\$4,222,259.90		
Total Awards less Returned Commitments		\$72,161,689.20	
Actual Revenues 2013-2015 Biennium	\$18,650,154.64	peoplesoft reports-final revenues	
Actual Revenues 2015-2017 Biennium	\$19,978,951.50		
Actual Revenues 2017-2019 Biennium	\$10,872,753.34		
Actual Revenues 2019-2021 Biennium	\$15,109,019.62		
Actual Revenues 2021-2023 through March 31, 2023	\$15,072,681.93	fund account report-total revenues	
		\$79,683,561.03	
Difference between Awards and Revenues			\$7,521,871.83
Administrative Expenses 2013-2015	\$90,034.88		
Administrative Expenses 2015-2017	\$88,543.96		
Administrative Expenses 2017-2019	\$98,808.02		
Administrative Expenses 2019-2021	\$114,072.43		
Estimated Administrative Expenses 2021-2023	\$200,000.00		
Total actual/estimated expenses 2013-2023	\$591,459.29		
Total of Difference between Awards and Revenues with Expenses			\$6,930,412.54
Estimated Remaining OMB/Legislative 2021-2023 Revenue Forecast (excluding interest income)			\$0.00
Available for Funding Awards			\$6,930,412.54
6/16/2023			

Outdoor Heritage Fund Awards		
7/1/13 - 6/30/15 BIENNIUM TOTAL		\$23,777,531.00
7/1/15 - 6/30/17 BIENNIUM TOTAL		\$7,569,592.15
7/1/17 - 6/30/19 BIENNIUM TOTAL		\$14,872,053.95
7/1/19 - 6/30/21 BIENNIUM TOTAL		\$12,712,011.00
Grant Round Eighteen Awards - 7/27/2021	\$5,803,692.00	
Grant Round Nineteen Awards - 10/19/2021	\$1,666,000.00	
Grant Round Twenty Awards - 4/29/2022	\$6,715,967.00	
Grant Round Twenty-One Awards - 10/20/2022	\$3,267,102.00	
7/1/21 - 6/30/23 BIENNIUM TOTAL		\$17,452,761.00
TOTAL		\$76,383,949.10

Outdoor Heritage Fund Returned Commitments		
7/1/13 - 6/30/15 BIENNIUM TOTAL		\$211,683.00
7/1/15 - 6/30/17 BIENNIUM TOTAL		\$681,430.31
7/1/17 - 6/30/19 BIENNIUM TOTAL		\$1,049,705.46
7/1/19 - 6/30/21 BIENNIUM TOTAL		\$1,705,093.80
5-74	North Dakota Statewide Windbreak Renovation Initiative	\$181,731.96
9-104	Southwest Grazing Lands Improvement Project	\$10.00
10-116	Planting for the Future: Tree Habitat Program	\$5,443.25
12-136	Sky Chief Park Restroom Facilities Project	\$2,883.10
13-140	ND Grassland Restoration Project	\$103.19
13-144	North Central Soil Health & Habitat	\$48,889.26
14-153	ND Statewide Tree Planting Initiative	\$1,238.26
15-162	Sheyenne River Fish Passage at Bouret Dam	\$2,858.65
16-165	Silver Lake Dam Improvements	\$4,107.56
17-170	McDowell Dam Bank Stabilization	\$1,269.42
18-187	Bringing Fish to Glen Ullin	\$7,570.00
18-188	Maple River Bank Stabilization Project - Enderlin	\$18,243.00
19-196	Agriculture's Soil Health Cover Crop Grant Program	\$300,000.00
7/1/21 - 6/30/23 BIENNIUM TOTAL		\$574,347.65
TOTAL		\$4,222,260.22

Total Awards less Returned Commitments \$72,161,688.88

7/1/13 - 6/30/15 BIENNIUM ACTUAL REVENUES TOTAL	\$18,650,154.64	
7/1/15 - 6/30/17 BIENNIUM ACTUAL REVENUES TOTAL	\$19,978,951.50	
7/1/17 - 6/30/19 BIENNIUM ACTUAL REVENUES TOTAL	\$10,872,753.34	
7/1/19 - 6/30/21 BIENNIUM ACTUAL REVENUES TOTAL	\$15,109,019.62	
7/1/21 - 6/30/23 BIENNIUM ACTUAL REVENUES TOTAL	\$15,072,681.93	
TOTAL		\$79,683,561.03

Difference Between Awards and Revenues \$7,521,872.15

Outdoor Heritage Fund

Month/Year	OMB 2021-2023		Difference	Interest
	Forecast	Actual	Original vs. Actual	Income
August, 2021	\$0.00	\$0.00	\$0.00	\$2,146.00
September, 2021	\$1,042,641.60	\$1,301,276.34	\$258,634.74	\$2,128.07
October, 2021	\$1,042,641.60	\$1,214,190.41	\$171,548.81	\$2,072.47
November, 2021	\$1,009,008.00	\$1,265,053.34	\$256,045.34	\$2,161.20
December, 2021	\$1,042,641.60	\$1,413,336.07	\$370,694.47	\$2,152.21
January, 2022	\$1,009,008.00	\$1,497,731.29	\$488,723.29	\$2,297.90
February, 2022	\$1,042,641.60	\$808,412.55	-\$234,229.05	\$2,357.95
March, 2022	\$1,042,641.60	\$0.00	-\$1,042,641.60	\$2,134.36
April, 2022	\$268,776.00	\$0.00	-\$268,776.00	\$2,390.37
May, 2022	\$0.00	\$0.00	\$0.00	\$2,312.73
June, 2022	\$0.00	\$0.00	\$0.00	\$4,700.36
July, 2022	\$0.00	\$0.00	\$0.00	\$0.00
August, 2022	\$0.00	\$0.00	\$0.00	\$2,382.65
September, 2022	\$947,856.00	\$2,044,250.86	\$1,096,394.86	\$2,365.21
October, 2022	\$947,856.00	\$1,926,711.42	\$978,855.42	\$2,255.90
November, 2022	\$917,280.00	\$1,778,676.18	\$861,396.18	\$3,209.91
December, 2022	\$947,856.00	\$1,750,361.54	\$802,505.54	\$8,552.52
January, 2023	\$917,280.00	\$0.00	-\$917,280.00	\$9,227.88
February, 2023	\$947,856.00	\$0.00	-\$947,856.00	\$9,457.57
March, 2023	\$947,856.00	\$0.00	-\$947,856.00	\$8,376.67
April, 2023	\$856,128.00	\$0.00	-\$856,128.00	\$0.00
May, 2023	\$70,032.00	\$0.00	-\$70,032.00	\$0.00
June, 2023	\$0.00	\$0.00	\$0.00	\$0.00
July, 2023	\$0.00	\$0.00	\$0.00	\$0.00
August, 2023	\$0.00	\$0.00	\$0.00	\$0.00
	\$15,000,000.00	\$15,000,000.00	\$0.00	\$72,681.93
FYI: 2021-2023 forecast based on oil production averaging 1.1 million barrels per day for FY 2022 and 1.0 million per day for FY2023. ND crude oil prices estimated to average \$50.00 per barrel for the entire biennium.				
3/31/2023				
Located on Fund Account Report-Tsfr Fm Oil & Gas Prod. Dist. And Interest on Investment				

Outdoor Heritage Fund Advisory Board Funding Recommendations
Grant Round 22

	Title	Applicant	Recommended Funding	Total Project Cost	% of Matching Funds	Summary	Vote
22-2	Katz Dam Fish Passage	McLean County Water Resource District	\$112,572.75	\$150,097	25%	Construction of fish passage to bypass barrier created by Katz Dam on Painted Woods Creek, would open 11 additional miles of the stream above the Missouri River; 2021 project used Water Commission funds to address low-head dam issue	8-1
22-3	Coyote Clay Target Range	Coyote Clay Target League	\$293,158	\$517,849	43%	The Coyote Clay Target League has grown into the largest youth league in the nation, but recently lost their range with the expansion of the City of Williston limits, and a new range is needed. The project would involve the construction of a new shooting range, including trap houses and a skeet range	8-1
22-4	Turkeys Enhancing Water Quality and Wildlife Habitat	National Wild Turkey Federation	\$200,000	\$356,913	44%	Project involves enhancement of 1,500 acres of habitat by providing financial assistance for both public and private land enhancement at no less than 3:1 match	8-1
22-5	ND Statewide Tree Planting Initiative	North Dakota Conservation District Employees Association	\$2,550,000	\$4,183,333	39%	Project involves providing up to 75% cost-share to North Dakota landowners for the purpose of installing and maintaining trees	8-1
22-6	TRPL Prairie Enhancement Land Management Phase I	Theodore Roosevelt Presidential Library Foundation	\$498,374	\$1,345,185	63%	Project involves collecting seed of local genetic origin for over 100 species of plants indigenous to southwest North Dakota; seeds will be cleaned and tested and planted; healthy plugs will be planted at the Theodore Roosevelt Presidential Library site; native seeds for the target species are not commercially available currently, the project will make these seeds available in the future	8-1*
22-7	Pembina County Community Orchard	Pembina County Historical Society	\$8,900	\$16,665	47%	Project involves installation of a water line from the Pembina County Museum to the Pembina County Community Orchard (\$8,900), a maintenance shed (\$1,500) wood mulch (\$1,000), and the installation of a shelter belt (\$1,500)	9-0*
22-8	The Conservation Capacity Program	North Dakota Wildlife Federation	\$30,000	\$45,000	33%	NDWF proposes providing project funds as sub-grants to North Dakota conservation clubs for projects ranging from fencing, rotational grazing, pollinator plantings, and shooting range improvements	9-0
22-9	North Dakota Partners for Wildlife Project 3	North Dakota Natural Resources Trust	\$1,957,500	\$3,387,000	42%	The Project involves a third phase of two previous OHF projects, and would include grazing system agreements, wetland restoration agreements, and cover crop agreements with North Dakota landowners	7-2
22-10	Howard Oppgard Landing Improvements	American Foundation for Wildlife	\$50,550	\$85,650	41%	The Project involves the construction of a boat ramp, an earthen fishing pier, a concrete picnic table, and native pollinator grass planting on a donated parcel of land adjacent to Eckelson Lake in Barnes County	8-1
22-11	Epping Springbrook Dam Algae Control	Williams County Parks	\$131,921	\$175,895	25%	The Project involves the installation of three algae control buoys to mitigate harmful algal blooms at Epping/Springbrook Dam in Williams County	9-0*
22-12	TMBCI Belcourt Lake Rejuvenation Phase II	Turtle Mountain Band of Chippewa	\$105,741	\$147,741	28%	The Project involves the installation of two handicapped-accessible fishing piers, a restroom facility, and two picnic arbors at Belcourt Lake; the project would renovate a historic boy scout camp site to provide additional public access to the lake	7-2

\$5,938,717 \$10,411,328

*Recommended contingencies

Outdoor Heritage Fund
Grant Round 22
Application Summary Page
GR 22-2

Project Title: Katz Dam Fish Passage
Applicant: McLean County Water Resource District
Primary Contact: Lynn Oberg
Total Project Costs: \$150,097
OHF Request: \$112,572.75

Match Amount	Funding Source	Match Type
\$37,524.25	McLean County Water Resource Board	Cash

Percentage of Matching Funds: 25%

Project Duration: One year

Major Directive: C

Additional Directive: A

Summary of Project: Construction of fish passage to bypass barrier created by Katz Dam on Painted Woods Creek, would open 11 additional miles of the stream above the Missouri River; 2021 project used Water Commission funds to address low-head dam issue; USACE 404 permit would need to be modified to allow construction of fish passage.

Technical Committee Comments:

- No direct connection to Missouri River, NDG&F operates a dam downstream

Technical questions from the OHF Advisory Board members:

- What kind of upkeep and maintenance is needed for this structure?

McLean County Water Resource District has not submitted any unsuccessful applications.

Funded Projects					
Contract	Total Project Cost	Title	Award Amount	Amount Expended	Project Timeframe
12-133	\$636,500	Painted Woods Lake Flood Damage Reduction Project	\$211,732	\$211,732	2018-2019
Totals	\$636,500.00		\$211,732.00	\$211,732.00	

OHF Advisory Board Recommendation

Contingencies: **None**

Conflicts of Interest: **None**

Funding Vote: **8-1**

Funding Amount Vote: **\$112,572.75**

May 19, 2023

North Dakota Industrial Commission
Attn: Outdoor Heritage Fund Program
State Capital 14th Floor
600 E. Boulevard Ave. Dept. 405
Bismarck, ND 58505-0840

RE: Outdoor Heritage Fund Grant Application – Katz Dam Fish Passage Project
McLean County Water Resource Board

Dear Outdoor Heritage Fund Advisory Board,

Enclosed is our Outdoor Heritage Fund Grant Application Request for support of the first phase of the Painted Woods Creek Fish Passage Project. The McLean County ND Water Resource Board (WRB) has been planning a fish passage program for Painted Woods Creek for five years, including developing concept and preliminary designs for several locations and holding partnership meetings with other agencies and private partners. The lower reaches of Painted Woods Creek have 4 blockages to fish and aquatic organism passage, including the Katz Dam, the WRD would like to eliminate. At this point in time there is construction work being planned for Katz Dam involving improvement of safety conditions there. It will be very advantageous to add fish passage to the project now because of economies of scale that would occur. There are mutual activities that can be shared between both projects. Eliminating the blockage to fish passage at Katz Dam will open up 11 more miles of the stream to sport fishing for walleye and northern pike. Our program goals for this Project overlap strongly with the directives of the Outdoor Heritage Fund project, including developing, enhancing, conserving and restoring wildlife and fish habitat on private and public lands. We look forward to a successful outcome from your review.

Sincerely,


Lynn Oberg

McLean County Water Resource Board

obergm@westriv.com

Outdoor Heritage Fund Grant Application



Instructions

After completing the form, applications and supporting documentation may be submitted by e-mail to ndicgrants@nd.gov. It is preferred that only electronic copies are submitted.

You are not limited to the spacing provided, except in those instances where there is a limit on the number of words. If you need additional space, please indicate that on the application form, answer the question on a separate page, and include with your submission.

The application and all attachments must be received by the application deadline. You may submit your application at any time prior to the application deadline. **Applicants are strongly encouraged to submit applications prior to the deadline for staff review in order ensure that proposals will be complete when submitted on deadline date.** Incomplete applications may not be considered for funding.

Please review the back of this form to determine project eligibility, definitions, budget criteria, and statutory requirements.

Project Name Katz Dam Fish Passage

Name of Organization McLean County Water Resource District

Federal Tax ID#

Contact Person/Title Lynn Oberg, Board Chair

Address 1201 22S Avenue SW

City Washburn

State ND

Zip Code 58577

E-mail Address obergm@westriv.com

Web Site Address (If applicable) mcleancountnd.gov

Phone 701 400 7793

List names of co-applicants if this is a joint proposal

MAJOR Directive:

Choose only one response

- Directive A.** Providing access to private and public lands for sportsmen, including projects that create fish and wildlife habitat and provide access for sportsmen;
- Directive B.** Improving, maintaining and restoring water quality, soil conditions, plant diversity, animal systems and by supporting other practices of stewardship to enhance farming and ranching;
- Directive C.** Developing, enhancing, conserving and restoring wildlife and fish habitat on private and public lands; and
- Directive D.** Conserving natural areas and creating other areas for recreation through the establishment and development of parks and other recreation areas.

Additional Directive:

Choose all that apply

- Directive A.**
- Directive B.**
- Directive C.**
- Directive D.**

Type of organization:

- State Agency
- Political Subdivision
- Tribal Entity
- Tax-exempt, nonprofit corporation.

Abstract/Executive Summary.

Summarize the project, including its objectives, expected results, duration, total project costs and participants. (no more than 500 words)

The McLean County ND Water Resource Board (WRB) has been planning a fish passage program for Painted Woods Creek for five years, including developing concept and preliminary designs for several locations and holding partnership meetings with other agencies and private partners. The Painted Woods Creek watershed lies within parts of McLean and Burleigh County North Dakota and has a watershed area of 305 square miles. The stream discharges to the Missouri River approximately 5 miles south of Washburn. There is an abundant and diverse fish community in the Missouri River near the mouth of Painted Woods Creek. However, there are a series of 4 barriers to fish passage in the lower portion of Painted Woods Creek that block fish migration up the creek and the WRD would like to eliminate all of them. Katz Dam is the farthest downstream of the complete barriers to fish passage in the watershed. Providing fish passage around Katz Dam would open 11 more miles of the stream to game species found in the Missouri River.

In 2021 the WRB started addressing a safety issue at Katz Dam, which is located a short distance upstream from US Highway 83. Katz Dam has a spillway that creates a dangerous hydraulic roller at higher flows. A final design was developed for modifying the spillway to eliminate this safety issue. The safety improvement work was completed with funding from McLean County and the Department of Water Resources. In 2022 the WRB determined it would be advantageous to add fish passage to the project. It is believed that joining the two projects will result in efficiencies and cost savings related to sharing costs such as mobilization, and having greater quantities of materials both projects need such as riprap, which should garner lower bid prices. The two projects are compatible from the standpoint that the safety improvements involve modifying the spillway, while the fish passage would be constructed around one side of the spillway.

Finding funding for fish passage has been one of the challenges. Work on the safety project completed to date has been supported by McLean County and grants from the Department of Water Resources. However, more funding is needed for design and construction of the fish passage facilities. The WRB believes that receiving funding from the Outdoor Heritage Fund provides the path forward needed to make the proposed project a reality.

The priority species targeted by the project are walleye and northern pike, which are native to North Dakota. Both species are known to survive in lower Painted Woods Creek to sizes targeted by sports fisherman. The Department of Game and Fish stocks northern between Painted Woods Lake and the Katz Dam on a regular basis. Trophy walleye have been occasionally caught between Painted Woods Lake and Katz Dam. There is good survival of these priority species in lower areas of the stream below Katz Dam. The proposed project will reopen the habitat throughout a much greater area than allowed by the present stocking program and infrequent extreme flooding of the Missouri River.

Project Duration:

Indicate the intended schedule for drawing down OHF funds.

Construction would begin in September 2023, with final completion by November 3, 2023. Vegetative restoration of the site may require work in the spring of 2024 to ensure plant survival. The WRB intends to draw down the funds between September 2023 and June 2024.

Permits required prior to construction are in review including the USACE 404 permit and Department of Resource Construction permit. Permit applications were submitted in 2022 for the Katz Safety Improvement Project. The USACE 404 permit was issued at that time, and the review of the Katz Safety Improvement Project was near complete. The permit applications need to be resubmitted to include the Katz Dam fish bypass. A design for the fish passage is needed to allow resubmittal of permit applications.

Amount of Grant request: \$ 112,572.75

Total Project Costs: \$ 150,097.00

Note: in-kind and indirect costs can be used for matching funds.

Amount of Matching Funds: \$ 37,524.25

A minimum of 25% Match Funding is required. Indicate if the matching funds will be in-kind, indirect or cash. Please provide verification that these matching funds are available for your project. Note that effective as of July 1, 2015 no State General Fund dollars can be used for a match unless funding was legislatively appropriated for that purpose.

Amount of Match	Funding Source	Type of Match (Cash, In-kind or Indirect)
\$ 37,524.25	McLean County Water Resource Board	Cash
\$		
\$		
\$		
\$		
\$		

Certifications

- I certify that this application has been made with the support of the governing body and chief executive of my organization.
- I certify that if awarded grant funding none of the funding will be used for any of the exemptions noted in the back of this application.

Narrative

Organization Information – Briefly summarize your organization’s history, mission, current programs and activities.

Include an overview of your organizational structure, including board, staff and volunteer involvement. (no more than 300 words)

The McLean County Water Resource Board (WRB) is a political subdivision of the State. The WRB is governed by a three-member board of managers appointed by the McLean County Commission. The WRB has the responsibility within McLean County to manage, conserve, protect, develop and control waters of the state for the benefit of the public. It is the policy of the WRB to provide management, conservation, protection, development and control of water resources, to work cooperatively with other resource agencies to strengthen and mutually support related programs, and protect and promote the health, safety and general welfare of the people of North Dakota.

The WRB manages a variety of programs including those related to drainage permits, maintaining, protecting and controlling streamflow, protection and maintenance of water bodies, managing flooding problems, protection and maintenance of water quality, biodiversity and construction impacts, and operation and maintenance of dams owned by the county, such as Katz Dam.

McLean County has approximately 9,771 residents that rely on farming, coal mining and power industries. The WRB has limited resources to conduct legislatively mandated duties. Management activities of the WRB are supported by a 1.74 mil levy which in 2021 generated a budget of \$146,865.80 to support a variety of activities. Important and ongoing projects include the Katz Dam Safety Improvement Project, Phase 2 bypass channel at Painted Woods Lake, Fort Mandan Flood Control Project, Turtle Creek Watershed Plan, control of cattail blockage of drainage at multiple locations, and the management of Yanktonai Dam, which is rated as having significant hazard. The WRB is voluntary and has no staff, but does obtain financial management services from the McLean County Auditor. To accomplish program goals the WRB retains professional services for engineering needs when necessary.

The fish passage project at Katz Dam has strong local support, particularly with the proximity of the Missouri River fishery and is an important project to the WRB. The location is along US Highway 83, a major north-south route between Bismarck and Minot, providing access to sport fishing regionally. Combining fish passage with the Katz Dam Safety Improvement Project provides a cost-effective means of completing this important project.

Purpose of Grant – Describe the proposed project identifying how the project will meet the specific directive(s) of the Outdoor Heritage Fund Program

Identify project goals, strategies and benefits and your timetable for implementation. Include information about the need for the project and whether there is urgency for funding. Indicate if this is a new project or if it is replacing funding that is no longer available to your organization. Identify any innovative features or processes of your project. Note: if your proposal provides funding to an individual, the names of the recipients must be reported to the Industrial Commission/Outdoor Heritage Fund. These names will be disclosed upon request.

For tree/shrub/grass plantings: provide a planting plan describing the site design, planting methods, number of trees/shrubs by species and stock size, grass species and future maintenance. A statement certifying that the applicant will adhere to USDA-NRCS tree/shrub/grass planting specifications along with the name of the governmental entity designing the planting may be substituted for a planting plan.

For projects including Section 319 funding: provide in detail the specific best management practices that will be implemented and the specific projects for which you are seeking funding.

For projects including fencing: A minimum cost share of 40% by the recipient is preferred. Include detailed information on the type of fencing to be installed, whether funding is requested for boundary fencing, new or replacement of existing fencing, and/or cross fencing.

Purpose of Project and Grant

The fish passage project at Katz Dam directly addresses the objectives of the Outdoor Heritage Fund Directive C. Reestablishing fish and aquatic organism passage at Katz Dam directly contributes to the restoration, enhancement and conservation of aquatic species in North Dakota. This would be the first of four fish passage projects the WRD wants to complete. The McLean County WRB has been organizing a fish passage program for four locations on Painted Woods Creek, including Katz Dam, for over five years. Work completed includes developing concept and preliminary designs for several

locations and holding partnership meetings with other agencies and private partners. Finding funding for fish passage has been one of the challenges. Work completed to date has been supported by McLean County and State Water Commission funds. However, more funding is needed for completion of designs and for construction of the fish passage facilities. The WRB believes that receiving funding from the Outdoor Heritage Fund will provide the path forward needed to make the proposed project Katz Dam a reality.

Painted Woods Creek discharges to the Missouri River approximately 5 miles south of Washburn and there is an abundant and diverse fish community at this confluence. However, there are a series of 4 barriers to fish passage in the lower portion of Painted Woods Creek that block fish migration up Painted Woods Creek, including Katz Dam, which is the downstream most complete aquatic organism blockage. Providing fish passage at Katz Dam would reopen the aquatic habitat for an 11-mile-long reach of Painted Woods Creek, allowing a much greater area of the stream to benefit from the present stocking program and infrequent extreme flooding of the Missouri River. Trophy walleye and northern have been caught between Painted Woods Lake and Katz Dam. Walleye pike are known to congregate below Katz Dam in the spring spawning season and north pike spawning migration is blocked as well. As identified by the Painted Woods Creek fish passage program, it is the goal of the project to open up a 11-mile reach of lower Painted Woods Creek to greater trophy fishing for both walleye and northern pike.

Is this project part of a Comprehensive Conservation Plan? Yes No

If yes, provide a copy with the application.

Note: Projects involving buildings and infrastructure will only be considered if part of a Comprehensive Conservation Plan. Please refer to the "Definitions" section at the back of the form for more details.

Management of Project – Provide a description of how you will manage and oversee the project to ensure it is carried out on schedule and in a manner that best ensures its objectives will be met.

Include a brief background and work experience for those managing the project.

The Board, as project sponsor, has retained Ulteig Engineers (Ulteig) to complete engineering design, construction oversight and permitting for this project. Ulteig also assists with stakeholder engagement. Ulteig has completed the design and permitting for the Katz Dam Safety Improvement Project. Their experience includes a variety of water resource engineering and fish passage projects including concept development, feasibility, environmental review, design, permitting and construction oversight with successful completion on time and within budget. Ulteig will provide bid preparation and construction engineering services for the project, including having regular meetings with the contractor, observation of construction activities, managing the schedule, reviewing compliance with the plans, specifications, and contract documents, and holding the contractor accountable for the use of taxpayer funds for completion of the project on time and within budget.

Evaluation – Describe your plan to document progress and results.

Please be specific on the methods you will utilize to measure success. Note that regular reporting, final evaluation and expenditure reports will be required for every grant awarded.

The WRB will develop a formal construction management plan for the project, including records and invoice management aspects. A monthly progress report will be submitted to the Outdoor Heritage

Fund that would also include copies of the invoices accrued and proposed activities until the next progress report.

Financial Information

Project Budget – Use the table below to provide an itemized list of project expenses and describe the matching funds being utilized for this project.

Indicate if the matching funds are in the form of cash, indirect costs or in-kind services. The budget should identify all other committed funding sources and the amount of funding from each source. **A minimum of 25% match funding is required.** An application will be scored higher the greater the amount of match funding provided. (See Scoring Form.)

Certain values have been identified for in-kind services as detailed under “Budget Information” at the back of this form. Refer to that section and utilize these values in identifying your matching funds.

NOTE: No indirect costs will be funded. Supporting documentation for project expenses, including bids, must be included or application will be considered incomplete.

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
Design	\$15009.70	\$16986.30	\$	\$	\$	\$
Construction	\$97563.05	\$20537.95	\$	\$	\$	\$
	\$	\$	\$	\$	\$	\$
	\$	\$	\$	\$	\$	\$
	\$	\$	\$	\$	\$	\$
	\$	\$	\$	\$	\$	\$
Total Costs	\$112572.75	\$37524.25	\$	\$	\$	\$

Note: Costs for seeding, fencing, pipelines, wells, and cover crops cannot exceed NRCS Field Office Tech Guide without justification. Projects involving perimeter fencing must follow NRCS eligibility standards.

Budget Narrative – Use the space below to provide additional detail regarding project expenses.

An Engineers Opinion of Probable Cost for the construction and individual bid items is found in Appendix B. This work is based on information developed through the associated Katz Dam Safety Improvement Project being supported by the Department of Water Resources at a 75 percent cost share. Cost share is applied to all project costs combined rather than individual items because all individual costs are required for completion of the project. The expenses outlined in the request do not include legal and administrative fees, as the McLean WRB expects to cover them on its own.

Sustainability – Indicate how the project will be funded or sustained in future years.

Include information on the sustainability of this project after OHF funds have been expended and whether the sustainability will be in the form of ongoing management or additional funding from a different source.

The fish passage is an armored side channel with a rock lining that both provides suitable conditions for fish passage and protection against scour and erosion. It will not require ongoing regular

maintenance. The design allows flood events to flow over the principal spillway without damage. If necessary the WRB will fund future maintenance of the project through their general fund.

Partial Funding – Indicate how the project will be affected if less funding is available than that requested.

If funding from the Outdoor Heritage Fund is not obtained, the project may be delayed until such time that sufficient funding is secured. It is possible that the WRB may not be able to afford the project. Anticipated benefits to provide walleye and northern pike to an additional 11 miles of Painted Woods Creek would be delayed or not occur.

Partnership Recognition - If you are a successful recipient of Outdoor Heritage Fund dollars, how would you recognize the Outdoor Heritage Fund partnership? * *There must be signage at the location of the project acknowledging OHF funding when appropriate.*

The WRB will provide signage at the facility identifying the names of all the project sponsors. The signage with the Outdoor Heritage Fund listed as a project sponsor will be viewed and appreciated by all who visit. The WRB would also complete a media campaign centered on the project and the Outdoor Heritage Fund would be singled out as a critical partner in the project.

Awarding of Grants - Review the appropriate sample contract for your organization on the website at <http://www.nd.gov/ndic/outdoor-infopage.htm>.

Can you meet all the provisions of the sample contract? Yes No

If there are provisions in that contract that your organization is unable to meet, please indicate below what those provisions would be:

ABOUT OHF:

The purpose of the North Dakota Outdoor Heritage Fund is to provide funding to state agencies, tribal governments, political subdivisions, and nonprofit organizations, with higher priority given to projects that enhance **conservation** practices in this state by:

Directive A. Providing access to private and public lands for sportsmen, including projects that create fish and wildlife habitat and provide access for sportsmen;

Directive B. Improving, maintaining and restoring water quality, soil conditions, plant diversity, animal systems and by supporting other practices of stewardship to enhance farming and ranching;

Directive C. Developing, enhancing, conserving and restoring wildlife and fish habitat on private and public lands; and

Directive D. Conserving natural areas and creating other areas for recreation through the establishment and development of parks and other recreation areas.

EXEMPTIONS

Outdoor Heritage Fund grants may not be used to finance the following:

- Litigation;
- Lobbying activities;
- Any activity that would interfere, disrupt, or prevent activities associated with surface coal mining operations; sand, gravel, or scoria extraction activities; oil and gas operations; or other energy facility or infrastructure development;
- The acquisition of land or to encumber any land for a term longer than twenty years; or
- Projects outside this state or projects that are beyond the scope of defined activities that fulfill the purposes of Chapter 54-17.8 of the North Dakota Century Code.

OHF funds may not be used, except after a finding of exceptional circumstances by the Industrial Commission, to finance:

- A completed project or project commenced before the grant application is submitted;
- A feasibility or research study;
- Maintenance costs;
- A paving project for a road or parking lot;
- A swimming pool or aquatic park;
- Personal property that is not affixed to the land;
- Playground equipment, except that grant funds may be provided for up to 25% of the cost of the equipment not exceeding \$10,000 per project and all playground equipment grants may not exceed 5% of the total grants per year (see Definitions/Clarifications for how this will be calculated);
- Staffing or outside consultants except for costs for staffing or an outside consultant to design and implement an approved project based on the documented need of the applicant and the expenditures may not exceed 5% of the grant to a grantee if the grant exceeds \$250,000 and expenditures may not exceed 10% of the grant to a grantee if the grant is \$250,000 or less (see Definitions/Clarifications for how this will be calculated);
- A building except for a building that is included as part of a comprehensive conservation plan for a new or expanded recreational project (see Definitions/Clarifications for definition of comprehensive conservation plan and new or expanded recreational project); or
- A project in which the applicant is not directly involved in the execution and completion of the project.

The goal of the Industrial Commission is that at a minimum 15% of the funding received for a biennium will be given priority for recreation projects that meet Directive D.

The following projects are not eligible for funding, unless there is a finding of exceptional circumstances by the Industrial Commission include:

- Construction or refurbishment of indoor/outdoor ice rinks,
- Construction or refurbishment of indoor/outdoor athletic courts and sports fields,
- Other substantially similar facilities.

- Infrastructure that is not part of a comprehensive conservation plan.
- Projects not meeting a minimum funding request of \$2,500.

Budget Information

In-kind services used to match the request for Outdoor Heritage Fund dollars shall be valued as follows:

- Labor costs \$15.00 an hour
- Land costs Average rent costs for the county as shown in the most recent publication of the USDA, National Agricultural Statistics Services, North Dakota Field Office
- Permanent Equipment Any equipment purchased must be listed separately with documentation showing actual cost. (For example: playground equipment)
- Equipment usage Actual documentation
- Seed & Seedlings Actual documentation
- Transportation Mileage at federal rate
- Supplies & materials Actual documentation

More categories will be added as we better understand the types of applications that will be submitted. We will use as our basis for these standards other State and Federal programs that have established rates. For example, the North Dakota Nonpoint Source Pollution Management Program has established rates. If your project includes work that has an established rate under another State Program, please use those rates and note your source.

Definitions/Clarifications:

Building - Defined as “A structure with a roof either with walls or without walls and is attached to the ground in a permanent nature.”

Comprehensive Conservation Plan - Defined as “A detailed plan that has been formally adopted by the governing board which includes goals and objectives--both short and long term, must show how this building will enhance the overall conservation goals of the project and the protection or preservation of wildlife and fish habitat or natural areas.” This does not need to be a complex multi-page document. It could be included as a part of the application or be an attachment.

New and Expanded Recreational Project means that the proposed building cannot be a replacement of a current building. The proposed building must also be related to either a new or expanded recreational project--either an expansion in land or an expansion of an existing building or in the opportunities for recreation at the project site.

Playground equipment calculation - Only the actual costs of the playground equipment (a bid or invoice showing the amount of the equipment costs must be provided) - cannot include freight or installation or surface materials or removal of old equipment, etc.

Staffing/Outside Consultants Costs - If you are requesting OHF funding for staffing or for an outside consultant, you must provide information in your application on the need for OHF funding to cover these costs. For example, if you are an entity that has engineering staff you must explain why you don't have sufficient staff to do the work or if specific expertise is needed or whatever the reason is for your entity to retain an outside consultant. If it is a request for reimbursement for staff time then a written explanation is required in the application of why OHF funding is needed to pay for the costs of that staff member(s)' time. **The budget form must reflect on a separate line item the specific amount that is being requested for staffing and/or the hiring of an outside consultant.** This separate line item will then be used to make the calculation of 5% or 10% as outlined in the law. Note that the calculation will be made on the grant less the costs for the consultant or staff.

Maintenance – Activities that preserve or keep infrastructure in a given existing condition, including repairs. Repair means to restore to sound condition after damage, to renew or refresh; except repairs due to damage caused by Acts of God.

Scoring of Grants

Oral Presentation. Please note that you will be given an opportunity to make a ten-minute Oral Presentation at a meeting of the Outdoor Heritage Fund Advisory Board. These presentations are strongly encouraged.

Open Record. Please note that your application and any attachments will be open records as defined by law and will be posted on the Industrial Commission/Outdoor Heritage Fund website.

All applications will be scored by the Outdoor Heritage Fund Advisory Board after your ten-minute oral presentation. The ranking form that will be used by the Board is available on the website at <http://www.nd.gov/ndic/outdoor-infopage.htm> .

Awarding of Grants

All decisions on requests will be reported to applicants no later than 30 days after Industrial Commission consideration. The Commission can set a limit on duration of an offer on each application or if there isn't a specific date indicated in the application for implementation of the project, then the applicant has until the next Outdoor Heritage Fund Advisory Board regular meeting to sign the contract and get the project underway or the commitment for funding will be terminated and the applicant may resubmit for funding. Applicants whose proposals have been approved will receive a contract outlining the terms and conditions of the grant.

Responsibility of Recipient

The recipient of any grant from the Industrial Commission must use the funds awarded for the specific purpose described in the grant application and in accordance with the contract. The recipient cannot use any of the funds for the purposes stated under Exemptions on the first page of this application.

If you have any questions about the application, the Commission can be reached at 701-328-3722 or outdoorheritage@nd.gov.

Revised: November 4, 2019, April 12, 2023

Appendix A

Project Location Figure

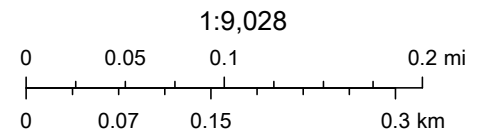
ND GIS Hub Explorer



June 1, 2021

Image

- Red: Band_1
- Green: Band_2



Appendix B

Engineers Opinion of Probable Construction Cost

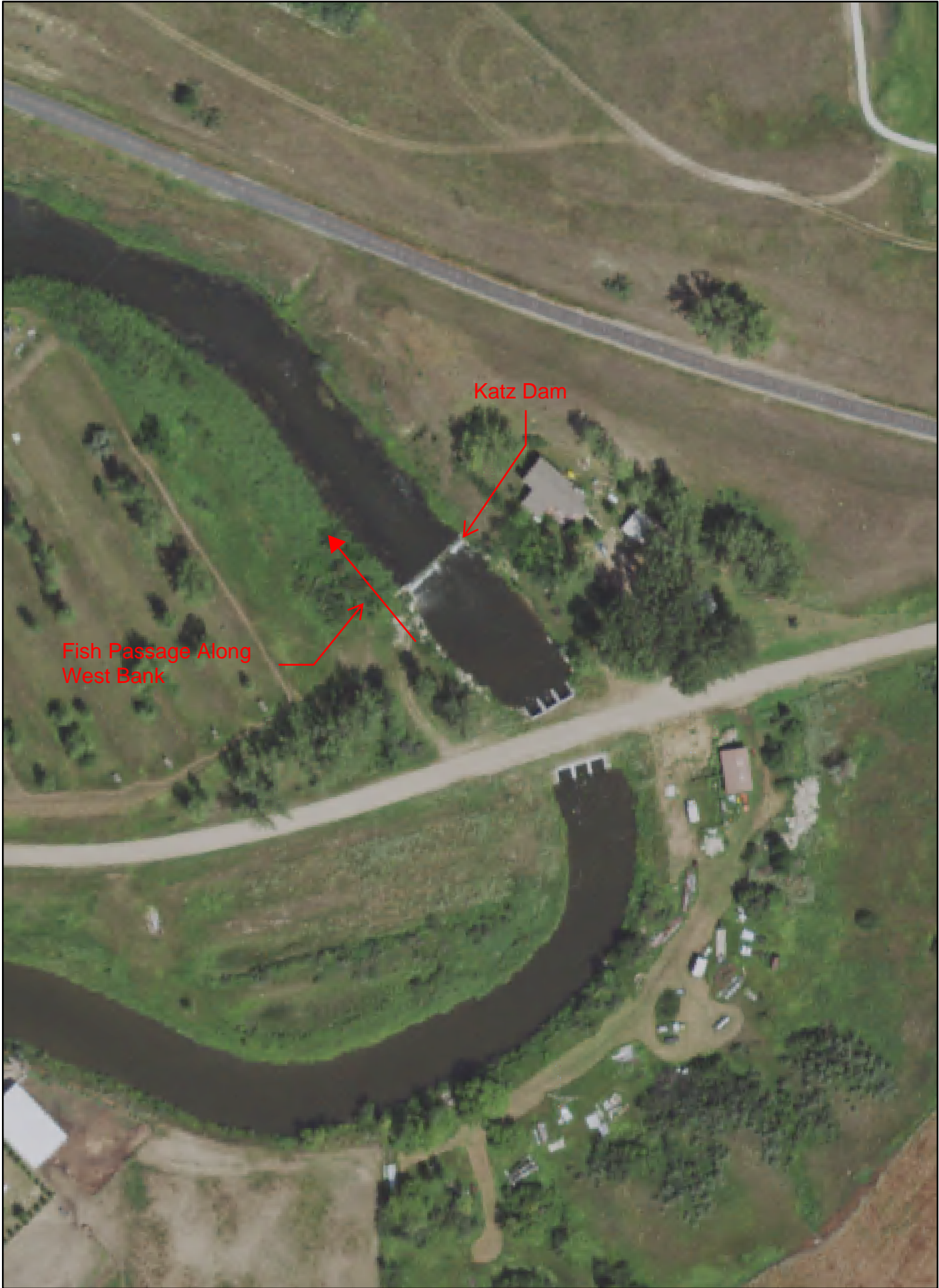
Opinion of Probable Construction Cost

Project: **Katz Dam Fish Passage**

Item Number	Specification	Code	Quantity	Unit	Unit Price	Total Price
1	201	330 Clearing and Grubbing	1	LS	\$ 2,000.00	\$ 2,000.00
2	203	101 Common Excavation	950	CY	\$ 10.00	\$ 9,500.00
3	203	109 Topsoil	20	CY	\$ 5.00	\$ 100.00
4	203	118 Topsoil Placement	500	SY	\$ 12.00	\$ 6,000.00
5	203	125 Remove & Salvage Topsoil	500	SY	\$ 12.00	\$ 6,000.00
6	251	1000 Restoration Seeding	0.2	Acre	\$ 6,000.00	\$ 1,200.00
7	255	101 Erosion Control Blanket Type 1	500	SY	\$ 3.00	\$ 1,500.00
8	256	100 Rip Rap Grade I	300	CY	\$ 95.00	\$ 28,500.00
9	256	200 Rip Rap Grade II	20	CY	\$ 70.00	\$ 1,400.00
10	264	112 Fiber Rolls 12-inch	33	LF	\$ 2.50	\$ 82.50
11	302	120 Aggregate Base Class 3	15	Ton	\$ 29.00	\$ 435.00
12		Boulders (3-4 ft Nominal Diameter)	32	EA	\$ 600.00	\$ 19,200.00
13		Construct Opening in Wing Wall	1	LS	\$ 10,000.00	\$ 10,000.00
14	702	100 Mobilization	1	LS	\$ 7,500.00	\$ 12,500.00
Subtotal						\$ 98,417.50
Construction Summary						
10% Construction Contingency						\$ 9,841.75
Total Estimated Construction Cost						\$ 108,259.25
Engineering Design and Construction Oversight						\$ 27,196.00
Survey						\$ 4,800.00
Total Estimated Improvement Cost						\$ 150,097.00

Appendix C

Site Photos



Katz Dam

Fish Passage Along West Bank

0 50 100 200 Feet

1 inch = 125 feet



View From Upstream on East Bank



View of West Bank from Downstream of Katz Dam. The fish passage will follow the west bank around the dam.

Outdoor Heritage Fund
Grant Round 22
Application Summary Page
GR 22-3

Project Title: Coyote Clay Target Range
Applicant: Coyote Clay Target League
Primary Contact: Penny Slagle
Total Project Costs: \$517,849
OHF Request: \$293,158

Match Amount	Funding Source	Match Type
\$60,461.91	Mountrail Williams Electric Cooperative	In-Kind
\$31,150.69	NDGF -Skeet Throwers	Cash
\$35,360	NDGF-Trap Throwers	Cash
\$126,972.60	Total	

Percentage of Matching Funds: 43%

Project Duration: 18 months

Major Directive: D

Additional Directive:

Summary of Project: The Coyote Clay Target League has grown into the largest youth league in the nation, but recently lost their range with the expansion of the City of Williston limits, and a new range is needed. The project would involve the construction of a new shooting range, including trap houses and a skeet range.

Technical Committee Comments:

- Project is needed, recommend helping as much as possible, understanding area of state where OHF dollars are coming from
- Unclear if skeet houses are eligible, consensus that clubhouse is not eligible
- Throwing equipment may also not be eligible, recommend board guidance
- Similar project funded for Bowman shooting range
- Not clear which phase they are seeking grant funding from OHF for

Technical questions from the OHF Advisory Board members:

- Is bolted-down equipment considered mobile? Would that change the board's position on equipment?

Coyote Clay Target League has not previously received funds.

***Total OHF funds awarded to date: \$0.00. Total OHF funds spent to date: \$0.00.**

Coyote Clay Target League has not submitted any unsuccessful applications.

OHF Advisory Board Recommendation

Contingencies: **None**

Conflicts of Interest: **None**

Funding Vote: **8-1**

Funding Amount Vote: **\$293,158**

Outdoor Heritage Fund Grant Application



Instructions

After completing the form, applications and supporting documentation may be submitted by e-mail to ndicgrants@nd.gov. It is preferred that only electronic copies are submitted.

You are not limited to the spacing provided, except in those instances where there is a limit on the number of words. If you need additional space, please indicate that on the application form, answer the question on a separate page, and include with your submission.

The application and all attachments must be received by the application deadline. You may submit your application at any time prior to the application deadline. **Applicants are strongly encouraged to submit applications prior to the deadline for staff review in order ensure that proposals will be complete when submitted on deadline date.** Incomplete applications may not be considered for funding.

Please review the back of this form to determine project eligibility, definitions, budget criteria, and statutory requirements.

Project Name Coyote Clay Target League Range Build Project

Name of Organization Coyote Clay Target League

Federal Tax ID # 84-3143662

Contact Person/Title Penny Lee Slagle President/Head Coach

Address 3021 13th Ave East

City Williston

State ND

Zip Code 58801

E-mail Address pslagle@nemont.net

Web Site Address (If applicable)

Phone 701-770-0606

List names of co-applicants if this is a joint proposal

MAJOR Directive:

Choose only one response

Directive A. Providing access to private and public lands for sportsmen, including projects that create fish and wildlife habitat and provide access for sportsmen;

Directive B. Improving, maintaining and restoring water quality, soil conditions, plant diversity, animal systems and by supporting other practices of stewardship to enhance farming and ranching;

Directive C. Developing, enhancing, conserving and restoring wildlife and fish habitat on private and public lands; and

Directive D. Conserving natural areas and creating other areas for recreation through the establishment and development of parks and other recreation areas.

Additional Directive:

Choose all that apply

Directive A.

Directive B.

Directive C.

Directive D.

Type of organization:

State Agency

Political Subdivision

Tribal Entity

Tax-exempt, nonprofit corporation.

Abstract/Executive Summary.

Summarize the project, including its objectives, expected results, duration, total project costs and participants. (no more than 500 words)

The main objective for needing this funding is to build a range to fit the growing needs of the Coyote Clay Target League and the community of Williston. The previous gun range (NW Gun Club) offered only Trap and disbanded in 2018 which is the year we started this league.

Our entire comprehensive plan consists of 4 Phases:

Phase 1 is the construction of 7 trap houses complete with walkways, sidewalk, and lighting on each house. This phase is fully funded and will be completed this spring.

Phase 2 is the construction of a clubhouse. We need a home. This clubhouse will consist of a large classroom for Hunter Education classes, fundamental classes that are held every

Thursday evening and will continue year around. It will include a concession stand, restrooms, an office, a large storage area and an open area for mingling. We are currently awaiting funding for this clubhouse phase.

Phase 3 is our current plan of constructing 4 Skeet/Trap combo fields. This is an exciting phase as we do not have a skeet range on site, and this will give our athletes an opportunity to shoot all 4 disciplines on our range. We currently have Trap, 5 Stand, and Sporting Clays. With this range we are hoping to revive the sport of Skeet as there are very few skeet ranges in the state of ND and none of them have 4 skeet ranges as ours will.

Phase 4 will be the addition of 8 more trap houses complete with lights, concrete walks and sidewalks joining all houses. The complete project will have 19 Trap houses, 4 Skeet ranges, 1 Sporting Clays and 3 -5 Stands!

We are under the USA Clay Target League plus our league is currently the largest league in the Nation! We have grown with each season and this new range will fit our needs as well as provide our community and western ND with a premier shooting range.

We want to build this range to attract more athletes to join our team but also keep our hunting tradition alive. With our league as big as it is, it will create more hunters and outdoor activities that benefits the R3 strategic plan of recruitment, retention, and reactivation. And we are fulfilling this plan.

The master plan we are seeking with this range build is to serve our community, our high school, the surrounding schools with a state-of-the-art shooting range. Our goal when all 4 phases are completed is to host ND State and National Tournaments in all 4 disciplines. Our goal is also to host off season high school shoots, ND High School Rodeo, 4 H shoots, fund raising events, adult leagues, ATA shoots, and team building activities for the oil companies and businesses in our area. We want to incorporate other aspects of shooting with the main aspect being safety and expose our athletes to the importance of conservation, the hunting philosophy, habitat, wildlife education and just enjoy the great outdoors of North Dakota.

Project Duration: Begin Spring 2024—complete Fall 2024

Indicate the intended schedule for drawing down OHF funds.

As each phase of this project is completed, we will pay our contractors throughout the construction process.

Amount of Grant request: \$293,158

Total Project Costs: \$517,849

Note: in-kind and indirect costs can be used for matching funds.

Amount of Matching Funds: \$97,719

A minimum of 25% Match Funding is required. Indicate if the matching funds will be in-kind, indirect or cash. Please provide verification that these matching funds are available for your project. Note that effective as of July 1, 2015 no State General Fund dollars can be used for a match unless funding was legislatively appropriated for that purpose.

Amount of Match	Funding Source	Type of Match (Cash, In-kind or Indirect)
\$60,461.91	Mountrail Williams Electric Cooperative	In Kind
\$31,150.69	NDGF -Skeet Throwers	Cash Grant
\$35,360	NDGF-Trap Throwers	Cash Grant
\$		
\$		

Certifications

I certify that this application has been made with the support of the governing body and chief executive of my organization.

I certify that if awarded grant funding none of the funding will be used for any of the exemptions noted in the back of this application.

Narrative

Organization Information – Briefly summarize your organization’s history, mission, current programs and activities.

Include an overview of your organizational structure, including board, staff and volunteer involvement. (no more than 300 words)

The Coyote Clay Target League began in 2018 with 34 members in grades 7-12. Our league now includes grades 6-12 and have grown to 138 athletes shooting from Trap, Sporting Clays or 5 Stand. We have 214 athletes shoot each week as some shoot one discipline or some shoot 2 and or 3. Our city made us move the range out of city limits in 2020 so we had to find a new home which we did but it did not have a trap range.

The leagues' priorities are safety, fun and marksmanship. We stress to our athletes gun safety, respect, ethical behavior, dignity, sportsmanship, fundamentals of shooting and take care of the countryside and the land surrounding our ranges. Since many of our athletes are now active hunters, we provide them with practice for the seasons and promote the hunting tradition. Shooting sports also strengthen connections within families and communities for life.

The Coyote Clay Target League is a 501c3 nonprofit. We have a 10-member board and a Booster Club board to help with the fundraising events. We have over 20 Coaches helping during the season with coaching and volunteer duties each week. None of the board or coaches are paid as they are all volunteers. Our volunteers do all the work that needs to be done at the range.

Much of the money we have raised for this range build project has been done by the athletes and their parents. This is "the range the kids built"! Many of our projects are work projects such as setting up and tearing down for events, selling concessions, working the rodeo, golf tournaments, weddings, fund raisers, and many others. Our athletes are very visible throughout the community, and we have a great deal of support from the entire surrounding area.

Purpose of Grant – Describe the proposed project identifying how the project will meet the specific directive(s) of the Outdoor Heritage Fund Program

Identify project goals, strategies and benefits and your timetable for implementation. Include information about the need for the project and whether there is urgency for funding. Indicate if this is a new project or if it is replacing funding that is no longer available to your organization. Identify any innovative features or processes of your project. Note: if your proposal provides funding to an individual, the names of the recipients must be reported to the Industrial Commission/Outdoor Heritage Fund. These names will be disclosed upon request.

For tree/shrub/grass plantings: provide a planting plan describing the site design, planting methods, number of trees/shrubs by species and stock size, grass species and future maintenance. A statement certifying that the applicant will adhere to USDA-NRCS tree/shrub/grass planting specifications along with the name of the governmental entity designing the planting may be substituted for a planting plan.

For projects including Section 319 funding: provide in detail the specific best management practices that will be implemented and the specific projects for which you are seeking funding.

For projects including fencing: A minimum cost share of 40% by the recipient is preferred. Include detailed information on the type of fencing to be installed, whether funding is requested for boundary fencing, new or replacement of existing fencing, and/or cross fencing.

The purpose of getting funding for this project is to build a range in the Williston area and a part of North Dakota that is lacking in a facility such as this. This is a new project, although one phase will be completed this spring. Our goal is to build a premier range that we can sponsor shoots of all types and bring people together into our community and help the economic development of Williston. We currently have to travel over 400 miles to the State Trap Shoot when once our range is complete we will be able to sponsor state and national shoots in all 4 disciplines in the Western part of the state.

With our league being the largest league in the Nation, we need to have a facility that will fit our growth. This includes trap houses, a clubhouse, and a skeet range.

Another purpose for this grant funding is that we need to promote gun safety, especially with the number of kids that we have. We offer fundamental classes every Thursday evening and include lessons with live fire. Once we get our clubhouse built, we will then also be able to shoot live fire with all the newly certified hunter ed students. We will also have opportunities to take kids hunting who have never experienced this before.

Directive D: Our range build project falls under this directive that deals with conserving natural areas and creating these areas for recreation by development. The land that we moved to was once a cattle pasture. It is a perfect area for a shooting range with a wide variety of types of land and cover for game. We are transforming some of that land to do our range build and create a recreation area for individuals and families to use for generations to come.

Is this project part of a Comprehensive Conservation Plan? Yes NO X

If yes, provide a copy with the application.

Note: Projects involving buildings and infrastructure will only be considered if part of a Comprehensive Conservation Plan. Please refer to the "Definitions" section at the back of the form for more details.

Management of Project – Provide a description of how you will manage and oversee the project to ensure it is carried out on schedule and in a manner that best ensures its objectives will be met.

Include a brief background and work experience for those managing the project.

Currently the Board is overseeing the entire range build project. The President of the Coyote Clay Target League will be the contact person for the contractors and make sure things are going as planned. We have a wide range of professions on our board from a manager of an equipment facility, manager of an oil company, teachers, bankers, gunsmith, competitive shooters, coaches, Tire Store owner, and many of these same people have several connections to what we need.

Evaluation– Describe your plan to document progress and results.

Please be specific on the methods you will utilize to measure success. Note that regular reporting, final evaluation and expenditure reports will be required for every grant awarded.

Success will be reported as the projects begin and are completed. The contractors are required to notify us as to what they are doing, and we have members out to the job site often. The club President and committee will be doing the final evaluations and our Treasurer will handle the expenditures. Our board also meets regularly to attend to any concerns we may have with the construction.

Financial Information

Project Budget – Use the table below to provide an itemized list of project expenses and describe the matching funds being utilized for this project.

Indicate if the matching funds are in the form of cash, indirect costs or in-kind services. The budget should identify all other committed funding sources and the amount of funding from each source. **A minimum of 25% match funding is required.** An application will be scored higher the greater the amount of match funding provided. (See Scoring Form.)

Certain values have been identified for in-kind services as detailed under “Budget Information” at the back of this form. Refer to that section and utilize these values in identifying your matching funds.

NOTE: No indirect costs will be funded. Supporting documentation for project expenses, including bids, must be included or application will be considered incomplete.

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
Concrete	\$138,951	\$46,317	\$	\$	\$	\$185,268
Skeet Houses	\$67,500	\$22,500	\$	\$	\$	\$90,000
			\$	\$	\$	
Dirt Work	\$5,625	\$1,875	\$	\$	\$	\$7,500
Electrical	\$78,750	\$26,250	\$	\$	\$	\$105,000
Voice Callers	\$2,332.50	\$777.50	\$	\$	\$	\$3,110
Total Costs	\$	\$	\$	\$	\$	\$

Note: Costs for seeding, fencing, pipelines, wells, and cover crops cannot exceed NRCS Field Office Tech Guide without justification. Projects involving perimeter fencing must follow NRCS eligibility standards.

Budget Narrative – Use the space below to provide additional detail regarding project expenses.

Powerline-----	\$60,461-----		\$60,461
Trap Throwers-----		\$35,360-----	\$35,360
Skeet Throwers-----		\$31,150-----	\$31,150
TOTAL: --\$293,158-----	-\$97,719-----	- \$60,461-----	-\$67,510-----
			\$517,849

Sustainability – Indicate how the project will be funded or sustained in future years.

Include information on the sustainability of this project after OHF funds have been expended and whether the sustainability will be in the form of ongoing management or additional funding from a different source.

Once our range project is completed, we will be able to maintain the facility by hosting league in both spring and fall, sponsoring high school and ATA Shoots, sponsor team building activities for companies, sell concessions from the clubhouse, club memberships, raffles, work projects. Our league has proven that we are available and willing to work for our donations, so we are called upon for many things people need help with.

Partial Funding – Indicate how the project will be affected if less funding is available than that requested.

If we receive less funding than requested, we will keep on going. We will have other avenues in which we will have to turn to raise money. Our board, coaches and athletes are passionate about our clay target league, and we will continue to push forward as we have been the past two years.

Partnership Recognition - If you are a successful recipient of Outdoor Heritage Fund dollars, how would you recognize the Outdoor Heritage Fund partnership? * *There must be signage at the location of the project acknowledging OHF funding when appropriate.*

If we are to receive this grant we will definitely give credit to the Outdoor Heritage Fund through our own Facebook page and other media. We also have an area at the range for signage and this would be put up at the entrance to the range.

Awarding of Grants - Review the appropriate sample contract for your organization on the website at <http://www.nd.gov/ndic/outdoor-infopage.htm>.

Can you meet all the provisions of the sample contract? Yes No

If there are provisions in that contract that your organization is unable to meet, please indicate below what those provisions would be:

ABOUT OHF:

The purpose of the North Dakota Outdoor Heritage Fund is to provide funding to state agencies, tribal governments, political subdivisions, and nonprofit organizations, with higher priority given to projects that enhance **conservation** practices in this state by:

Directive A. Providing access to private and public lands for sportsmen, including projects that create fish and wildlife habitat and provide access for sportsmen;

Directive B. Improving, maintaining and restoring water quality, soil conditions, plant diversity, animal systems and by supporting other practices of stewardship to enhance farming and ranching;

Directive C. Developing, enhancing, conserving and restoring wildlife and fish habitat on private and public lands; and

Directive D. Conserving natural areas and creating other areas for recreation through the establishment and development of parks and other recreation areas.

EXEMPTIONS

Outdoor Heritage Fund grants may not be used to finance the following:

- Litigation;
- Lobbying activities;
- Any activity that would interfere, disrupt, or prevent activities associated with surface coal mining operations; sand, gravel, or scoria extraction activities; oil and gas operations; or other energy facility or infrastructure development;
- The acquisition of land or to encumber any land for a term longer than twenty years; or
- Projects outside this state or projects that are beyond the scope of defined activities that fulfill the purposes of Chapter 54-17.8 of the North Dakota Century Code.

OHF funds may not be used, except after a finding of exceptional circumstances by the Industrial Commission, to finance:

- A completed project or project commenced before the grant application is submitted;
- A feasibility or research study;
- Maintenance costs;
- A paving project for a road or parking lot;
- A swimming pool or aquatic park;
- Personal property that is not affixed to the land;

- Playground equipment, except that grant funds may be provided for up to 25% of the cost of the equipment not exceeding \$10,000 per project and all playground equipment grants may not exceed 5% of the total grants per year (see Definitions/Clarifications for how this will be calculated);
- Staffing or outside consultants except for costs for staffing or an outside consultant to design and implement an approved project based on the documented need of the applicant and the expenditures may not exceed 5% of the grant to a grantee if the grant exceeds \$250,000 and expenditures may not exceed 10% of the grant to a grantee if the grant is \$250,000 or less (see Definitions/Clarifications for how this will be calculated);
- A building except for a building that is included as part of a comprehensive conservation plan for a new or expanded recreational project (see Definitions/Clarifications for definition of comprehensive conservation plan and new or expanded recreational project); or
- A project in which the applicant is not directly involved in the execution and completion of the project.

The goal of the Industrial Commission is that at a minimum 15% of the funding received for a biennium will be given priority for recreation projects that meet Directive D.

The following projects are not eligible for funding, unless there is a finding of exceptional circumstances by the Industrial Commission include:

- Construction or refurbishment of indoor/outdoor ice rinks,
- Construction or refurbishment of indoor/outdoor athletic courts and sports fields,
- Other substantially similar facilities.
- Infrastructure that is not part of a comprehensive conservation plan.
- Projects not meeting a minimum funding request of \$2,500.

Budget Information

In-kind services used to match the request for Outdoor Heritage Fund dollars shall be valued as follows:

- Labor costs \$15.00 an hour
- Land costs Average rent costs for the county as shown in the most recent publication of the USDA, National Agricultural Statistics Services, North Dakota Field Office
- Permanent Equipment Any equipment purchased must be listed separately with documentation showing actual cost. (For example: playground equipment)
- Equipment usage Actual documentation
- Seed & Seedlings Actual documentation
- Transportation Mileage at federal rate
- Supplies & materials Actual documentation

More categories will be added as we better understand the types of applications that will be submitted. We will use as our basis for these standards other State and Federal programs that have established rates. For example, the North Dakota Nonpoint Source Pollution Management Program has established rates. If your project includes work that has an established rate under another State Program, please use those rates and note your source.

Definitions/Clarifications:

Building - Defined as “A structure with a roof either with walls or without walls and is attached to the ground in a permanent nature.”

Comprehensive Conservation Plan - Defined as “A detailed plan that has been formally adopted by the governing board which includes goals and objectives--both short and long term, must show how this building will enhance the overall conservation goals of the project and the protection or preservation of wildlife and fish habitat or natural areas.” This does not need to be a complex multi-page document. It could be included as a part of the application or be an attachment.

New and Expanded Recreational Project means that the proposed building cannot be a replacement of a current building. The proposed building must also be related to either a new or expanded recreational project--either an expansion in land or an expansion of an existing building or in the opportunities for recreation at the project site.

Playground equipment calculation - Only the actual costs of the playground equipment (a bid or invoice showing the amount of the equipment costs must be provided) - cannot include freight or installation or surface materials or removal of old equipment, etc.

Staffing/Outside Consultants Costs - If you are requesting OHF funding for staffing or for an outside consultant, you must provide information in your application on the need for OHF funding to cover these costs. For example, if you are an entity that has engineering staff you must explain why you don't have sufficient staff to do the work or if specific expertise is needed or whatever the reason is for your entity to retain an outside consultant. If it is a request for reimbursement for staff time then a written explanation is required in the application of why OHF funding is needed to pay for the costs of that staff member(s)' time. **The budget form must reflect on a separate line item the specific amount that is being requested for staffing and/or the hiring of an outside consultant.** This separate line item will then be used to make the calculation of 5% or 10% as outlined in the law. Note that the calculation will be made on the grant less the costs for the consultant or staff.

Maintenance – Activities that preserve or keep infrastructure in a given existing condition, including repairs. Repair means to restore to sound condition after damage, to renew or refresh; except repairs due to damage caused by Acts of God.

Scoring of Grants

Oral Presentation. Please note that you will be given an opportunity to make a ten-minute Oral Presentation at a meeting of the Outdoor Heritage Fund Advisory Board. These presentations are strongly encouraged.

Open Record. Please note that your application and any attachments will be open records as defined by law and will be posted on the Industrial Commission/Outdoor Heritage Fund website.

All applications will be scored by the Outdoor Heritage Fund Advisory Board after your ten-minute oral presentation. The ranking form that will be used by the Board is available on the website at <http://www.nd.gov/ndic/outdoor-infopage.htm> .

Awarding of Grants

All decisions on requests will be reported to applicants no later than 30 days after Industrial Commission consideration. The Commission can set a limit on duration of an offer on each application or if there isn't a specific date indicated in the application for implementation of the project, then the applicant has until the next Outdoor Heritage Fund Advisory Board regular

meeting to sign the contract and get the project underway or the commitment for funding will be terminated and the applicant may resubmit for funding. Applicants whose proposals have been approved will receive a contract outlining the terms and conditions of the grant.

Responsibility of Recipient

The recipient of any grant from the Industrial Commission must use the funds awarded for the specific purpose described in the grant application and in accordance with the contract. The recipient cannot use any of the funds for the purposes stated under Exemptions on the first page of this application.

If you have any questions about the application, the Commission can be reached at 701-328-3722 or outdoorheritage@nd.gov.

Revised: November 4, 2019, April 12, 2023



990 Lone Oak Drive • Suite 120 • Eagan, MN 55121 • usaclaytarget.com • FEIN: 27-3226324

May 20, 2023

Dear North Dakota Outdoor Heritage Fund Commission,

The USA Clay Target League is the independent provider of clay target shooting sports as an extra curricular co-ed and adaptive activity to students enrolled in middle school, high school, and college. This is accomplished through divisions and alliances including the North Dakota State High School Clay Target League, USA College Clay Target League, and the Minnesota College Athletic Conference. The League's priorities in order of importance are safety, fun, and marksmanship. The League a not-for-profit public charitable corporation.

The League has been one of the fastest-growing school-sponsored sports in the country for the past decade. Nationwide last year, the League hosted 44,900 student athletes representing over 1,500 teams that were coached by more than 8,000 team staff members. The League started in Minnesota in 2008 with three teams and 30 student athletes.

In North Dakota, nearly 90 teams and 2,800 student athletes participate on clay target teams annually. For the spring high school league, clay target participation would rank seventh highest out of 23 high school sports. The Coyote Clay Target League that represents the Williston area, had more than 370 student athletes participated in multi-week seasons last year making them the largest participating team in the entire USA Clay Target League. Williston High School joined the League in 2018 with just 30 student athletes.

Each year, thousands of students that are on clay target team waiting lists or rosters are not allowed to participate in the League primarily due to the lack of capacity at shooting ranges. Unlike most other high school outdoor sports that have playing fields at virtually every high school, clay target shooting sports requires the use of a regulation shooting range providing a safe, consistent, and competitive venue to conduct all League-sponsored events.

North Dakota Game and Fish has been a major supporter of the League and many teams in its home state. Through annual shooting range development grants, new clay target team grants, and sponsor support for the League, the State of North Dakota continues to invest in its R3 (Recruitment, Retention, and Reactivation) strategic planning for hunting, fishing, outdoor recreation, and recreational shooting.

NDGF received approximately \$18.5 million from the Pittman-Robertson Act in 2022. These funds are primarily used for wildlife conservation and management, shooting range enhancements, hunter education, and shooting sport participation recruitment efforts. This revenue is generated by the an 11% excise tax on firearms and ammunition. Of the excise taxes that are collected, nearly 80% of the revenue is generated by recreational shooting - not hunting.

The USA Clay Target League fully supports the development of the Coyote Clay Target League's efforts to build additional clay target fields at the Painted Woods Shooting Range in Williston. Upon completion, these new fields will create 1) safe and professional venue for attracting more clay target participants, 2) host large local, regional, and statewide clay target events, 3) positive economic impacts to the Williston area and the State of North Dakota, 4) greatly assist North Dakota Game and Fish's wildlife conservation efforts and its R3 strategic plan, and 5) help create the next generation of outdoor enthusiasts for the great State of North Dakota.

Thank you very much for your consideration and support of the Coyote Clay Target League Range Build Project.

A handwritten signature in black ink that reads 'John Nelson'. The signature is written in a cursive, slightly slanted style.

John Nelson
President



May 22, 2023

To Whom it May Concern,

I am writing this letter in support of the OHF grant that the Coyote Clay Target League has applied for. I have worked with Penny Slagle for years on various programs. She is a long-term volunteer for the department and her services has been exemplary. Penny has been very active in the ND High School Clay Target range and that is the largest and fastest grown club in our state. A few years ago, the City of Williston closed down the trap shooting range where they practiced. Penny and a group of volunteers have been in the process of building a new trap shooting facility. These facilities are not cheap and any assistance they can be given will benefit the youth in the Williston area. This is a perfect opportunity to offer these kids a lifelong skill that gets them in the outdoors.

Sincerely,

A handwritten signature in black ink, appearing to read "Marty Egeland". The signature is fluid and cursive, with the first name "Marty" being more prominent.

Marty Egeland

Governor
Doug Burgum

Director
Jeb Williams

Deputy Director
Scott A. Peterson

To Whom It May Concern,

My name is Brian Burrows and I am on the USA shooting team. I represented the United States at the Tokyo 2020 Olympic Games in International Trap. My teammate, Maddie Bernau, and I brought home the bronze medal in the Mixed Trap event. In addition to competing, I enjoy coaching shotgun sports. I have coached over 500 athletes and held camps for multiple scholastic teams. I have had the pleasure of hosting camps for the Williston Clay Target team in 2021 and 2022.

The growth of this program, led by Penny Slagle, is incredible. Since it's inception in 2018, the team has grown to become the largest youth league in the nation. With the exponential growth of the program, there is a need to build 4 skeet and trap combo field at the community gun club.

The Williston Clay Target league is seeking funds for this range project from the Outdoor Heritage Fund Grant. With this addition they will have all 4 shotgun disciplines: Skeet, Trap, 5-stand, and Sporting Clays. It will greatly benefit the team and allow them to continue to grow and produce great shooting athletes that can excel in all disciplines. Not only will it benefit the team, but also the whole Williston community. This range project will allow the Clay Target League to host community, state, and national tournaments.

I look forward to continuing to support the Williston Clay Target League and I know they will continue to become a positive and powerful force in the scholastic shooting world. Thank you for considering the Williston Clay Target League range project as the beneficiary of the Outdoor Heritage Fund Grant.

Please feel free to contact me if you need any further information about the Clay Target League and the positive impact that this range project will have on the athletes and the community.

Sincerely,

Brian Burrows, OLY
760-622-6948

To Whom it May Concern,

My name is David Montgomery, and I am writing this letter of recommendation for the grant application of the Williston Clay Target League.

I have had the pleasure of working with Penny Slagle, the coach of the Williston High School and Williston State College clay target league teams.

Penny has worked tirelessly the past years to get these teams up and running and now has accomplished them as one of the largest teams as far as members in the United States.

Penny has built this program from the ground up by her hard work of fund raising through grants, donations, and her own commitment of labor, so she could succeed in getting this program for so many young adults in NW ND to enjoy and succeed and be successful in their clay Target League competitions. The program has a way to go in their fund raising to achieve their reality of a new clubhouse and equipment needs to continue to offer this program to even more individuals interested in this program.

As a Williams County commissioner, I have seen how important this program is to our area with the significant number of participants in the program and giving these youth another great option to participate in, of which Williams County has also provided grant dollars for them to achieve their goals. I ask you to please consider and approve their grant request from you so they can continue to grow their program and offer more individuals to be able to participate in their program.

Thank You for your consideration.
David Montgomery
Williston ND

Assembly Unit	Unit Description	Enter Estimated Quantity	Unit	Labor Unit Price	2022 Material Unit Price	Total Unit Price	Total Labor Cost	Total Material Cost	Total Estimated Cost	Comment
UG7	1 PH PAD MOUNTED TRANS LOOP OR RADIAL	1	Each	\$385.88	\$0.00	\$385.88	\$385.88	\$0.00	\$385.88	
UM3-14	1 PH SECTIONALIZING ENCLOSURE	1	Each	\$275.63	\$850.00	\$1,125.63	\$275.63	\$850.00	\$1,125.63	
UM6-11(0)25KV	LOAD BREAK ELBOW TERM	4	Each	\$94.26	\$70.00	\$164.26	\$377.04	\$280.00	\$657.04	
UM6-11(600A)	INSULATED PROTECTIVE CAP	2	Each	\$13.23	\$110.00	\$123.23	\$26.46	\$220.00	\$246.46	
UM6-27(25KV)	FOUR POINT JUNCTION/200 A	1	Each	\$44.10	\$270.00	\$314.10	\$44.10	\$270.00	\$314.10	
UM6-6	GROUND ROD ASSEMBLY	2	Each	\$35.28	\$40.00	\$75.28	\$70.56	\$80.00	\$150.56	
1480Z	Primary Service, 1/0 25 KV JACKETED 260	3.00	1000 Ft	\$0.00	\$3,710.00	\$3,710.00	Add Handling Below	\$11,130.00	\$11,130.00	
	Backhoe	2,500	Ft	\$5.46		\$5.46	\$13,650.00	\$0.00	\$13,650.00	
	1 Primary Cables	2,500	Ft	\$4.69		\$4.69	\$11,725.00	\$0.00	\$11,725.00	

Easements	
Length (Miles)	-
Width (Feet)	40
Land Type	Cropland
Acres	-
Estimated Easement Payment(s) Total	\$

Project Name: Clay Target League - Sheet Houses

Estimate Completed By: Brent

Date: 10/10/2022

Map No.?: 049-21 Location Factor for OH: Yes

Hot Work?: No Length < 0.5 MI?: No

Winter Work?: No Hot Work Factor: Winter Work Factor:

Special Services: 0.0% Labor/Material Contingency: 50.0%

Misc. Materials Uplift: 3.0% Special Services (\$1,000 minimum):

Easements: N/A

Misc. Materials: 3.0%

Grand Total: \$384.90

Grand Total: \$60,461.91

Note 1: Use a Pay factor of 1.5 for individual Overhead or Distribution Underbuild Work Orders 0.50 miles or less outside the map areas noted below:

Williston Area Maps: 49, 50, 51, 78, 79 and 88

Stanley Area Maps: 68, 69, 70, 97, 98, 99, 106, 107 and 108

New Town Area Maps: 15, 23, 24, 25, 34 and 35

Note 2: 1.5 pay factor does not apply if more than one Work Order is issued and cumulative length exceeds 0.5 miles when Work Orders are within 5 mile radius of each other, or units with "near".

Note 3: A pay factor of 1.35 may be used for hot work with written approval from MWEC prior to performing the work.

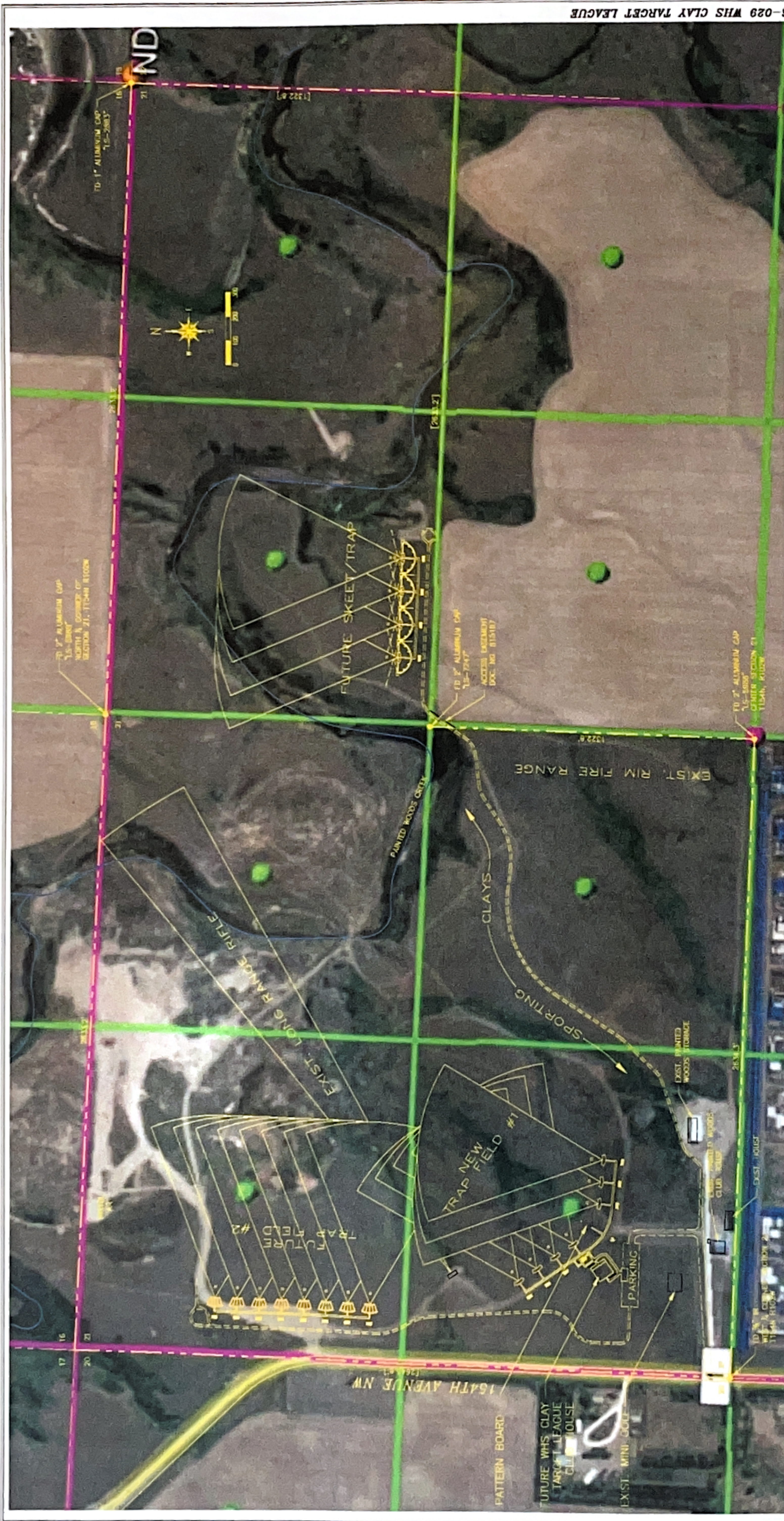
Note 4: All work to be performed on a Unit Rate basis unless approved in writing by MWEC prior to performing the work.

Note 5: All Work Orders under 1 mile shall be on one invoice unless approved otherwise in writing by MWEC.

Note 6: Hydro-Vac charges will only be approved for locating MWEC utilities where easement or lease requires it, or when hydro-vac-ing is requested by MWEC.

Handwritten notes: 220696, 10-11-22, 10 KVA

OH Subtotal:	Material	Estimated Total
\$0.00	\$0.00	\$0.00
UG Subtotal:	\$12,830.00	\$39,384.67
Other Subtotal:	\$0.00	\$0.00
Subtotal:	\$12,830.00	\$39,384.67
OH Subtotal:	\$0.00	\$0.00
Hot Work Factor:	\$0.00	\$0.00
Winter Work Factor:	\$0.00	\$0.00
Labor/Material Subtotal:	\$26,554.67	\$59,384.67
Labor/Material Contingency:	\$1,000.00	\$19,692.34
Special Services (\$1,000 minimum):	\$0.00	\$1,000.00
Easements:	\$0.00	\$0.00
Misc. Materials:	\$384.90	\$384.90
Grand Total:	\$384.90	\$60,461.91



21-06-029 WHS CLAY TARGET LEAGUE

SHEET INDEX

- 1 - TITLE SHEET
- 2 - SITE PLAN TRAP FIELD 1
- 3 - GRADING TRAP FIELD 1
- 3B - NEW CONTOURS
- 4 - GRADING DETAILS
- 5 - GRADING DETAILS
- 6 - PROFILE
- 7 - DETAILS
- 8 - DETAILS
- 8A - TRAP PHASING
- 9 - SITE PLAN TRAP FIELD 2
- 10 - SITE PLAN SHEET FIELD
- 10A - SHEET DETAILS

LEGEND

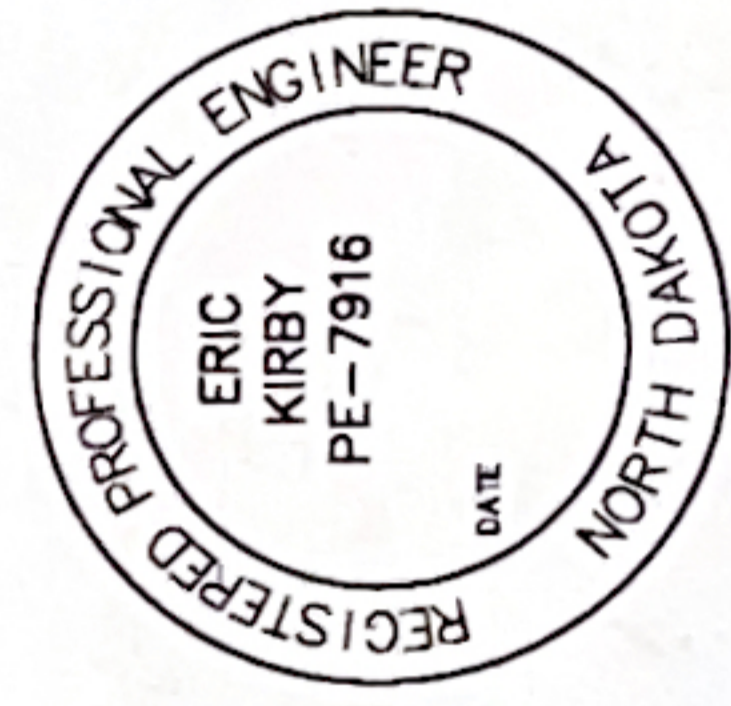
- EXIST. - EXISTING
- FD - FOUND
- IR - IRON ROD
- NEW GRADE
- PROPERTY BOUNDARY
- EXIST. FENCE
- EXIST. WATER
- NEW WATER
- EXIST. POWER
- DM LINES
- EXIST. OVERHEAD POWER
- EXIST. SWALE
- NEW SWALE
- EXIST. CONTOUR
- NEW CONTOUR

LEAGUE CONTACT

COYOTE CLAY TARGET LEAGUE
 3021 13TH AVENUE E
 WILLISTON, ND 58801
 PENNY SLAUGE 701-770-0606

FACILITY CONTACT

PAINTED WOODS SPORTING RANGE
 5000 14TH AVENUE NW
 WILLISTON, ND 58801
 JERRY@SOUTHWOODSPORTS.COM



TITLE



ATTENTION: CALL BEFORE YOU DIG - ONE CALL LOCATES - REQUIRES 2 WORKING DAYS NOTICE PRIOR TO EXCAVATION. (CALL THE TELEPHONE NUMBER FOR THE NORTH DAKOTA ONE CALL 8 811 (1.800.745.3665) AND WEB IS WWW.80811.COM)

Traps & Targets R Us

Bill Prindle

2611 Aqua Marine Dr

Idaho Falls, ID 83401

208-390-2577

prindlebill@gmail.com

INVOICE

INVOICE # 1955

DATE 02/07/2023

BILL TO

Painted Woods Sporting

2502 4th Ave. West

Williston, ND 58801

ACTIVITY	QTY	AMOUNT
Item Mec 500E Skeet Set	4	29,053.00
Item Shipping	1	2,097.69

We accept Mastercard and Visa with an additional 3.75% credit card fee. Payment is due upon receipt.

SUBTOTAL	31,150.69
TAX	0.00
TOTAL	31,150.69
BALANCE DUE	\$31,150.69



P.O. Box 119 • Wenatchee, WA 98807

Phone: (509)663-3464 • Fax: (509)662-4465

Painted Woods Sporting Range
5050 145th Ave. NW
Williston, ND 58801

Painted Woods Sporting Range Grading for New Clay Target Range

Selland Construction, Inc. hereby proposes to perform the following work

<u>Item:</u>	<u>Description</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Amount</u>
1	Grading New Clay Target Range	1	ls	\$ 7,500.00	\$ 7,500.00
				Total Cost	\$ 7,500.00

Sincerely,
Selland Construction, Inc.

Jason Ekblad
701-570-8778

D3 Concrete LLC
PO Box 7726
Williston, ND 58803
701-609-9363

Summary of services to grade, form, place, and finish (Qty) 4 concrete skeet/trap combo fields, thrower houses and shooting stations along with all connecting sidewalks – Coyote Clay Target League

Quote includes concrete material and labor required to complete the job, as per supplied site information and spec drawings. Additional fill material not included in quote may be required if existing base material is insufficient, and will be discussed with client before proceeding.

Qty (4) trap houses, ~8'x8' footprint, 8" thickened integral footing, 3 sidewalls ~6'-6" height, 1 sidewall ~4' height, and concrete floor (each bunker). Moisture barrier applied prior to backfill.

Qty (4) trap shooting stations, ~260' lineal per station, 3'-4' width per drawing specs. Yardage markers 16-19 poured as single piece. Qty (4) skeet shooting stations and connecting walkway, ~350' lineal per station. Yardage markers and station numbers to be determined (materials and installation process). Upon agreement of said material and installation process, this part of the quote may have to be revisited. Concrete benchmark installation included in revised quote.

Qty (1) sidewalk connecting all (4) stations, ~465' lineal, 6' width per drawing specs. If total length notably exceeds original site plan specs, this section of the quote may also have to be revisited.

Qty (5) high/low skeet thrower houses, ~12'x12' footprint, 8" thickened integral footing, installation of steel reinforcement and anchor bolts included.

Transport / Gradework / Excavation / Compaction

Form materials and labor

Reinforcing steel materials and labor

Placement and finishing of concrete material and labor

Cleanup and finish grade/backfill

Admixes and procedures to be applied for cold weather concrete placement, to include heated water and concrete accelerant, with application of insulated concrete blankets upon completion to provide thermal protection during critical portion of curing process are not included in this quote. Winter excavation and ground thaw procedures and processes are not included in this quote. Cold weather operations, cost, and viability will need to be assessed as proposed start date(s) approach.

Estimated Field Total

\$185,268.00

Thank you for the opportunity to quote your project, and we look forward to an exciting and productive 2023!



On Point Electrical Services, LLC
 4983 Hatzenbiler Lane
 Williston, ND 58801
 701-570-8433

Estimate

Date	Estimate #
5/22/2023	206

Name / Address
Coyote Clay Target League 3021 13th Ave E Williston, ND 58801

Approved by:

Description	Qty	Rate	Total
<p>PHASE II</p> <ul style="list-style-type: none"> - Set and wire 220/ 120 volt 200 amp panel - Install 4 30 ft wooded poles with 3 stadium type lights for each of the 4 fields - Power for 20 Amp outlet along with switched LED light in each Hi / Low house - Power for 20 Amp outlet along with switched LED light in each Trap house - Power for 20 Amp outlet for sump pump located in the trap houses - Install 1 " conduit from trap houses and hi / low houses to operator area <p>This estimate covers all, equipment, materials labor, and ND electrical certificate needed to complete this job.</p> <p>Due to current market supply and demands, there maybe extended lead times of current materials along with a cost increase.</p> <p>Electrical</p>	1	105,000.00	105,000.00
Prices are good for 7 days based on current material supply and demand		Total	\$105,000.00

To Whom it May Concern

My name is David Montgomery, and I am writing this letter of recommendation for the grant application of the Williston Clay Target League.

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The program has a way to go in their fund raising to achieve their reality of a new clubhouse and equipment needs to continue to offer this program to even more individuals interested in this program.

As a Williams County commissioner, I have seen how important this program is to our area with the significant number of participants in the program and giving these youth another great option to participate in, of which Williams County has also provided grant dollars for them to achieve their goals.

I ask you to please consider and approve their grant request from you so they can continue to grow their program and offer more individuals to be able to participate in their program.

Thank You for your consideration.

David Montgomery

Williston ND



990 Lone Oak Drive • Suite 120 • Eagan, MN 55121 • usaclaytarget.com • FEIN: 27-3226324

May 20, 2023

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The League has been one of the fastest-growing school-sponsored sports in the country for the past decade. Nationwide last year, the League hosted 44,900 student athletes representing over 1,500 teams that were coached by more than 8,000 team staff members. The League started in Minnesota in 2008 with three teams and 30 student athletes.

In North Dakota, nearly 90 teams and 2,800 student athletes participate on clay target teams annually. For the spring high school league, clay target participation would rank seventh highest out of 23 high school sports. The Coyote Clay Target League that represents the Williston area, had more than 370 student athletes participated in multi-week seasons last year making them the largest participating team in the entire USA Clay Target League. Williston High School joined the League in 2018 with just 30 student athletes.

Each year, thousands of students that are on clay target team waiting lists or rosters are not allowed to participate in the League primarily due to the lack of capacity at shooting ranges. Unlike most other high school outdoor sports that have playing fields at virtually every high school, clay target shooting sports requires the use of a regulation shooting range providing a safe, consistent, and competitive venue to conduct all League-sponsored events.

North Dakota Game and Fish has been a major supporter of the League and many teams in its home state. Through annual shooting range development grants, new clay target team grants, and sponsor support for the League, the State of North Dakota continues to invest in its R3 (Recruitment, Retention, and Reactivation) strategic planning for hunting, fishing, outdoor recreation, and recreational shooting.

NDGF received approximately \$18.5 million from the Pittman-Robertson Act in 2022. These funds are primarily used for wildlife conservation and management, shooting range enhancements, hunter education, and shooting sport participation recruitment efforts. This revenue is generated by the an 11% excise tax on firearms and ammunition. Of the excise taxes that are collected, nearly 80% of the revenue is generated by recreational shooting - not hunting.

The USA Clay Target League fully supports the development of the Coyote Clay Target League's efforts to build additional clay target fields at the Painted Woods Shooting Range in Williston. Upon completion, these new fields will create 1) safe and professional venue for attracting more clay target participants, 2) host large local, regional, and statewide clay target events, 3) positive economic impacts to the Williston area and the State of North Dakota, 4) greatly assist North Dakota Game and Fish's wildlife conservation efforts and its R3 strategic plan, and 5) help create the next generation of outdoor enthusiasts for the great State of North Dakota.

Thank you very much for your consideration and support of the Coyote Clay Target League Range Build Project.

A handwritten signature in black ink that reads 'John Nelson'. The signature is written in a cursive style with a prominent 'J' and 'N'.

John Nelson
President



May 22, 2023

To Whom it May Concern,

I am writing this letter in support of the OHF grant that the Coyote Clay Target League has applied for. I have worked with Penny Slagle for years on various programs. She is a long-term volunteer for the department and her services has been exemplary. Penny has been very active in the ND High School Clay Target range and that is the largest and fastest grown club in our state. A few years ago, the City of Williston closed down the trap shooting range where they practiced. Penny and a group of volunteers have been in the process of building a new trap shooting facility. These facilities are not cheap and any assistance they can be given will benefit the youth in the Williston area. This is a perfect opportunity to offer these kids a lifelong skill that gets them in the outdoors.

Sincerely,

A handwritten signature in black ink, appearing to read "Marty Egeland". The signature is fluid and cursive, with the first name "Marty" being more prominent.

Marty Egeland

Governor
Doug Burgum

Director
Jeb Williams

Deputy Director
Scott A. Peterson

To Whom It May Concern,

My name is Brian Burrows and I am on the USA shooting team. I represented the United States at the Tokyo 2020 Olympic Games in International Trap. My teammate, Maddie Bernau, and I brought home the bronze medal in the Mixed Trap event. In addition to competing, I enjoy coaching shotgun sports. I have coached over 500 athletes and held camps for multiple scholastic teams. I have had the pleasure of hosting camps for the Williston Clay Target team in 2021 and 2022.

The growth of this program, led by Penny Slagle, is incredible. Since it's inception in 2018, the team has grown to become the largest youth league in the nation. With the exponential growth of the program, there is a need to build 4 skeet and trap combo field at the community gun club.

The Williston Clay Target league is seeking funds for this range project from the Outdoor Heritage Fund Grant. With this addition they will have all 4 shotgun disciplines: Skeet, Trap, 5-stand, and Sporting Clays. It will greatly benefit the team and allow them to continue to grow and produce great shooting athletes that can excel in all disciplines. Not only will it benefit the team, but also the whole Williston community. This range project will allow the Clay Target League to host community, state, and national tournaments.

I look forward to continuing to support the Williston Clay Target League and I know they will continue to become a positive and powerful force in the scholastic shooting world. Thank you for considering the Williston Clay Target League range project as the beneficiary of the Outdoor Heritage Fund Grant.

Please feel free to contact me if you need any further information about the Clay Target League and the positive impact that this range project will have on the athletes and the community.

Sincerely,

Brian Burrows, OLY
760-622-6948

Outdoor Heritage Fund
Grant Round 22
Application Summary Page
GR 22-4

Project Title: Turkeys Enhancing Water Quality and Wildlife Habitat
Applicant: National Wild Turkey Federation
Primary Contact: Clayton Lenk
Total Project Costs: \$356,913
OHF Request: \$200,000

Match Amount	Funding Source	Match Type
\$44,000	Project Partners	Cash & In-Kind
\$53,333	Project Partners	Cash & In-Kind
\$30,000	NWTF District Biologist staff time and travel	In-Kind
\$29,580	NWTF Indirect	Indirect
\$156,913.00	Total	

Percentage of Matching Funds: 44%

Project Duration: Four years

Major Directive: C

Additional Directive: A & B

Summary of Project: Project involves enhancement of 1,500 acres of habitat by providing financial assistance for both public and private land enhancement at no less than 3:1 match.

Technical Committee Comments:

- Using NRCS practices to enhance wildlife habit and water quality, not sure who conservation partners are
- Could be duplicating objectives of existing 319 projects and/or NDG&F CREP project
- Great project, but would rather see individual chapters apply

Technical questions from the OHF Advisory Board members:

National Wild Turkey Federation has not submitted any unsuccessful applications.

Funded Projects					
Contract	Total Project Cost	Title	Award Amount	Amount Expended	Project Timeframe
11-127	\$60,000	NWTF Northern Plains Riparian Restoration Initiative	\$45,000	\$27,042.25	2018-2021
Totals	\$60,000.00		\$45,000.00	\$27,042.25	

OHF Advisory Board Recommendation

Contingencies: **None**

Conflicts of Interest: **None**

Funding Vote: **8-1**

Funding Amount Vote: **\$200,000**

Outdoor Heritage Fund Grant Application



Instructions

After completing the form, applications and supporting documentation may be submitted by e-mail to ndicgrants@nd.gov. It is preferred that only electronic copies are submitted.

You are not limited to the spacing provided, except in those instances where there is a limit on the number of words. If you need additional space, please indicate that on the application form, answer the question on a separate page, and include with your submission.

The application and all attachments must be received by the application deadline. You may submit your application at any time prior to the application deadline. **Applicants are strongly encouraged to submit applications prior to the deadline for staff review in order ensure that proposals will be complete when submitted on deadline date.** Incomplete applications may not be considered for funding.

Please review the back of this form to determine project eligibility, definitions, budget criteria, and statutory requirements.

Project Name: Turkeys enhancing water quality and wildlife habitat

Name of Organization: National Wild Turkey Federation

Federal Tax ID#: 57-0564993

Contact Person/Title: Clayton Lenk – NWTF District Biologist

Address: 770 Augusta Rd.

City: Edgefield

State: SC

Zip Code: 29824

E-mail Address: clenk@nwtf.net

Web Site Address (If applicable): <https://www.nwtf.org/>

Phone: 218-821-0079

List names of co-applicants if this is a joint proposal

Please contact the following in regards to agreements and finances:

Tara Moon – Director of Conservation Administration, Grants and Planning, tmooon@nwtf.net, O:803-637-7507, C:706-840-4219

MAJOR Directive:

Choose only one response

- Directive A.** Providing access to private and public lands for sportsmen, including projects that create fish and wildlife habitat and provide access for sportsmen;
- Directive B.** Improving, maintaining and restoring water quality, soil conditions, plant diversity, animal systems and by supporting other practices of stewardship to enhance farming and ranching;
- Directive C.** Developing, enhancing, conserving and restoring wildlife and fish habitat on private and public lands; and
- Directive D.** Conserving natural areas and creating other areas for recreation through the establishment and development of parks and other recreation areas.

Additional Directive:

Choose all that apply

- Directive A.**
- Directive B.**
- Directive C.**
- Directive D.**

Type of organization:

- State Agency
- Political Subdivision
- Tribal Entity
- Tax-exempt, nonprofit corporation.

Abstract/Executive Summary.

Summarize the project, including its objectives, expected results, duration, total project costs and participants. (no more than 500 words)

In North Dakota, the wild turkey is an often overlooked and undervalued species that doesn't get the same headline attention as other big game. However, the wild turkey is one of North Dakota's greatest conservation successes and has huntable populations as a result. In fact, North Dakota has one of the highest turkey hunter success rates in the country of roughly 45-50%. This is all due to the habitat work and conservation efforts that takes place on public land and even more so on private lands in the state. In recent years, population declines are being recorded throughout a lot of the southern and midwestern states. Recent population estimates in ND show a stable or slightly increasing population. With recent droughts and long winters, quality habitat is the main factor that will help these birds make it through repeated adverse conditions and keep the healthy population stable. The wild turkey has an extensive usage of habitat types that allow countless other wildlife

species to benefit from managing for this magnificent bird. So much so that the wild turkey is often considered an icon of diverse and well managed habitat.

Throughout the Great Plains of the United States, it is estimated that less than 1.5% of the overall landscape is of riparian nature, yet over 70% of wildlife species use these riparian areas in at least some capacity during their life cycle. Riparian habitat as well as the adjacent upland areas are critical to the survival of fish and wildlife species in the Plains but also have significant water conservation benefits to all things downstream. People are also a benefactor of quality habitat in these areas whether it be from recreational opportunities, more efficient livestock practices, cleaner drinking water, among others.

The primary objectives of this grant will be to conserve and/or enhance roughly 1,500-acres of fish and wildlife habitat across North Dakota. The habitat types we would be helping conserve/enhance would include riparian areas and upland areas suitable to support wild turkeys or that have a clear water conservation impact. Over the course of four-years, NWTF will work with our membership base and local chapters to find potential projects and then collaborate with our numerous conservation partners to help leverage dollars and implement projects on the ground. The NWTF has internal focal landscapes that largely encompass the North Dakota State Wildlife Action Plan. These areas would be given priority for project funding and consideration.

The National Wild Turkey Federation’s (NWTF) mission is the conservation of the wild turkey and the preservation of our hunting heritage. With our mission in mind, we approach conservation through our “four shared values” which are healthy forests and wildlife habitat, clean water, robust recreational opportunities, and resilient communities. By positively impacting riparian and upland habitats in North Dakota, we would implement all four of our shared values across the state.

Project Duration: Four-years

Indicate the intended schedule for drawing down OHF funds.

Amount of Grant request: \$200,000

Total Project Costs: \$356,913

Note: in-kind and indirect costs can be used for matching funds.

Amount of Matching Funds: \$156,913

A minimum of 25% Match Funding is required. Indicate if the matching funds will be in-kind, indirect or cash. Please provide verification that these matching funds are available for your project. Note that effective as of July 1, 2015 no State General Fund dollars can be used for a match unless funding was legislatively appropriated for that purpose.

Amount of Match	Funding Source	Type of Match (Cash, In-kind or Indirect)
\$44,000 for contracted services	Project Partners	Cash and In-kind
\$53,333 for supplies	Project Partners	Cash and In-Kind

\$30,000	NWTF District Biologist staff time and travel	In-Kind
\$29,580	NWTF Indirect	Indirect
\$		
\$		

Certifications

- ✓ I certify that this application has been made with the support of the governing body and chief executive of my organization.
- ✓ I certify that if awarded grant funding none of the funding will be used for any of the exemptions noted in the back of this application.

Narrative

Organization Information – Briefly summarize your organization’s history, mission, current programs and activities.

Include an overview of your organizational structure, including board, staff and volunteer involvement. (no more than 300 words)

The mission of the National Wild Turkey Federation (NWTF) is that we are dedicated to the conservation of the wild turkey and the preservation of our hunting heritage. The NWTF has over 230,000 members with over 1,200 local chapters representing all 50 states. Founded in 1973, the NWTF has invested over half a billion dollars into wildlife conservation and has conserved or enhanced over 22 million acres of critical wildlife habitat. The organization continues to drive wildlife conservation, forest resiliency and robust recreational opportunities throughout the U.S. by working across boundaries on a landscape scale. The organization is governed by an 18-member National board of directors. The NWTF has recently started a Co-CEO structure where one CEO leads the marketing and fundraising side of the organization while the other focuses on conservation and business support. Volunteers work directly with field staff on projects and events. NWTF programs include our Hunting Heritage Super Fund which is used to deliver mission related objectives at the state level. This includes outreach and education programs such as JAKES, Women in the Outdoors, and Wheelin’ sportsmen and can also be applied to research projects, used to complete conservation work, among many other mission centric activities. The NWTF has also created landscape-level initiatives like the Waterways for Wildlife (W4W) Initiative which has provided \$392,000 over the last two-years to help conserve over 10,484 acres and 116.8 stream miles.

Purpose of Grant – Describe the proposed project identifying how the project will meet the specific directive(s) of the Outdoor Heritage Fund Program

Identify project goals, strategies and benefits and your timetable for implementation. Include information about the need for the project and whether there is urgency for funding. Indicate if this is a new project or if it is replacing funding that is no longer available to your organization. Identify any innovative features or processes of your project. Note: if your proposal provides funding to an individual, the names of the recipients must be reported to the Industrial Commission/Outdoor Heritage Fund. These names will be disclosed upon request.

For tree/shrub/grass plantings: provide a planting plan describing the site design, planting methods, number of trees/shrubs by species and stock size, grass species and future maintenance. A statement certifying that the applicant will adhere to USDA-NRCS tree/shrub/grass planting specifications along with the name of the governmental entity designing the planting may be substituted for a planting plan.

For projects including Section 319 funding: provide in detail the specific best management practices that will be implemented and the specific projects for which you are seeking funding.

For projects including fencing: A minimum cost share of 40% by the recipient is preferred. Include detailed information on the type of fencing to be installed, whether funding is requested for boundary fencing, new or replacement of existing fencing, and/or cross fencing.

This grant will overlap with NWTF's Waterways for Wildlife (W4W) Initiative which is an internal program created and designed by staff to advance conservation, restoration, and enhancement of riparian areas throughout the Great Plains. This new initiative was built on the success of the Northern Plains Riparian Restoration Initiative (NPRRI) which helped conserve/enhance over 83,000 acres, over 14,000 of which in ND, since 2006. The program uses established networks of conservation professionals and volunteers to help identify projects on both private and public lands. The program works with public and private land managers to provide technical assistance in identifying, designing, and implement the on the ground projects. The W4W program provides financial assistance through an application process at no less than 3:1 (75:25) match from partners and often exceeds 14:1. The North Dakota Game and Fish have also identified the importance of conserving and enhancing riparian habitat for fisheries by the creation of their "Save Our Lakes" program. This program helped private landowners in priority watersheds with conservation practices and limited agricultural practices to increase water quality in downstream fisheries. The program was ran by the fisheries department but has since been repurposed under the private lands section of the department.

This grant could potentially fund some W4W projects that occur in ND but it will also encompass areas that are not directly in riparian areas that wouldn't qualify for W4W but still provide wildlife and or water quality benefits in upland habitats.

Goals – The overarching goal of this grant is to expand on our previous work conserving/enhancing riparian areas across the state while also conserving/enhancing upland areas that have a habitat or water quality benefit. Doing so would help reverse the downward trend of riparian and upland habitat quality and quantity across the state. Through the efforts implemented by this grant there will be more native habitat on the landscape, more diverse habitat, less erosion, and increased water quality in North Dakota. We are currently planning on conserving/enhancing 1,000 acres of riparian habitat and 500 acres of upland habitat. Riparian habitat would be considered everything from the water to the edges of the adjacent uplands where there are clear vegetative breaks. Upland habitat would include meadows, grasslands, forests, or savanna type habitats. The practices that will help us achieve those goals will vary based on location and by landowner preference. Those practices may include, but not

limited to; Tree and shrub establishment (612), Forest Stand Improvement (666), Conservation Cover (327), Brush Management (314), Fence (382), Riparian Herbaceous Cover (390), Riparian Forest Buffer (391), Stream and Shoreline Protection (580), Livestock Pipeline (516), Watering Facility (614), among others.

Strategies – Interest in voluntary conservation of these proposed habitat improvement projects are projected to be very strong by ND landowners. Through existing networks of conservation professionals and volunteers, projects would be identified and reviewed for compatibility for receiving these funds. Potential projects would be screened by the NWTF District Biologist and would be reviewed based on criteria such as project merit, water quality benefits, benefits to wildlife, longevity of project work, size of project, and if the project falls within our internal focal landscapes which largely overlap focus areas identified within the State Wildlife Action Plan. NWTF will prioritize projects that have the greatest impact on turkeys. NWTF staff will also coordinate with partners, landowners, and volunteers to meet and often exceed grant match requirements. The NWTF chapter system in North Dakota consists of 17 active chapters representing over 1,400 members.

Benefits – There is no question that projects accomplished by NWTF have a multitude of benefits no matter where they are in the country. These ultimately tie to our four shared values of water quality, forest health and wildlife habitat, recreational opportunities, and resilient communities. The projects that NWTF is seeking to implement using these funds will aim to hit at least two of these values and more where applicable.

Some of the projects accomplished through this funding would likely be highlighted in NWTF's nationally distributed magazine "Turkey Call" which is sent out bi-monthly to over 230,000 members across the United States and several other countries. Project articles are also written specifically for our website which would be searchable by state. Funding sources, partners, and project work details all get highlighted through both of these avenues which would give OHF and ND good representation to a nationwide audience.

Timelines – Historically through the NPRRI program, formal requests for proposals were sent out in the March/April timeframe of each year through riparian conservation networks with applications due in June. Through this round of grant funding, formal requests would still be made annually but would likely occur in the fall/winter months so project work could begin first thing in the spring for shovel ready projects. This would allow project managers to work on applications and get project details during what are typically slow months as far as on the ground implementation goes. Since projects don't always fall into designated timelines, eligible projects could still come in throughout the year and would be reviewed on an individual basis after the initial round of funding has taken place and if budgets allow. NWTF will remain in close contact with the project manager throughout implementation to ensure timelines are in order and that work is going as planned. Upon project completion, either NWTF staff or a trusted conservation representative would evaluate the completed project to ensure it meets all project specifications. Successful applicants are given one year to completed project work but may be granted an extension if extenuating circumstances exist. The project leaders and land managers would be responsible for any future maintenance or repair of the site should it be needed.

Need for project and funding urgency – Downward trends in both riparian and upland habitat across the state call for action. Riparian areas specifically are often small and occur with major watercourses or flashy waterways that are especially vulnerable to negative impacts. These habitat areas across the state and across the plains states for that matter have been heavily declined by human-directed activities such as infrastructure and dam construction, development/sprawl, incompatible agricultural

practices, etc.. The decline of these habitats has been happening at an alarming rate and the impact on water quality and wildlife has not yet been quantified.

New project or replacing expiring funding – These funds would in-part replace the OHF grant that NWTF received in 2018 to do riparian centric work but will build off of that success to also include upland habitats that have a wildlife or water conservation tie to it. Aside from OHF funds, the NWTF only has one other source of funding in ND and those are our member generated “Super Funds”. These funds are used for a variety of things and not just conservation projects and are determined by the NWTF State Chapters Board of Directors. Thus, limiting the amount of funds that can be applied towards on the ground conservation.

Is this project part of a Comprehensive Conservation Plan? Yes No

If yes, provide a copy with the application. ND State Wildlife Action Plan

Note: Projects involving buildings and infrastructure will only be considered if part of a Comprehensive Conservation Plan. Please refer to the “Definitions” section at the back of the form for more details.

Management of Project – Provide a description of how you will manage and oversee the project to ensure it is carried out on schedule and in a manner that best ensures its objectives will be met.

Include a brief background and work experience for those managing the project.

This grants administration and program management will be overseen by NWTF staff. Individual projects receiving funds from this grant are overseen and administered through their project leaders in coordination with NWTF. Project leaders will be state and/or federal agency staff responsible for those public lands, or in the case of private lands projects, staff responsible for working with private landowners that are enrolled in recognized long-term conservation programs. Although a request for project proposals will go out annually on a set timeline, individual project timelines may vary. However, projects will be given one-year to complete project work unless an extension is granted for extenuating circumstances. NWTF staff will maintain communication with individual project leaders throughout the project phases to monitor implementation timelines and get status updates. Individual project leaders background info will vary depending on agency and location of projects that will come in so that info is not available at this time but will be disclosed as requested when projects are determined. NWTF staff currently overseeing conservation implementation in ND, District Biologist – Clayton Lenk, has been involved in wildlife and habitat management on both public and private lands since 2014 through local and state government and also with a non-government conservation organization.

Evaluation – Describe your plan to document progress and results.

Please be specific on the methods you will utilize to measure success. Note that regular reporting, final evaluation and expenditure reports will be required for every grant awarded.

Project work will likely focus on improving grazing infrastructure and improving grazing management. Additional project work may include tree and shrub establishment, brush management, timber stand improvement, conservation cover, and other wildlife and water conservation related best management practices. NRCS practice codes will be used to identify practices that are implemented and practice standards will be referenced during the technical portion of the project proposal review. Projects delivered successfully will result in improved or created fish and wildlife habitat, improved water quality, reduced soil erosion, and oftentimes will enhance productivity of the lands owned and managed by farmers or ranchers. BMP implementation and follow up monitoring will be beneficial in

determining overall project success. Technical assistance is provided to project managers as needed throughout the project. Project completion review and reports will be completed for each individual project. Before and after photos and project shapefiles for mapping will also be required of individual projects. Post-project monitoring and follow up maintenance will be the responsibility of the individual project leader and the project team which may include private landowners.

Financial Information

Project Budget – Use the table below to provide an itemized list of project expenses and describe the matching funds being utilized for this project.

Indicate if the matching funds are in the form of cash, indirect costs or in-kind services. The budget should identify all other committed funding sources and the amount of funding from each source. **A minimum of 25% match funding is required.** An application will be scored higher the greater the amount of match funding provided. (See Scoring Form.)

Certain values have been identified for in-kind services as detailed under “Budget Information” at the back of this form. Refer to that section and utilize these values in identifying your matching funds. **NOTE: No indirect costs will be funded. Supporting documentation for project expenses, including bids, must be included or application will be considered incomplete.**

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
Contracted Services	\$120,000	\$	\$	\$	\$40,000	\$160,000
Other Services (in-kind)	\$	\$	\$	\$	\$4,000	\$4,000
Supplies	\$80,000	\$	\$	\$	\$53,333	\$133,333
Operating Costs	\$	\$	\$30,000	\$29,580	\$	\$59,580
	\$	\$	\$	\$	\$	\$
	\$	\$	\$	\$	\$	\$
Total Costs	\$200,000	\$	\$30,000	\$29,580	\$97,333	\$356,913

Note: Costs for seeding, fencing, pipelines, wells, and cover crops cannot exceed NRCS Field Office Tech Guide without justification. Projects involving perimeter fencing must follow NRCS eligibility standards.

Budget Narrative – Use the space below to provide additional detail regarding project expenses.

All costs will not exceed USDA – Natural Resources Conservation Service EQIP cost-share rates.

Contracted Services – this category is for work that will not be completed by partners. Not to exceed (NTE) 75% of total project labor costs paid by the grant. This category will encompass costs to implement the “on the ground work” including things like re-sloping of banks, installing pipelines, drilling of wells, fencing not installed by the landowner, tree planting, etc.. This category will typically be paid directly to the contractor for work provided.

Other Services – this will include in-kind labor/equipment usage of partners. This portion will apply to the 25% project match provided by partners. This amount is an estimate and may be exceeded.

Supplies – NTE 60% of total supplies costs paid by the grant. This will include things such as water tanks, pipeline, well pumps, fence, posts, seed, trees, etc.. Cash or in-kind provided by partners for materials and supplies will cover remaining 40%.

Operating Costs – Waived indirect of federally approved 14.79% on grant amount. NWTF District Biologist staff time and travel budgeted up to \$10,000/year will be in-kind

Projects will not have identified costs until they start coming in and the planning process starts. Landowner interest will ultimately dictate how much funding is spent on each practice and habitat type.

Sustainability – Indicate how the project will be funded or sustained in future years.

Include information on the sustainability of this project after OHF funds have been expended and whether the sustainability will be in the form of ongoing management or additional funding from a different source.

Projects will be designed and planned for long-term success. However, additional management or follow up management/maintenance may be necessary in some cases. Projects such as invasive species removal, watering, or follow up herbicide or controlled burn treatment of established native are a few examples. All future management or maintenance on the site will be the responsibility, both technically and financially, of the land management agency and/or the private landowner that receives the project funding.

Partial Funding – Indicate how the project will be affected if less funding is available than that requested.

If partial funding is received, project work and program priorities would remain the same but would reduce the acreage impact during those funding years as a result.

Partnership Recognition - If you are a successful recipient of Outdoor Heritage Fund dollars, how would you recognize the Outdoor Heritage Fund partnership? * *There must be signage at the location of the project acknowledging OHF funding when appropriate.*

Project work completed by NWTF has signage erected and would note OHF as a contributing partner. OHF would also receive recognition through NWTF media outlets when highlighting specific partnerships or projects. This is done via our website, social media platforms, and our nationally distributed "Turkey Call" magazine.

Awarding of Grants - Review the appropriate sample contract for your organization on the website at <http://www.nd.gov/ndic/outdoor-infopage.htm>.

Can you meet all the provisions of the sample contract? Yes No

If there are provisions in that contract that your organization is unable to meet, please indicate below what those provisions would be:

ABOUT OHF:

The purpose of the North Dakota Outdoor Heritage Fund is to provide funding to state agencies, tribal governments, political subdivisions, and nonprofit organizations, with higher priority given to projects that enhance **conservation** practices in this state by:

Directive A. Providing access to private and public lands for sportsmen, including projects that create fish and wildlife habitat and provide access for sportsmen;

Directive B. Improving, maintaining and restoring water quality, soil conditions, plant diversity, animal systems and by supporting other practices of stewardship to enhance farming and ranching;

Directive C. Developing, enhancing, conserving and restoring wildlife and fish habitat on private and public lands; and

Directive D. Conserving natural areas and creating other areas for recreation through the establishment and development of parks and other recreation areas.

EXEMPTIONS

Outdoor Heritage Fund grants may not be used to finance the following:

- Litigation;
- Lobbying activities;
- Any activity that would interfere, disrupt, or prevent activities associated with surface coal mining operations; sand, gravel, or scoria extraction activities; oil and gas operations; or other energy facility or infrastructure development;
- The acquisition of land or to encumber any land for a term longer than twenty years; or
- Projects outside this state or projects that are beyond the scope of defined activities that fulfill the purposes of Chapter 54-17.8 of the North Dakota Century Code.

OHF funds may not be used, except after a finding of exceptional circumstances by the Industrial Commission, to finance:

- A completed project or project commenced before the grant application is submitted;
- A feasibility or research study;
- Maintenance costs;
- A paving project for a road or parking lot;
- A swimming pool or aquatic park;
- Personal property that is not affixed to the land;
- Playground equipment, except that grant funds may be provided for up to 25% of the cost of the equipment not exceeding \$10,000 per project and all playground equipment grants may not exceed 5% of the total grants per year (see Definitions/Clarifications for how this will be calculated);
- Staffing or outside consultants except for costs for staffing or an outside consultant to design and implement an approved project based on the documented need of the applicant and the expenditures may not exceed 5% of the grant to a grantee if the grant exceeds \$250,000 and expenditures may not exceed 10% of the grant to a grantee if the grant is \$250,000 or less (see Definitions/Clarifications for how this will be calculated);
- A building except for a building that is included as part of a comprehensive conservation plan for a new or expanded recreational project (see Definitions/Clarifications for

definition of comprehensive conservation plan and new or expanded recreational project); or

- A project in which the applicant is not directly involved in the execution and completion of the project.

The goal of the Industrial Commission is that at a minimum 15% of the funding received for a biennium will be given priority for recreation projects that meet Directive D.

The following projects are not eligible for funding, unless there is a finding of exceptional circumstances by the Industrial Commission include:

- Construction or refurbishment of indoor/outdoor ice rinks,
- Construction or refurbishment of indoor/outdoor athletic courts and sports fields,
- Other substantially similar facilities.
- Infrastructure that is not part of a comprehensive conservation plan.
- Projects not meeting a minimum funding request of \$2,500.

Budget Information

In-kind services used to match the request for Outdoor Heritage Fund dollars shall be valued as follows:

- Labor costs \$15.00 an hour
- Land costs Average rent costs for the county as shown in the most recent publication of the USDA, National Agricultural Statistics Services, North Dakota Field Office
- Permanent Equipment Any equipment purchased must be listed separately with documentation showing actual cost. (For example: playground equipment)
- Equipment usage Actual documentation
- Seed & Seedlings Actual documentation
- Transportation Mileage at federal rate
- Supplies & materials Actual documentation

More categories will be added as we better understand the types of applications that will be submitted. We will use as our basis for these standards other State and Federal programs that have established rates. For example, the North Dakota Nonpoint Source Pollution Management Program has established rates. If your project includes work that has an established rate under another State Program, please use those rates and note your source.

Definitions/Clarifications:

Building - Defined as "A structure with a roof either with walls or without walls and is attached to the ground in a permanent nature."

Comprehensive Conservation Plan - Defined as "A detailed plan that has been formally adopted by the governing board which includes goals and objectives--both short and long term, must show how this building will enhance the overall conservation goals of the project and the protection or preservation of wildlife and fish habitat or natural areas." This does not need to be a complex multi-page document. It could be included as a part of the application or be an attachment.

New and Expanded Recreational Project means that the proposed building cannot be a replacement of a current building. The proposed building must also be related to either a new or expanded recreational project--either an expansion in land or an expansion of an existing building or in the opportunities for recreation at the project site.

Playground equipment calculation - Only the actual costs of the playground equipment (a bid or invoice showing the amount of the equipment costs must be provided) - cannot include freight or installation or surface materials or removal of old equipment, etc.

Staffing/Outside Consultants Costs - If you are requesting OHF funding for staffing or for an outside consultant, you must provide information in your application on the need for OHF funding to cover these costs. For example, if you are an entity that has engineering staff you must explain why you don't have sufficient staff to do the work or if specific expertise is needed or whatever the reason is for your entity to retain an outside consultant. If it is a request for reimbursement for staff time then a written explanation is required in the application of why OHF funding is needed to pay for the costs of that staff member(s)' time. **The budget form must reflect on a separate line item the specific amount that is being requested for staffing and/or the hiring of an outside consultant.** This separate line item will then be used to make the calculation of 5% or 10% as outlined in the law. Note that the calculation will be made on the grant less the costs for the consultant or staff.

Maintenance – Activities that preserve or keep infrastructure in a given existing condition, including repairs. Repair means to restore to sound condition after damage, to renew or refresh; except repairs due to damage caused by Acts of God.

Scoring of Grants

Oral Presentation. Please note that you will be given an opportunity to make a ten-minute Oral Presentation at a meeting of the Outdoor Heritage Fund Advisory Board. These presentations are strongly encouraged.

Open Record. Please note that your application and any attachments will be open records as defined by law and will be posted on the Industrial Commission/Outdoor Heritage Fund website.

All applications will be scored by the Outdoor Heritage Fund Advisory Board after your ten-minute oral presentation. The ranking form that will be used by the Board is available on the website at <http://www.nd.gov/ndic/outdoor-infopage.htm> .

Awarding of Grants

All decisions on requests will be reported to applicants no later than 30 days after Industrial Commission consideration. The Commission can set a limit on duration of an offer on each application or if there isn't a specific date indicated in the application for implementation of the project, then the applicant has until the next Outdoor Heritage Fund Advisory Board regular meeting to sign the contract and get the project underway or the commitment for funding will be terminated and the applicant may resubmit for funding. Applicants whose proposals have been approved will receive a contract outlining the terms and conditions of the grant.

Responsibility of Recipient

The recipient of any grant from the Industrial Commission must use the funds awarded for the specific purpose described in the grant application and in accordance with the contract. The recipient cannot use any of the funds for the purposes stated under Exemptions on the first page of this application.

If you have any questions about the application, the Commission can be reached at 701-328-3722 or outdoorheritage@nd.gov.

Revised: November 4, 2019, April 12, 2023

HABITAT MATTERS



WHAT'S BEEN LOST

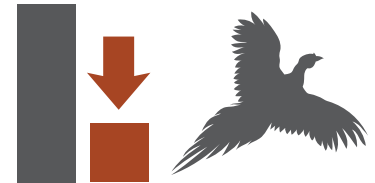


Has been converted.

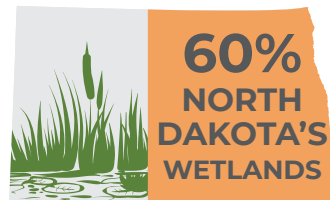
DEER LICENSES
55% decrease
SINCE 2007



Pheasant Harvest
900K DOWN TO 300K



66% decrease
CRP ACRES



Of the nearly 5 million natural wetland acres, 60% have been converted or lost.

WHAT'S AT STAKE



Economic Value

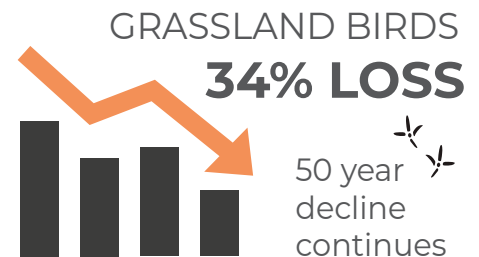
of hunting to North Dakota's economy



WATER QUALITY



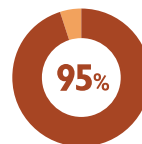
LOSS OF HUNTING HERITAGE



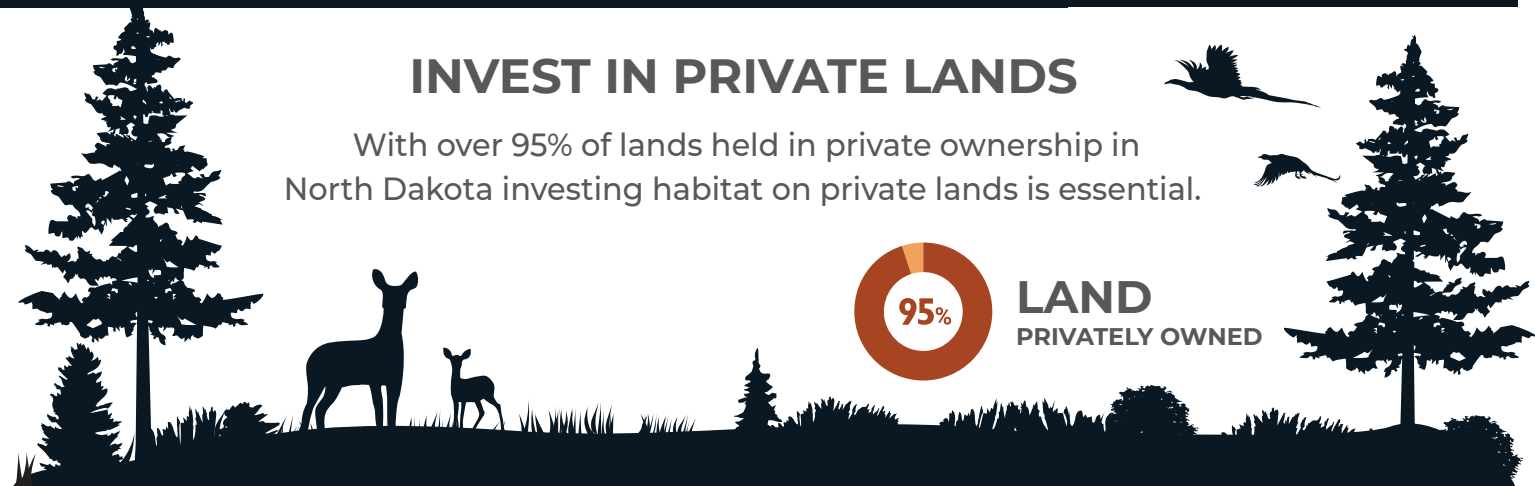
WHAT NEEDS TO BE DONE

INVEST IN PRIVATE LANDS

With over 95% of lands held in private ownership in North Dakota investing habitat on private lands is essential.

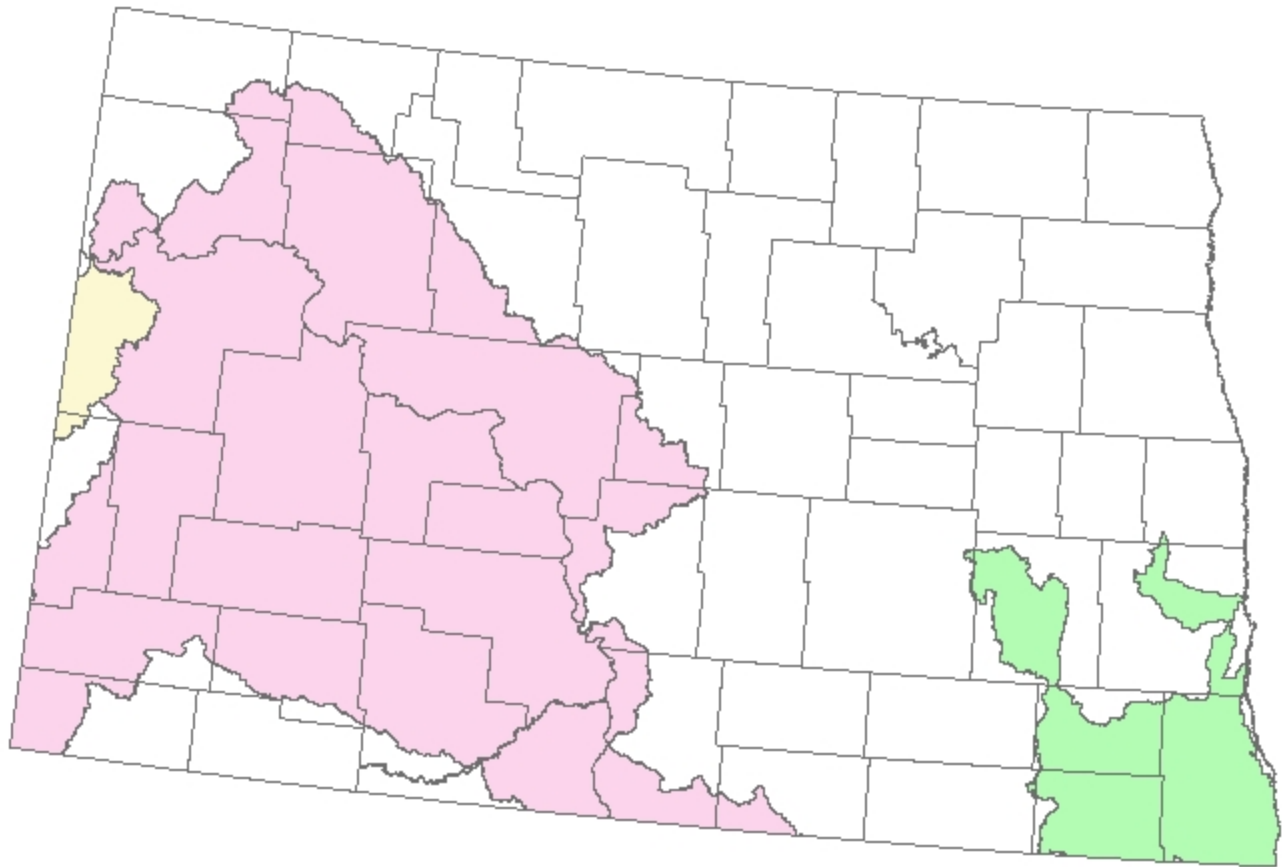


LAND PRIVATELY OWNED


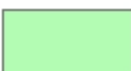
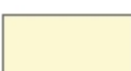




North Dakota



Legend

-  Little Missouri / Western Dakota
-  Red River
-  Yellowstone

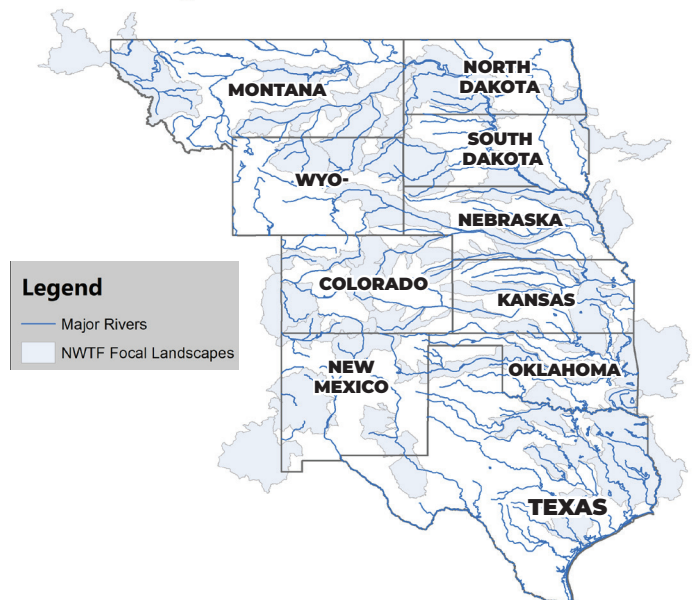
Waterways for Wildlife

An NWTF Conservation Initiative

The Waterways for Wildlife Initiative is a comprehensive, landscape-level effort developed by the National Wild Turkey Federation to address critically urgent conservation needs in riparian ecosystems along rivers and streams in the Great Plains of the United States. This ambitious initiative is designed to continue our efforts addressing declining riparian health in America's Big Six of Wildlife Conservation, specifically America's Great Open Spaces and America's Western Wildlands. In the arid plains of the American West, riparian areas are a natural magnet for wild turkeys and hundreds of other species of wildlife. Many of these important wildlife habitats, however, are in poor condition due to a variety of causes. To address critical conservation issues, the NWTF is partnering with landowners, governmental agencies, and other conservation organizations to restore these vitally important ecosystems across the landscape. Over the next 10 years, the NWTF will improve 75,000 acres of wildlife habitat along 1,500 linear miles of waterways in the Great Plains landscape.

What are "Riparian Areas" and why are they so important?

Commonly referred to as riparian corridors or zones, riparian areas are natural ecosystems located along the banks of rivers, streams, creeks, or any other water network. While riparian areas make up less than 1.5 percent of the entire landscape in the Great Plains, more than 70 percent of all plains wildlife species depend on these ecosystems for water, food, cover, roosting, nesting and as travel corridors. Often described as "ribbons of life," riparian areas support deciduous trees and shrubs in an otherwise arid and open grassland environment. Additionally, these areas provide roosting and nesting for birds, and food, cover and travel ways for a variety of animals. Riparian areas are also important for fish and other aquatic species, as they help control erosion and filter excess nutrients from surface runoff that can adversely affect spawning and rearing areas. They also serve to control flooding, improve water quality, provide for community water supply demands and recharge underground aquifers. These functions are vitally important to the people who live on the landscape, for production agriculture, the support of local economies, jobs, hunting, fishing and in providing high quality wildlife habitats. Additionally, riparian areas provide important opportunities for family camping, hiking and bird-watching.

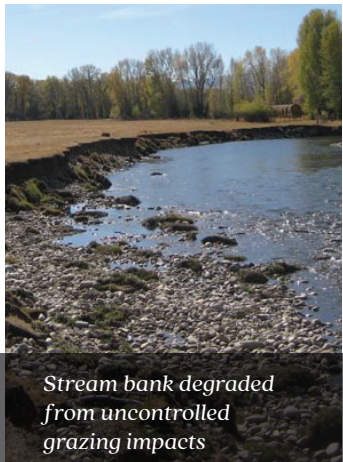




The Conservation Need

Riparian ecosystems are naturally diverse systems subject to frequent periods of flooding and drought. These natural disturbances serve to create new seed beds and remove biomass ultimately “setting back” plant succession, and providing nutrients to riparian plant communities which maintains a productive ecosystem that benefits wildlife species. However, many changes have occurred in the Great Plains that have disrupted this natural cycle and impacted the health of these vital communities.

Land use changes (including altered hydrology), increased water demands to meet human needs, invasive species and livestock use are some of the many factors that can affect riparian ecosystem function and diminish wildlife habitat.



Stream bank degraded from uncontrolled grazing impacts



Healthy riparian area



Spring source protected by fencing to maintain stream flow

Strategies

Through Waterways for Wildlife, the NWTF will develop partnerships with other conservation groups, landowners and governmental agencies to develop and implement riparian enhancement projects across this landscape. Projects will focus in America's Great Open Spaces and America's Western Wildlands and will include:

- Fencing riparian areas to assist landowners in managing livestock access
- Planting of trees, shrubs and native grasses along riparian areas
- Removing invasive plant species that compete with important native species
- Work with others to address needed research and provide outreach and education on riparian best management practices
- Partner with others for acquisitions and easements when applicable

Financial Need

The NWTF seeks to raise \$10 million in private funding over a 10-year period and leverage \$40 million in matching funds to establish the \$50 million Waterways for Wildlife Initiative.

To learn more, please visit NWTF.org.

A Plan for Action

The NWTF is addressing the many pressing challenges in riparian areas by creating the Waterways for Wildlife Initiative. The purpose of this program is to improve the health and vigor of riparian areas on at least 75,000 acres. This ambitious plan will enhance riparian plant communities along 1,500 linear miles of rivers and streams in the American Great Plains, stretching from North Dakota to South Texas.



Outdoor Heritage Fund
Grant Round 22
Application Summary Page
GR 22-5

Project Title: ND Statewide Tree Planting Initiative
Applicant: North Dakota Conservation District Employees Association
Primary Contact: Sarah Tunge
Total Project Costs: \$4,183,333
OHF Request: \$2,550,000

Match Amount	Funding Source	Match Type
\$833,333	Landowner Obligation	Cash
\$800,000	Soil Conservation Districts	In-Kind
\$1,633,333.00	Total	

Percentage of Matching Funds: 39%

Project Duration: Three years

Major Directive: B

Additional Directive: A & C

Summary of Project: Project involves providing up to 75% cost-share to North Dakota landowners for the purpose of installing and maintaining trees.

Technical Committee Comments:

- Popular program, recommend funding
- Timing is always a challenge for tree planting, and each applicant needs SHPO approval, so need to spread the project out

Technical questions from the OHF Advisory Board members:

North Dakota Conservation District Employees Association has not submitted any unsuccessful applications.

Funded Projects					
Contract	Total Project Cost	Title	Award Amount	Amount Expended	Project Timeframe
14-153	\$4,920,000	ND Statewide Tree Planting Initiative	\$3,070,000	\$3,068,761.74	Completed
18-180	\$4,183,333	ND Conservation District Employees Association Statewide Tree Planting Initiative	\$2,550,000	\$278,532.40	2024 or when funding is exhausted
Totals	\$9,103,333.00		\$5,620,000.00	\$3,347,294.14	

OHF Advisory Board Recommendation

Contingencies: **None**

Conflicts of Interest: **None**

Funding Vote: **8-1**

Funding Amount Vote: **\$2,550,000**

Outdoor Heritage Fund Grant Application



Instructions

After completing the form, applications and supporting documentation may be submitted by e-mail to ndicgrants@nd.gov. It is preferred that only electronic copies are submitted.

You are not limited to the spacing provided, except in those instances where there is a limit on the number of words. If you need additional space, please indicate that on the application form, answer the question on a separate page, and include with your submission.

The application and all attachments must be received by the application deadline. You may submit your application at any time prior to the application deadline. **Applicants are strongly encouraged to submit applications prior to the deadline for staff review in order ensure that proposals will be complete when submitted on deadline date.** Incomplete applications may not be considered for funding.

Please review the back of this form to determine project eligibility, definitions, budget criteria, and statutory requirements.

Project Name: ND Statewide Tree Planting Initiative

Name of Organization: North Dakota Conservation District Employees Association (NDCDEA)

Federal Tax ID #45-0420359

Contact Person/Title Sarah Tunge, Manager

Address 123 Main St, PO Box 346

City McClusky

State ND

Zip Code 58463

E-mail Address mcscd@westriv.com

Web Site Address (If applicable)

Phone 701-873-2101

List names of co-applicants if this is a joint proposal

MAJOR Directive:

Choose only one response

Directive B. Improving, maintaining and restoring water quality, soil conditions, plant diversity, animal systems and by supporting other practices of stewardship to enhance farming and ranching;

Additional Directive:

Choose all that apply

Directive A.

Directive C.

Type of organization:

Tax-exempt, nonprofit corporation.

Abstract/Executive Summary.

Summarize the project, including its objectives, expected results, duration, total project costs and participants. (no more than 500 words)

Conservation tree planting is an important component of agricultural systems, improves rural life and enhances wildlife. Field windbreaks help reduce soil erosion during the years of drought and periods of excessive winds. Field windbreaks have been studied and proven to reduce water evaporation from adjacent cropland and increase crop yields. Conservation plantings are designed for streambank stabilization, filter water runoff from adjacent agricultural lands, to provide wildlife habitat, increase safety on roads with snow accumulation, to provide winter protection for wildlife or livestock, and to protect rural homes from snow and wind decreasing energy costs.

The ND Statewide Tree Planting Initiative (NDSTPI) will engage stewards to embrace conservation practices that promote the ecological benefits trees provide. This initiative will focus on encouraging and providing financial assistance to implement agroforestry practices in North Dakota including farmstead, feedlot and field windbreaks, wildlife and riparian plantings, buffers and living snow fences.

The successful NDSTPI has grown in popularity due to the outreach the 54 Soil Conservation Districts have provided in their counties through newspapers, quarterly newsletters, and boots on the ground conservation planning. We have also seen a shift in addressing resource concerns as transition of ownership has changed within farming operations. The number of plantings being installed continues to increase and the high volume of applications submitted each batching period indicate continued and growing support for the program.

Districts promote the Outdoor Heritage Fund through on-site field visits with interested stewards, which often leads to additional conservation planning. To qualify for the program,

district staff submit a CONS 4 tree plan meeting soil suitability and NRCS Field Office Tech Guide specifications. Plans must note that proper site preparation prior to field installation will take place, and ensure all local, state, and federal setbacks are followed.

All approved OHF applications are required to be screened by the State Historical Preservation Office (SHPO) and/or the Tribal Historical Preservation Office (THPO) depending on the county prior to practice installation. If additional screening is required, landowners will obtain an archeological survey that SHPO must provide concurrence on. Cost-share for plantings will be paid based on actual installed footage in accordance to their OHF/SCD contract. Eligible landowners sign a ten-year contract to maintain the site. Replacement trees are the responsibility of the landowner.

The NDCDEA will conduct random compliance spot checks in the year of installation to ensure accountability and review the quality of work being installed.

The grant request is \$2,550,000.00 for a three-year program with total project costs not to exceed \$4,183,333.00. The landowner's obligation will be 25% of the practice installation cost and maintenance outlined in the ten-year contract.

Project Duration: 3-Years

Indicate the intended schedule for drawing down OHF funds.

There will be a spring and late summer application period per year beginning late summer 2023 if funded. Applications accepted in 2023 will be for plantings to be completed in 2024. The first request for funds will be in July/August 2024. Requests will continue annually until funds are exhausted.

Field Office Tech Guide requires tree plantings be installed no later than the first week of June, payment applications will be distributed mid-June with a mid-July deadline for submission to NDCDEA. Reimbursement requests will be submitted to the Industrial Commission in July/August. Funds will be distributed to the districts on behalf of the landowners for services rendered as soon as possible after receipt of OHF funds in the NDCDEA account.

Amount of Grant request: \$2,550,000.00

Total Project Costs: \$4,183,333.00

Note: in-kind and indirect costs can be used for matching funds.

Amount of Matching Funds: \$1,633,333.00

A minimum of 25% Match Funding is required. Indicate if the matching funds will be in-kind, indirect or cash. Please provide verification that these matching funds are available for your project. Note that effective as of July 1, 2015 no State General Fund dollars can be used for a match unless funding was legislatively appropriated for that purpose.

Amount of Match	Funding Source	Type of Match (Cash, In-kind or Indirect)
\$833,333	Landowner Obligation	Cash
\$800,000	Soil Conservation Districts	In-Kind
\$		
\$		
\$		
\$		

Certifications

X I certify that this application has been made with the support of the governing body and chief executive of my organization.

X I certify that if awarded grant funding none of the funding will be used for any of the exemptions noted in the back of this application.

Narrative

Organization Information – Briefly summarize your organization’s history, mission, current programs and activities.

Include an overview of your organizational structure, including board, staff and volunteer involvement. (no more than 300 words)

The ND Conservation District Employees Association was formed on February 11th, 1991, with the purpose of promoting professionalism, providing training, and networking opportunities for district employees throughout the state. NDCDEA advocates for diverse partnerships and collaboration opportunities to increase effectiveness and efficiency in the delivery of conservation programs. NDCDEA is a strong partner in the conservation delivery system that includes District Supervisors, the North Dakota Association of Soil Conservation Districts (NDASCD), North Dakota State Soil Conservation Committee (NDSSCC), State and USDA conservation agencies.

NDCDEA sponsors training and leadership opportunities for district employees including technical training, youth and adult outreach, conservation planning, and mentoring.

Collaborative conservation and building strong working relationships with partners is a high priority for the organization.

The NDCDEA Board consists of 12 district employees elected for two-year terms from the NDASCD areas. The Executive Committee, president, vice-president, secretary, and treasurer are elected by the board and are able to act in the name of the Association between board meetings. NDCDEA members also serve on various national boards including Natural Resource Policy, National Conservation Planning Partnership Team, and the National Employee Development Board.

NDCDEA has a strong history of successful grant administration, including four Outdoor Heritage Fund Grants (totaling \$8,750,000) for state-wide tree planting initiatives, a National Association of Conservation Districts Conservation Partnership Collaboration grant for \$35,600 to deliver leadership training, USDA conservation practice capacity, and to build an online system to track district accomplishments. In addition, NDCDEA has received three NRCS Conservation Delivery Planning Partnership grants to provide technical and financial assistance for USDA Farm Bill directives and a Conservation Collaboration Grant for \$2,000,000 to continue support for districts working on USDA Farm Bill deliverables and conservation outreach.

Purpose of Grant – Describe the proposed project identifying how the project will meet the specific directive(s) of the Outdoor Heritage Fund Program

The purpose of the grant is to continue the STPI for the 2024-2026 tree planting seasons to install conservation tree plantings, including trees and fabric. This program is being utilized to fill the increasing need for financial assistance for conservation trees and to complement current USDA NRCS – Environmental Quality Incentive Program or the USDA FSA – CRP Continuous Sign-up programs. The federal programs often have limited or capped sign-ups as well as a decrease in funding to meet the demand. The program is oriented primarily to the growing number of landowners with resource concerns who do not qualify for other forms of cost share or whose specific conservation practice doesn't attract funding due to federal priorities. This program has created better working relationships with our partners by filling a gap, allowing more conservation to be put on the landscape.

If approved for additional funding, it will allow districts to work with landowners beyond the 2023 tree planting season. Applications are required to be submitted a year prior to planting, to allow for a review process for FOTG specifications, adequate site prep, cultural screenings, and tree availability from our nursery suppliers.

Tree Plantings Completed:

- 2015 447 Applicants 1,976,875 linear feet installed
- 2016 142 Applicants 994,079 linear feet installed
- 2017 128 Applicants 839,487 linear feet installed
- 2018 152 Applicants 767,026 linear feet installed

- 2019 209 Applicants 1,484,292 linear feet installed
- 2020 381 Applicants 1,927,891 linear feet installed
- 2021 247 Applicants 1,345,587 linear feet installed
- 2022 314 Applicants 1,711,474 linear feet installed
- 2023 348 Applicants 3,282,775 linear feet *estimated (these planting are currently being installed)*

Totals 2,368 Applicants 14,329,486 linear feet equivalent to 2,714 miles of trees

Is this project part of a Comprehensive Conservation Plan? Yes No

If yes, provide a copy with the application.

Note: Projects involving buildings and infrastructure will only be considered if part of a Comprehensive Conservation Plan. Please refer to the “Definitions” section at the back of the form for more details.

Management of Project – Provide a description of how you will manage and oversee the project to ensure it is carried out on schedule and in a manner that best ensures its objectives will be met.

Include a brief background and work experience for those managing the project.

The NDSTPI program is open to all SCDs to provide services to landowners/producers in the state of North Dakota. The North Dakota Conservation District Employees Association (NDCDEA) will coordinate the project. The NDCDEA will provide oversight and coordination of the program through established tracking and reporting mechanisms including applications, tree plans, payment applications and accounting. Districts provide a local connection to ensure the program is accessible to all interested parties in their respective counties.

Conservation Districts are required to submit applications, producer contracts, payment submissions and status reviews to meet grant requirements. Applications will be reviewed by the NDCDEA grant review committee to ensure all technical specifications are met and for tree to soil suitability. In addition, all applications will be submitted for SHPO or THPO review based on county location to ensure planting areas are free of any cultural resource impacts.

The cost for replacement trees and shrubs is not included in the program and will be the responsibility of the landowner, who will be required to sign a 10-year contract to maintain the project. All landowner contracts will be held with grant administrator should a request be made for a state review with receipt of services. Payment submission will contain all legal descriptions, names, and funds dispensed on their behalf. Districts will submit a payment application signed by the landowner/producer to ensure the practice was installed and that they agree with the amount being requested on their behalf.

NDCDEA has also implemented random field spot checks for installed plantings for an additional layer of review to ensure plantings are within technical specifications as well as following approved planting plans.

NDCEA is required to follow audit guidelines ensuring funds are being dispersed accordingly along with federal filing to maintain their 501 C3 status.

Evaluation – Describe your plan to document progress and results.

Please be specific on the methods you will utilize to measure success. Note that regular reporting, final evaluation and expenditure reports will be required for every grant awarded.

NDCDEA will measure the success of the grant by the number of applications submitted and approved and the actual footage of trees and fabric installed. This will be measured and tracked by the SCDs with approved contracts. Payment request applications will be accompanied by a final planting plan with actual installed footage and planting notes.

We can also evaluate success from previous rounds of the STPI that were funded through the Outdoor Heritage Fund. The first award of \$1,878,000.00 was for 2013 through 2016 and the second for \$2,050,000.00 concluding in 2019. Those first two awards were spent down prior to the end date of the project. The third STPI was awarded \$3,070,000.00 for the years 2020 through 2022. This funding was exhausted in 2021. The current STPI award is for \$2,550,000 for 2022-2024. All funds have been allocated and will be paid out in August/September of 2023.

Due to continued demand the current funding allocation will not carry us into the 2023 season and beyond. The reason for submitting early for funding consideration is to allow for field visits to be conducted, adequate site preparations, nursery availability and cultural screenings for the future years.

Financial Information

Project Budget – Use the table below to provide an itemized list of project expenses and describe the matching funds being utilized for this project.

Indicate if the matching funds are in the form of cash, indirect costs or in-kind services. The budget should identify all other committed funding sources and the amount of funding from each source. **A minimum of 25% match funding is required.** An application will be scored higher the greater the amount of match funding provided. (See Scoring Form.)

Certain values have been identified for in-kind services as detailed under “Budget Information” at the back of this form. Refer to that section and utilize these values in identifying your matching funds. **NOTE: No indirect costs will be funded. Supporting documentation for project expenses, including bids, must be included or application will be considered incomplete.**

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
Tree Plantings	\$2,500,000	\$833,333	\$800,000	\$	\$	\$4,133,333
Administrative	\$40,000	\$	\$	\$	\$	\$40,000
Cultural Reviews	\$10,000	\$	\$	\$	\$	\$10,000
	\$	\$	\$	\$	\$	\$
	\$	\$	\$	\$	\$	\$
	\$	\$	\$	\$	\$	\$
Total Costs	\$	\$	\$	\$	\$	\$

Note: Costs for seeding, fencing, pipelines, wells, and cover crops cannot exceed NRCS Field Office Tech Guide without justification. Projects involving perimeter fencing must follow NRCS eligibility standards.

Budget Narrative – Use the space below to provide additional detail regarding project expenses.

Cash match is calculated at 75/25 with the landowner responsibility being 25% of the total planting cost. This totals \$833,333 for the full grant request.

In-kind match of \$800,000.00 will be contributed by the participating SCDs. This will included field visits, application submission, field staking and order placement, tree installation and follow up certification of practices.

Administrative costs will include the coordination of applications, contracts, and county correspondence, facilitating the review committee, and spot checks. In addition, there will be landowner contract development, file folder maintenance, processing of payment applications, and coordination with SHPO.

Cultural review costs are for applications requiring additional cultural screening by The State Historical Preservation Office; cultural reviews will be reimbursed at 75% of the cost submitted; not to exceed \$2,500.00.

Sustainability – Indicate how the project will be funded or sustained in future years.

Include information on the sustainability of this project after OHF funds have been expended and whether the sustainability will be in the form of ongoing management or additional funding from a different source.

Conservation tree planting is an important long-term management tool. Trees provide opportunities to integrate productivity and profitability with environmental stewardship. In turn, this results in healthy, sustainable agricultural systems that can be passed on to future generations.

Individual conservation tree plantings will be managed to ensure effectiveness by the landowner. Overall survival requirements will be outlined within the landowner agreements as well as unacceptable land management practices such as burning, grazing, or destructive tree removal. The landowners will be financially invested in their projects, to secure their buy-in towards ensuring practice success.

Partial Funding – Indicate how the project will be affected if less funding is available than that requested.

If partial funding is awarded, NDCDEA will limit the number of applications from each district to ensure needs are met and no district is excluded from the opportunity to access the program. A reduced level of funding would simply result in fewer landowners participating in the program.

Partnership Recognition - If you are a successful recipient of Outdoor Heritage Fund dollars, how would you recognize the Outdoor Heritage Fund partnership? * *There must be signage at the location of the project acknowledging OHF funding when appropriate.*

The ND Outdoor Heritage Fund will be listed as primary sponsor on all media releases local SCD's provide in their county. The OHF logo is visible on all advertisement, pamphlets, county newsletters, and statewide press releases. The Outdoor Heritage Fund has also been recognized on a national level with presentations to partner organizations. SCDs also conduct events at the state capital, legislative meetings, and other conferences highlighting OHF projects.

Awarding of Grants - Review the appropriate sample contract for your organization on the website at <http://www.nd.gov/ndic/outdoor-infopage.htm>.

Can you meet all the provisions of the sample contract? X Yes No

If there are provisions in that contract that your organization is unable to meet, please indicate below what those provisions would be:

ABOUT OHF:

The purpose of the North Dakota Outdoor Heritage Fund is to provide funding to state agencies, tribal governments, political subdivisions, and nonprofit organizations, with higher priority given to projects that enhance **conservation** practices in this state by:

Directive A. Providing access to private and public lands for sportsmen, including projects that create fish and wildlife habitat and provide access for sportsmen;

Directive B. Improving, maintaining and restoring water quality, soil conditions, plant diversity, animal systems and by supporting other practices of stewardship to enhance farming and ranching;

Directive C. Developing, enhancing, conserving and restoring wildlife and fish habitat on private and public lands; and

Directive D. Conserving natural areas and creating other areas for recreation through the establishment and development of parks and other recreation areas.

EXEMPTIONS

Outdoor Heritage Fund grants may not be used to finance the following:

- Litigation;
- Lobbying activities;
- Any activity that would interfere, disrupt, or prevent activities associated with surface coal mining operations; sand, gravel, or scoria extraction activities; oil and gas operations; or other energy facility or infrastructure development;
- The acquisition of land or to encumber any land for a term longer than twenty years; or
- Projects outside this state or projects that are beyond the scope of defined activities that fulfill the purposes of Chapter 54-17.8 of the North Dakota Century Code.

OHF funds may not be used, except after a finding of exceptional circumstances by the Industrial Commission, to finance:

- A completed project or project commenced before the grant application is submitted;
- A feasibility or research study;
- Maintenance costs;
- A paving project for a road or parking lot;
- A swimming pool or aquatic park;
- Personal property that is not affixed to the land;
- Playground equipment, except that grant funds may be provided for up to 25% of the cost of the equipment not exceeding \$10,000 per project and all playground equipment grants may not exceed 5% of the total grants per year (see Definitions/Clarifications for how this will be calculated);
- Staffing or outside consultants except for costs for staffing or an outside consultant to design and implement an approved project based on the documented need of the applicant and the expenditures may not exceed 5% of the grant to a grantee if the grant exceeds \$250,000 and expenditures may not exceed 10% of the grant to a grantee if the grant is \$250,000 or less (see Definitions/Clarifications for how this will be calculated);

- A building except for a building that is included as part of a comprehensive conservation plan for a new or expanded recreational project (see Definitions/Clarifications for definition of comprehensive conservation plan and new or expanded recreational project); or
- A project in which the applicant is not directly involved in the execution and completion of the project.

The goal of the Industrial Commission is that at a minimum 15% of the funding received for a biennium will be given priority for recreation projects that meet Directive D.

The following projects are not eligible for funding, unless there is a finding of exceptional circumstances by the Industrial Commission include:

- Construction or refurbishment of indoor/outdoor ice rinks,
- Construction or refurbishment of indoor/outdoor athletic courts and sports fields,
- Other substantially similar facilities.
- Infrastructure that is not part of a comprehensive conservation plan.
- Projects not meeting a minimum funding request of \$2,500.

Budget Information

In-kind services used to match the request for Outdoor Heritage Fund dollars shall be valued as follows:

- Labor costs \$15.00 an hour
- Land costs Average rent costs for the county as shown in the most recent publication of the USDA, National Agricultural Statistics Services, North Dakota Field Office
- Permanent Equipment Any equipment purchased must be listed separately with documentation showing actual cost. (For example: playground equipment)
- Equipment usage Actual documentation
- Seed & Seedlings Actual documentation
- Transportation Mileage at federal rate
- Supplies & materials Actual documentation

More categories will be added as we better understand the types of applications that will be submitted. We will use as our basis for these standards other State and Federal programs that have established rates. For example, the North Dakota Nonpoint Source Pollution Management Program has established rates. If your project includes work that has an established rate under another State Program, please use those rates and note your source.

Definitions/Clarifications:

Building - Defined as "A structure with a roof either with walls or without walls and is attached to the ground in a permanent nature."

Comprehensive Conservation Plan - Defined as "A detailed plan that has been formally adopted by the governing board which includes goals and objectives--both short and long term, must show how this building will enhance the overall conservation goals of the project and the protection or preservation of wildlife and fish habitat or natural areas." This does not need to be a complex multi-page document. It could be included as a part of the application or be an attachment.

New and Expanded Recreational Project means that the proposed building cannot be a replacement of a current building. The proposed building must also be related to either a new or expanded

recreational project--either an expansion in land or an expansion of an existing building or in the opportunities for recreation at the project site.

Playground equipment calculation - Only the actual costs of the playground equipment (a bid or invoice showing the amount of the equipment costs must be provided) - cannot include freight or installation or surface materials or removal of old equipment, etc.

Staffing/Outside Consultants Costs - If you are requesting OHF funding for staffing or for an outside consultant, you must provide information in your application on the need for OHF funding to cover these costs. For example, if you are an entity that has engineering staff you must explain why you don't have sufficient staff to do the work or if specific expertise is needed or whatever the reason is for your entity to retain an outside consultant. If it is a request for reimbursement for staff time then a written explanation is required in the application of why OHF funding is needed to pay for the costs of that staff member(s)' time. **The budget form must reflect on a separate line item the specific amount that is being requested for staffing and/or the hiring of an outside consultant.** This separate line item will then be used to make the calculation of 5% or 10% as outlined in the law. Note that the calculation will be made on the grant less the costs for the consultant or staff.

Maintenance – Activities that preserve or keep infrastructure in a given existing condition, including repairs. Repair means to restore to sound condition after damage, to renew or refresh; except repairs due to damage caused by Acts of God.

Scoring of Grants

Oral Presentation. Please note that you will be given an opportunity to make a ten-minute Oral Presentation at a meeting of the Outdoor Heritage Fund Advisory Board. These presentations are strongly encouraged.

Open Record. Please note that your application and any attachments will be open records as defined by law and will be posted on the Industrial Commission/Outdoor Heritage Fund website.

All applications will be scored by the Outdoor Heritage Fund Advisory Board after your ten-minute oral presentation. The ranking form that will be used by the Board is available on the website at <http://www.nd.gov/ndic/outdoor-infopage.htm> .

Awarding of Grants

All decisions on requests will be reported to applicants no later than 30 days after Industrial Commission consideration. The Commission can set a limit on duration of an offer on each application or if there isn't a specific date indicated in the application for implementation of the project, then the applicant has until the next Outdoor Heritage Fund Advisory Board regular meeting to sign the contract and get the project underway or the commitment for funding will be terminated and the applicant may resubmit for funding. Applicants whose proposals have been approved will receive a contract outlining the terms and conditions of the grant.

Responsibility of Recipient

The recipient of any grant from the Industrial Commission must use the funds awarded for the specific purpose described in the grant application and in accordance with the contract. The

recipient cannot use any of the funds for the purposes stated under Exemptions on the first page of this application.

If you have any questions about the application, the Commission can be reached at 701-328-3722 or outdoorheritage@nd.gov.

Revised: November 4, 2019, April 12, 2023

Outdoor Heritage Fund
Grant Round 22
Application Summary Page
GR 22-6

Project Title: TRPL Prairie Enhancement Land Management Phase I
Applicant: Theodore Roosevelt Presidential Library Foundation
Primary Contact: Kelli Gardner
Total Project Costs: \$1,345,185
OHF Request: \$939,105

Match Amount	Funding Source	Match Type
\$2,480	Billings County	In-Kind
\$3,600	NDSU	In-Kind
\$400,000	TRPL	Cash
\$406,080.00	Total	

Percentage of Matching Funds: 30%

Project Duration: Fourteen months

Major Directive: C

Additional Directive: B & D

Summary of Project: Project involves collecting seed of local genetic origin for over 100 species of plants indigenous to southwest North Dakota; seeds will be cleaned and tested and planted; healthy plugs will be planted at the Theodore Roosevelt Presidential Library site; native seeds for the target species are not commercially available currently, the project will make these seeds available in the future.

Technical Committee Comments:

- Applicant did a great job re-writing the application, addressed every concern we had from the previous grant round
- Great opportunity to highlight OHF with this project, would love to see OHF's logo associated with it
- Pleased to see a wildfire protection plan and incorporation of Wildland Urban Interface landscaping

Technical questions from the OHF Advisory Board members:

Theodore Roosevelt Presidential Library Foundation has not previously received funds.

Unsuccessful Applications				
Round	Request	Total Project Cost	Title	Vote
21-09	\$2,033,452	\$3,380,379	TRPL Prairie Restoration Phase	2-8
Totals	\$50,000	\$100,000		

OHF Advisory Board Recommendation

Contingencies: **Do not fund fencing, trailhead structure, or weed control**

Conflicts of Interest: **None**

Funding Vote: **8-1**

Funding Amount Vote: **\$498,374**

Outdoor Heritage Fund Grant Application



Instructions

After completing the form, applications and supporting documentation may be submitted by e-mail to ndicgrants@nd.gov. It is preferred that only electronic copies are submitted.

You are not limited to the spacing provided, except in those instances where there is a limit on the number of words. If you need additional space, please indicate that on the application form, answer the question on a separate page, and include with your submission.

The application and all attachments must be received by the application deadline. You may submit your application at any time prior to the application deadline. **Applicants are strongly encouraged to submit applications prior to the deadline for staff review in order ensure that proposals will be complete when submitted on deadline date.** Incomplete applications may not be considered for funding.

Please review the back of this form to determine project eligibility, definitions, budget criteria, and statutory requirements.

Project Name: TRPL Prairie Enhancement Land Management Phase 1

Name of Organization: Theodore Roosevelt Presidential Library Foundation

Federal Tax ID#: 47-1324043

Contact Person/Title: Kelli Gardner, Corporation and Foundation Relations Associate

Address: 350 Third Ave

City: Medora

State: ND

Zip Code: 58645

E-mail Address: kelli@trlibrary.com

Web Site Address (If applicable): <https://www.trlibrary.com/>

Phone: 203-470-8504

List names of co-applicants if this is a joint proposal

MAJOR Directive:

Choose only one response

Directive A. Providing access to private and public lands for sportsmen, including projects that create fish and wildlife habitat and provide access for sportsmen;

Directive B. Improving, maintaining and restoring water quality, soil conditions, plant diversity, animal systems and by supporting other practices of stewardship to enhance farming and ranching;

Directive C. Developing, enhancing, conserving and restoring wildlife and fish habitat on private and public lands; and

Directive D. Conserving natural areas and creating other areas for recreation through the establishment and development of parks and other recreation areas.

Additional Directive:

Choose all that apply

Directive A.

Directive B.

Directive C.

Directive D.

Type of organization:

State Agency

Political Subdivision

Tribal Entity

Tax-exempt, nonprofit corporation.

Abstract/Executive Summary.

Summarize the project, including its objectives, expected results, duration, total project costs and participants. (no more than 500 words)

The TRPL is pursuing an ambitious and significant prairie restoration project, which consists of collecting seed of local genetic origin for over 100 species of plants indigenous to the TRPL site, but for which seed volume and local genetics is limited. Many of these plants are not commercially available and are diminished in number in the western ND wild. After these seeds are collected, they will be cleaned and tested and then planted in nurseries in order to produce hearty native plants. Some of these plants will be transferred as plugs to the TRPL site while others will have their seeds harvested and then those seeds will be broadcast on site. This will result in a landscape that is populated with all native, genetically sourced plants. A project like this has never been done before in ND. These native seeds will be available for others going forward. Our big picture objectives will be to restore and replenish the native ecosystems of the existing Badland plant communities, increase the availability of indigenous seed with local genetics of western ND prairie, create an outdoor public space that will provide opportunities for recreation and renewal for local communities, and finally, be a living classroom and sustainability exemplar to inspire, educate, and motivate others to find ways to live more sustainably. Expected results for this project are a restoration of ecological balance and

increased biodiversity of the grassland landscape with healthy soils that supports human use as well as animal biodiversity, habitat, and livestock grazing and engaged local community and stakeholders, who find that the TRPL is not only a good neighbor but an accessible and restorative place to recreate. There will be a trailhead on site that will connect with the Maah Daah Hey Trail for hikers, horseback riders, and mountain bikers. We expect the TRPL to be among the most visited public parks in ND (all outdoor spaces at TRPL will be open to the public) and one of the most sustainable museums in the world. Another result of this project is the contribution of research about western ND prairie plants and availability of local and indigenous seed, which is currently not commercially available. Project duration for this phase is June 2023 to August 2024. Total project costs for this first phase are \$1,345,185 which includes growing the native plants, weed control on site, restoring the firebreak scar, creating the trailhead structure and berm and the crushed aggregate trail, and installing wildlife-friendly cattle fencing. There are many who are participating in this important work. Local landowners, Theodore Roosevelt’s Ranchlands, and the United States Forest Service are all important partners for collecting the local, indigenous plants. NDSU Research Extension Center in Hettinger will house and cultivate the native plants. RES, our ecologists, along with Snøhetta and Confluence make up our site design team. JE Dunn is our construction manager and will manage the installation of the plants. We hope the Outdoor Heritage Fund will be a partner in this project.

Project Duration:

Indicate the intended schedule for drawing down OHF funds.

This project is focused on the first phase of work in enhancing and replenishing the land surrounding the TRPL as we prepare for and begin construction. This phase of enhancement work will occur primarily between June 2023 and August 2024. Of course, these efforts in responsible and sustainable land management will be ongoing and a key aspect of the TRPL’s day-to-day operations. We anticipate needing the majority of the requested funds in late summer 2023.

Amount of Grant request: \$939,105

Total Project Costs: \$1,345,185

Note: in-kind and indirect costs can be used for matching funds.

Amount of Matching Funds: \$406,080

A minimum of 25% Match Funding is required. Indicate if the matching funds will be in-kind, indirect or cash. Please provide verification that these matching funds are available for your project. Note that effective as of July 1, 2015 no State General Fund dollars can be used for a match unless funding was legislatively appropriated for that purpose.

Amount of Match	Funding Source	Type of Match (Cash, In-kind or Indirect)
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\$2,480	Billings County	In-kind
\$3,600	NDSU	In-kind
\$400,000	TRPL	cash
\$		
\$		
\$		

Certifications

I certify that this application has been made with the support of the governing body and chief executive of my organization.

I certify that if awarded grant funding none of the funding will be used for any of the exemptions noted in the back of this application.

Narrative

Organization Information – Briefly summarize your organization’s history, mission, current programs and activities.

Include an overview of your organizational structure, including board, staff and volunteer involvement. (no more than 300 words)

We are building a presidential library and museum for Theodore Roosevelt in Medora, ND. Our mission is to explore the life, legacy, and enduring relevance of our 26th president. We have a vision for a presidential library that speaks to the staggering beauty of the Western American landscape, 19th-century American virtues, and fully interactive and digital 21st-century presentation. This is a concept that we hope will inspire bold action and fearless participation *in the arena* and challenge all of us to dare greatly, think boldly, live passionately, and care deeply, just like TR. Practical progress toward realizing the TRPL includes raising over \$200M since 2018, unlocking a \$50M endowment from the North Dakota Legislature to support our ongoing operations, the retaining of our architect Snøhetta, our decision to construct the facility as part of the Living Building Challenge, a carbon-neutral designation, and the official acquisition of 93.8 acres of land adjacent to Theodore Roosevelt National Park in Medora in June 2022. The dramatic landscape of the Badlands, striking in natural beauty, was

restorative to TR. Our design concept marries with the Badlands topography and facilitates a conservation ambition, while also including a contradiction like TR—landscape in harmony with a bold vision. It promotes biodiversity, conservation, and stewardship of the land. Deep in our conceptual thinking is a model of self-reliance that uses no more than it takes. It is a concept that leapfrogs baseline building code specifications as well as best practices of peer institutions, boasting the top category LEED Platinum certification. Upon opening, we expect net-zero energy, carbon emissions, and water with full habitat restoration. By 2032, we aim to achieve net-zero waste as well. Groundbreaking for the building is expected in 2023 and the anticipated grand opening is on July 4, 2026—the 250th anniversary of America. We have 15 board members, 16 full-time staff, 4 part-time staff, and 1 very-involved volunteer.

Purpose of Grant – Describe the proposed project identifying how the project will meet the specific directive(s) of the Outdoor Heritage Fund Program

Identify project goals, strategies and benefits and your timetable for implementation. Include information about the need for the project and whether there is urgency for funding. Indicate if this is a new project or if it is replacing funding that is no longer available to your organization. Identify any innovative features or processes of your project. Note: if your proposal provides funding to an individual, the names of the recipients must be reported to the Industrial Commission/Outdoor Heritage Fund. These names will be disclosed upon request.

For tree/shrub/grass plantings: provide a planting plan describing the site design, planting methods, number of trees/shrubs by species and stock size, grass species and future maintenance. A statement certifying that the applicant will adhere to USDA-NRCS tree/shrub/grass planting specifications along with the name of the governmental entity designing the planting may be substituted for a planting plan.

For projects including Section 319 funding: provide in detail the specific best management practices that will be implemented and the specific projects for which you are seeking funding.

For projects including fencing: A minimum cost share of 40% by the recipient is preferred. Include detailed information on the type of fencing to be installed, whether funding is requested for boundary fencing, new or replacement of existing fencing, and/or cross fencing.

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Theodore Roosevelt had a powerful vision of sustainability in his time: he embraced conservation and helped to expand the nation’s national parks, forests, and bird reserves. To be truly sustainable today, however, we must—as TR would—dare to go above and beyond. The TRPL will enhance conservation practices in North Dakota, both through our own sustainable choices and ongoing operations as well as through the model of sustainability we will provide to others. Recognizing the prime importance of the Badlands to TR’s story, we begin from the premise that the Library is the landscape and cannot be thought of as separate entities. This concept promotes biodiversity, conservation, and stewardship of the land upon which the Library is built. The TRPL was specifically designed to function in harmony with the unique ecology surrounding it. As part of those efforts, the TRPL is embarking on a prairie enhancement and land management program that will enhance habitat for pollinators and wildlife and improve soil conditions. The site design is focused on managing the land to restore and replenish native ecosystems. Practices such as grazing and prescribed burns will be designed into the Library’s calendar as regular ecological events. This environmental stewardship will help manage invasive species, encourage biodiversity, and promote healthy ecosystems across the site for visitors to observe and enjoy. The design of the Library will be carefully planned to minimize negative impact to the landscape and existing site systems.

In this first stage of work we are focusing on restoring indigenous plants to our site and preparing the land for grazing. Decades of human activity have diminished the diversity of native ND Badlands prairie species, including rare and endangered plants. Moreover, we have found that very few of these native species are even available for purchase commercially. And the few that are available, have not been grown in western ND; plants grown from these seeds would be native to North Dakota's Badlands but not genetically related. Therefore, the TRPL, in partnership with ecologists and local stakeholders, is collecting and cultivating native seeds to grow these unique plants on site, helping to restore ecological balance and increase biodiversity in this striking grassland landscape.

Enhancement of the grasslands at TRPL will improve habitat for many bird species that Theodore Roosevelt observed during his time in North Dakota. Roosevelt described the North Dakota state bird, the Western Meadowlark, as "The meadow lark is a singer of a higher order, deserving to rank with the best. Its song has length, variety, power and rich melody; and there is in it sometimes a cadence of wild sadness, inexpressibly touching." Unfortunately, the meadowlark is declining at a rate of 1.3% annually in North Dakota. It is listed as a Species of Conservation Priority in the North Dakota State Wildlife Action Plan (<https://gf.nd.gov/wildlife/swap>), the state's principal document for safeguarding rare and declining species. Meadowlarks are synonymous with cattle pastures. Prescribed grazing at TRPL will be crucial to maintaining healthy grasslands and grassland structure that meadowlarks prefer for nesting.

Another endemic grassland bird which has declined significantly but may benefit from the grassland enhancement efforts at TRPL is the Sprague's Pipit. This species, which breeds only in a small portion of the Northern Great Plains, has declined 75% since 1970 (Rosenberg et al. 2016, <https://partnersinflight.org/resources/the-plan/>). The pipit is a secretive, nondescript, small grassland bird that is not readily seen like the Western Meadowlark. However, the bird's song is unmistakable, and unforgettable to those who have witnessed it. During Roosevelt's time, the Sprague's Pipit was referred to as the Missouri Skylark. His description perfectly describes this legendary bird "Sometimes in the early morning, when crossing the open, grassy plateaus, I have heard the prince of them all, the Missouri skylark. The skylark sings on the wing, soaring overhead and mounting in spiral curves until it can hardly be seen, while its bright, tender strains never cease for a moment."

Other birds listed as Species of Conservation Priority in the North Dakota Wildlife Action Plan that may benefit from grassland enhancement at TRPL include: American Kestrel, Baird's Sparrow, Bobolink, Chestnut-collared Longspur, Grasshopper Sparrow, Lark Bunting, Loggerhead Shrike, Long-billed Curlew, Sharp-tailed Grouse, Sprague's Pipit, Upland Sandpiper, and Western Meadowlark. Other reptile, mammal and insect Species of Conservation Priority include Plains Spadefoot, Short-horned Lizard, Big Brown Bat, Little Brown Bat, Long-eared Bat, Long-legged Bat, Merriam's Shrew, Northern Long-eared Bat, Merriam's Shrew, Sagebrush Vole, Swift Fox, Townsend's Big-eared Bat, Western Small-footed Bat, Monarch Butterfly, and Regal Fritillary.

We understand that this prairie enhancement work is a long-term project that will be ongoing for many years and require the support and insight of local and expert partners. Following the advice and feedback we received from the Outdoor Heritage Fund Advisory Board last Fall, TRPL has decided to focus our efforts on moving the native seed development forward with our partners. Since last fall, TRPL managed to collect and clean the seeds from the Little Missouri Badlands region through the help of many volunteers and the support of a few generous benefactors. We have also found a capable and knowledgeable partner in Ben Geaumont. Dr. Geaumont will own and grow the native plants at the NDSU Hettinger Research Extension Center until they are ready to be harvested for healthy seed to be planted on site.

What we are asking Outdoor Heritage Fund's help with in this phase of work is the following:



1. Help supporting the vital work of NDSU in housing and cultivating the native plants (specifically: labor and transportation of the plugs to the NDSU facility), as well as supporting the production of new plugs for recovering crop loss at NDSU in 2024.
2. Help supporting construction of the trailhead that will connect to the Maah Daah Hey Trail for hikers, horseback riders and mountain bikers.
3. Preparing and seeding areas of TRPL's site that need attention before construction, specifically restoring the scar resulting from the fire break (earthwork, grading, seed purchase, labor, irrigation) and creating and planting the trailhead berm (seed purchase and earthwork), which will protect the site from artificial light spilling into the landscape.
4. Weed control (herbicide) on TRPL's site to protect the native plants when they are installed.
5. Installing wildlife-friendly cattle fencing, both permanent and temporary that will be necessary to implement our long-term grazing plan, which is vital to prairie management and ongoing maintenance of a healthy ecosystem.

The work outlined here will all take place approximately between June 2023 and August 2024.

The TRPL will not only be a place where visitors can learn about and from the life and lessons of Theodore Roosevelt, it will also be one of the most sustainable museums in the world. Central to our sustainability goals is to lead by example and be a resource for others. We will educate our visitors about our ongoing prairie enhancement and sustainable land management techniques, serving in a sense as a small nature center. All of TRPL's outdoor spaces, including our large, occupiable, green roof, will be publicly accessible year-round upon opening. The vision for the TRPL is bold, innovative, and transformative—especially for North Dakota. As a result, there is an urgency for enthusiastic local support. Outdoor Heritage Fund's partnership is vital to the success of the project.

Is this project part of a Comprehensive Conservation Plan?  Yes  No.

YES

If yes, provide a copy with the application.

*Note: Projects involving buildings and infrastructure will only be considered if part of a Comprehensive Conservation Plan. Please refer to the "Definitions" section at the back of the form for more details.*

**Management of Project – Provide a description of how you will manage and oversee the project to ensure it is carried out on schedule and in a manner that best ensures its objectives will be met.**

Include a brief background and work experience for those managing the project.

We have a talented collection of partners who are helping us achieve this work. Our site design team is made up of Resource Environmental Solutions (RES), Confluence, and Snøhetta. RES is the nation's largest ecological restoration company. Confluence is a landscape architecture, planning, and urban design firm. Snøhetta is a world-renowned Norwegian and U.S. based architecture and design firm. Together, these three teams have designed and will implement our prairie enhancement project. In addition to our site design team, JE Dunn is our construction manager, and Sherwood and AE2S are our civil engineers.

Benjamin Geaumont is our partner at NDSU and prairie enhancement consultant. He has been a wildlife and range science research assistant professor at the Hettinger Research Extension Center since 2011. Originally from Deering, New Hampshire, he holds a BS degree in Biology from Keene State College and MS and PhD degrees in natural resources management from NDSU. After completing his PhD, he worked as a post-doc at the HREC. In 2011, a multiple land use position was funded by the

ND legislature as part of the Soil Health Initiative. He applied and was offered the job which is his current position. Geaumont is responsible for the development of the Multiple Land Use program at the HREC which includes conducting research projects, writing manuscripts, mentoring both undergraduate and graduate students, as well as securing funds for future research projects. Geaumont's main research goal is to provide stakeholders with information to help them better manage the land for multiple uses; essentially providing applicable knowledge that will be useful for the management of natural resources. With a limited land base and many demands placed upon it, the idea behind the research is to help meet these demands through applied research.

These teams are overseen by TRPL's Design and Construction team led by Tony Erickson and Ken Vein. Tony is our Associate Director of Design and Construction. He has 18 years of experience in the design and construction industry. Over the past 9 years, Tony served as facility manager of a large healthcare system, where he managed over 500 million dollars of capital projects. Ken Vein is our Director of Design and Construction. For nearly 20 years, Ken served as a Senior Leader and as Administrative Director of Plant and Facilities for Altru Health System in Grand Forks, ND. Before that, Ken was the City Engineer and Public Works Director for the City of Grand Forks. He also served as program manager for the construction of the Alerus Center and Tri-Chair for Recovery following the devastating Red River flood in 1997. During flood recovery, Ken oversaw rehabilitation of all public infrastructure and implementation of permanent flood protection, working directly with the Corps of Engineers, FEMA, and Geological Survey. TRPL is coordinating all the partners on this project and ensuring consistent progress through regular meetings and tracking of project milestones. This prairie enhancement project is occurring simultaneously with the construction of the TRPL building and is a key part of that larger project. Before TRPL opens, we plan to add a full-time position that will be dedicated to overseeing our ongoing sustainable land management work.

### **Evaluation – Describe your plan to document progress and results.**

Please be specific on the methods you will utilize to measure success. Note that regular reporting, final evaluation and expenditure reports will be required for every grant awarded.

As the TR Library has many precedent-setting sustainability goals that we are pursuing, evaluation of our success and documentation of our progress and process is a top priority. We hope to achieve and go beyond LEED Platinum, SITES Platinum, and the full Living Building Challenge Certification—all of which require detailed evaluation and reporting and will be clear markers of achieving our sustainability goals.

For our native plant project, we have specific goals and expectations, which have been laid out for us by our ecologists. These goals pertain to the native plant project as a whole and not just the phase 1 work that we have focused this application on.

Seed Collection (2023, 2024) - The measure of success is to meet the target seed quantities and number of native species with wild seed collections spanning two years. We need 700-800 pounds of pure live seed for all plantings, with about 30 percent of that in the first phase of the project. We are striving to collect 100-150 species of plants native to North Dakota rangeland and that grow near the Library site. The actual quantities and number of species depend on the amount of rainfall, plant distribution and rarity, and other uncontrollable factors.

Expansion of Seed Availability (2023, 2024) - The measure of success is to meet the number of live plants needed to establish nursery beds at NDSU nursery facilities, in order to harvest in 2023 and 2024 additional quantities of seed of species that are hard to collect or that make up an important component of the seed mixes being planted at the Library site. We are targeting 30-35 species of native North Dakota rangeland plants, with the goal of providing about 35,000 live plants to be installed in

NDSU nursery beds. The harvested amount from mature nursery beds is estimated to be 100 pounds per acre of nursery beds, and the nursery beds may occupy up to four acres of ground. However, harvest depends on weather conditions and the speed at which the beds mature, so the actual amount harvested from beds may be less than the estimated amount.

Native Prairie Seeding and Planting at the Library site (2024, 2025) - The measure of success is to seed the required acreage and plant the required number of live plants in order to complete the planting plans at the Library site. Approximately 33 acres will be seeded in the first phase of the Library project, and at least 200,000 live plants will be installed on the roof, in the stormwater management areas, and other special locations of the site. Standard requirements for survivorship have not been set, but typically live plant survival should be greater than 90% at one year after planting, and seeded areas should support at three years after seeding over half the species that were planted.

## Financial Information

**Project Budget – Use the table below to provide an itemized list of project expenses and describe the matching funds being utilized for this project.**

Indicate if the matching funds are in the form of cash, indirect costs or in-kind services. The budget should identify all other committed funding sources and the amount of funding from each source. **A minimum of 25% match funding is required.** An application will be scored higher the greater the amount of match funding provided. (See Scoring Form.)

Certain values have been identified for in-kind services as detailed under “Budget Information” at the back of this form. Refer to that section and utilize these values in identifying your matching funds.

**NOTE: No indirect costs will be funded. Supporting documentation for project expenses, including bids, must be included or application will be considered incomplete.**

| 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 |
|-------------------------|-------------------|--------------------------------|-----------------------------------|------------------------------------|-------------------------------|----------------------------|
| Weed Control            | \$5,000           | \$ 5,000                       | \$2,480                           | \$                                 | \$                            | \$12,480                   |
| Firebreak Scar          | \$35,951          | \$30,000                       | \$                                | \$                                 | \$                            | \$65,951                   |
| Native Plants at NDSU   | \$123,087         | \$                             | \$3,600                           | \$                                 | \$                            | \$126,687                  |
| Trailhead Structure     | \$413,819         | \$200,000                      |                                   |                                    |                               | \$613,819                  |
| Trailhead Berm          | \$97,002          | \$50,000                       |                                   |                                    |                               | \$147,002                  |
| Crushed Aggregate Trail | \$242,334         | \$100,000                      | \$                                | \$                                 | \$                            | \$342,334                  |
| Cattle Fencing          | \$21,912          | \$15,000                       | \$                                | \$                                 | \$                            | \$36,912                   |
|                         | \$                | \$                             | \$                                | \$                                 | \$                            | \$                         |
| <b>Total Costs</b>      | <b>\$ 939,105</b> | <b>\$ 400,000</b>              | <b>\$6,080</b>                    | <b>\$</b>                          | <b>\$</b>                     | <b>\$1,345,185</b>         |

Note: Costs for seeding, fencing, pipelines, wells, and cover crops cannot exceed NRCS Field Office Tech Guide without justification. Projects involving perimeter fencing must follow NRCS eligibility standards.

**Budget Narrative – Use the space below to provide additional detail regarding project expenses.**

Weed Control:

Prairie Land Consulting out of South Dakota will be providing us with the herbicide necessary to eradicate noxious weeds (as dictated by ND State Law). They will spot spray in the spring (not in budget) and again in the fall of 2023, and continue in subsequent years. The estimated cost for the fall is \$10,000, which includes both the cost of the chemical as well as the labor.

Billings County provided \$2,480 of in-kind support in the form of the labor and supplies necessary to collect and release the beetles on TRPL's site as biocontrol agents. Labor: 7 people for 4 hours at \$15/hour (\$420). Supplies: \$200. This will be done 4 times June-July 2023-2024.

Restoration of Firebreak Scar:

We have contracted with Midwest Erosion Control, located in Dickinson, ND, to do this work. Breakdown of costs: \$58,462 for the specialized labor to do the earthwork. \$3,589 to purchase the native seed (for about 1 acre of land). \$3900 for the labor for establishment and irrigation.

Native Plant Nursery at NDSU:

We have contracted with Dr. Ben Geaumont and his team at NDSU Hettinger Research Extension to house and cultivate the native plants until they are ready to be harvested for healthy seed that will be planted on site. Our ecologists, RES, collected, cleaned, and propagated the wild collected seed. In June these plugs will be transported from the RES Greenhouse in Wisconsin to NDSU. This transportation cost is \$19,000. We are purchasing these plugs from RES (36,000 plugs) for \$28,529.12. NDSU labor for 2023-2024 is \$60,000. We are estimating a need for a 30% refill to cover crop failure, which would be \$15,558 paid to RES for purchase and shipment of these plugs. NDSU has offered labor and land in-kind: Dr. Geaumont's consulting on the project (approximately 80 hours at \$30/hour) for \$2,400. NDSU is not charging us for the use of the land where the native plants will grow approximately 2 acres for 12 months between 2023 and 2024, (estimating \$50/acre/month): \$1200.

Trail, Trailhead and Berm:

Trailhead structure cost breakdown: Excavation \$12,614, Structure \$83,047, Enclosure \$460,168, Carpentry \$20,418, Roofing \$34,295, Paint \$3,277.

Trailhead Berm cost breakdown: Fill \$53,363, Planting Soil Type 1 \$25,900, Plug Mixture Type 3: \$67,739. We have contracted with Midwest Erosion Control, located in Dickinson, ND, to do this work.

The Crushed Aggregate Trail will cross the property to join up to the Maah Daah Hey Trail: \$342,334.

Wildlife-Friendly Cattle Fencing:

We will install 8,372 ft of linear foot barb wire to help facilitate our grazing plans. The supplies for fencing is \$30,092. The labor to install fencing is \$6,820. A TRPL benefactor will pay \$15,000 of the fencing.

TRPL's Match Share

With generous support from our benefactors, TRPL will manage to cover \$400,000 (i.e., 30% of the total project cost) of this first phase of prairie enhancement work. In the budget above we have spread this out across the budget items, but this can be allocated however best to suit all parties.



**Sustainability – Indicate how the project will be funded or sustained in future years.**

Include information on the sustainability of this project after OHF funds have been expended and whether the sustainability will be in the form of ongoing management or additional funding from a different source.

The TRPLF believes that “nonprofit” is a tax status, not a business plan. Not only are we the beneficiaries of a \$50M sustaining endowment set up by the State of North Dakota to help with ongoing operating costs, but we are also counting on various revenue streams, from venue rental to corporate sponsorships, to offset future fundraising efforts in the long term. Our long-term plan for sustaining our land management and prairie enhancement work does involve future fundraising, but specifically to sponsor an Ecology Enhancement Endowment fund. This endowment would provide ongoing support for continued landscaping costs, including an onsite ecologist and/or an interpretive guide, as well as groundskeeping, composting programs, and educational programs related to Land Ecology Enhancement. Our plans to fundraise for this endowment reflect how vital we feel ecological enhancement and education are to our mission and sustainability ambitions.

**Partial Funding – Indicate how the project will be affected if less funding is available than that requested.**

If we receive only partial funding for this project from the OHF, we will likely continue with the project but may have to do it on a smaller scale and/or over a longer period of time, unless other funding can be secured. We would be so grateful for the contribution of the Outdoor Heritage Fund. We are eager, in fact, to involve every North Dakota-focused funder, as we understand our project to be beneficial for the entire state, and beyond. Moreover, Outdoor Heritage Fund’s endorsement and partnership will no doubt attract more North Dakota benefactors to this important work.

**Partnership Recognition - If you are a successful recipient of Outdoor Heritage Fund dollars, how would you recognize the Outdoor Heritage Fund partnership? \* *There must be signage at the location of the project acknowledging OHF funding when appropriate.***

We would honor and recognize a gift from the Outdoor Heritage Fund with physical naming in both signage on site as well as in our related publicity materials. While we would need to work out specifics in terms of location of this signage and wording, with full funding the Outdoor Heritage Fund would be an important supporter of the first stage of our prairie enhancement and land management work. TRPL would be honored to have the Outdoor Heritage Fund as a named supporter of our project that we believe is vital to the conservation efforts of the state of North Dakota.

**Awarding of Grants - Review the appropriate sample contract for your organization on the website at <http://www.nd.gov/ndic/outdoor-infopage.htm>.**

Can you meet all the provisions of the sample contract?  Yes  No YES

If there are provisions in that contract that your organization is unable to meet, please indicate below what those provisions would be:

~~~~~

ABOUT OHF:

The purpose of the North Dakota Outdoor Heritage Fund is to provide funding to state agencies, tribal governments, political subdivisions, and nonprofit organizations, with higher priority given to projects that enhance **conservation** practices in this state by:

Directive A. Providing access to private and public lands for sportsmen, including projects that create fish and wildlife habitat and provide access for sportsmen;

Directive B. Improving, maintaining and restoring water quality, soil conditions, plant diversity, animal systems and by supporting other practices of stewardship to enhance farming and ranching;

Directive C. Developing, enhancing, conserving and restoring wildlife and fish habitat on private and public lands; and

Directive D. Conserving natural areas and creating other areas for recreation through the establishment and development of parks and other recreation areas.

EXEMPTIONS

Outdoor Heritage Fund grants may not be used to finance the following:

- Litigation;
- Lobbying activities;
- Any activity that would interfere, disrupt, or prevent activities associated with surface coal mining operations; sand, gravel, or scoria extraction activities; oil and gas operations; or other energy facility or infrastructure development;
- The acquisition of land or to encumber any land for a term longer than twenty years; or
- Projects outside this state or projects that are beyond the scope of defined activities that fulfill the purposes of Chapter 54-17.8 of the North Dakota Century Code.

OHF funds may not be used, except after a finding of exceptional circumstances by the Industrial Commission, to finance:

- A completed project or project commenced before the grant application is submitted;
- A feasibility or research study;
- Maintenance costs;
- A paving project for a road or parking lot;
- A swimming pool or aquatic park;
- Personal property that is not affixed to the land;

- Playground equipment, except that grant funds may be provided for up to 25% of the cost of the equipment not exceeding \$10,000 per project and all playground equipment grants may not exceed 5% of the total grants per year (see Definitions/Clarifications for how this will be calculated);
- Staffing or outside consultants except for costs for staffing or an outside consultant to design and implement an approved project based on the documented need of the applicant and the expenditures may not exceed 5% of the grant to a grantee if the grant exceeds \$250,000 and expenditures may not exceed 10% of the grant to a grantee if the grant is \$250,000 or less (see Definitions/Clarifications for how this will be calculated);
- A building except for a building that is included as part of a comprehensive conservation plan for a new or expanded recreational project (see Definitions/Clarifications for definition of comprehensive conservation plan and new or expanded recreational project); or
- A project in which the applicant is not directly involved in the execution and completion of the project.

The goal of the Industrial Commission is that at a minimum 15% of the funding received for a biennium will be given priority for recreation projects that meet Directive D.

The following projects are not eligible for funding, unless there is a finding of exceptional circumstances by the Industrial Commission include:

- Construction or refurbishment of indoor/outdoor ice rinks,
- Construction or refurbishment of indoor/outdoor athletic courts and sports fields,
- Other substantially similar facilities.
- Infrastructure that is not part of a comprehensive conservation plan.
- Projects not meeting a minimum funding request of \$2,500.

Budget Information

In-kind services used to match the request for Outdoor Heritage Fund dollars shall be valued as follows:

- Labor costs \$15.00 an hour
- Land costs Average rent costs for the county as shown in the most recent publication of the USDA, National Agricultural Statistics Services, North Dakota Field Office
- Permanent Equipment Any equipment purchased must be listed separately with documentation showing actual cost. (For example: playground equipment)
- Equipment usage Actual documentation
- Seed & Seedlings Actual documentation
- Transportation Mileage at federal rate
- Supplies & materials Actual documentation

More categories will be added as we better understand the types of applications that will be submitted. We will use as our basis for these standards other State and Federal programs that have established rates. For example, the North Dakota Nonpoint Source Pollution Management Program has established rates. If your project includes work that has an established rate under another State Program, please use those rates and note your source.

Definitions/Clarifications:

Building - Defined as “A structure with a roof either with walls or without walls and is attached to the ground in a permanent nature.”

Comprehensive Conservation Plan - Defined as “A detailed plan that has been formally adopted by the governing board which includes goals and objectives--both short and long term, must show how this building will enhance the overall conservation goals of the project and the protection or preservation of wildlife and fish habitat or natural areas.” This does not need to be a complex multi-page document. It could be included as a part of the application or be an attachment.

New and Expanded Recreational Project means that the proposed building cannot be a replacement of a current building. The proposed building must also be related to either a new or expanded recreational project--either an expansion in land or an expansion of an existing building or in the opportunities for recreation at the project site.

Playground equipment calculation - Only the actual costs of the playground equipment (a bid or invoice showing the amount of the equipment costs must be provided) - cannot include freight or installation or surface materials or removal of old equipment, etc.

Staffing/Outside Consultants Costs - If you are requesting OHF funding for staffing or for an outside consultant, you must provide information in your application on the need for OHF funding to cover these costs. For example, if you are an entity that has engineering staff you must explain why you don't have sufficient staff to do the work or if specific expertise is needed or whatever the reason is for your entity to retain an outside consultant. If it is a request for reimbursement for staff time then a written explanation is required in the application of why OHF funding is needed to pay for the costs of that staff member(s) time. **The budget form must reflect on a separate line item the specific amount that is being requested for staffing and/or the hiring of an outside consultant.** This separate line item will then be used to make the calculation of 5% or 10% as outlined in the law. Note that the calculation will be made on the grant less the costs for the consultant or staff.

Maintenance – Activities that preserve or keep infrastructure in a given existing condition, including repairs. Repair means to restore to sound condition after damage, to renew or refresh; except repairs due to damage caused by Acts of God.

Scoring of Grants

Oral Presentation. Please note that you will be given an opportunity to make a ten-minute Oral Presentation at a meeting of the Outdoor Heritage Fund Advisory Board. These presentations are strongly encouraged.

Open Record. Please note that your application and any attachments will be open records as defined by law and will be posted on the Industrial Commission/Outdoor Heritage Fund website.

All applications will be scored by the Outdoor Heritage Fund Advisory Board after your ten-minute oral presentation. The ranking form that will be used by the Board is available on the website at <http://www.nd.gov/ndic/outdoor-infopage.htm> .

Awarding of Grants

All decisions on requests will be reported to applicants no later than 30 days after Industrial Commission consideration. The Commission can set a limit on duration of an offer on each application or if there isn't a specific date indicated in the application for implementation of the project, then the applicant has until the next Outdoor Heritage Fund Advisory Board regular

meeting to sign the contract and get the project underway or the commitment for funding will be terminated and the applicant may resubmit for funding. Applicants whose proposals have been approved will receive a contract outlining the terms and conditions of the grant.

Responsibility of Recipient

The recipient of any grant from the Industrial Commission must use the funds awarded for the specific purpose described in the grant application and in accordance with the contract. The recipient cannot use any of the funds for the purposes stated under Exemptions on the first page of this application.

If you have any questions about the application, the Commission can be reached at 701-328-3722 or outdoorheritage@nd.gov.

Revised: November 4, 2019, April 12, 2023

TRAILHEAD



**We are submitting this as
our Comprehensive
Conservation Plan**

THEODORE ROOSEVELT PRESIDENTIAL LIBRARY

ADAPTIVE LAND MANAGEMENT PLAN



NOVEMBER 23, 2022

DRAFT

PREPARED FOR:

JLG ARCHITECTS ON BEHALF OF THE

THEODORE ROOSEVELT PRESIDENTIAL LIBRARY FOUNDATION

SUBMITTED BY:

RESOURCE ENVIRONMENTAL SOLUTIONS, LLC



THEODORE ROOSEVELT PRESIDENTIAL LIBRARY

ADAPTIVE LAND MANAGEMENT PLAN

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Prepared for:

JLG Architects on behalf of the Theodore Roosevelt Presidential Library Foundation

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Doug Mensing, MS

Citation: Resource Environmental Solutions. 2022. *Theodore Roosevelt Presidential Library Adaptive Land Management Plan*. Theodore Roosevelt Presidential Library Foundation, Medora ND.

THE THEODORE ROOSEVELT PRESIDENTIAL LIBRARY SITE AND THE LIVING BUILDING CHALLENGE

As part of its mission to embrace and communicate the legacy of Theodore Roosevelt, the Theodore Roosevelt Library Foundation (TRLF) is pursuing the Living Building Challenge (LBC), administered by the International Living Futures Initiative (ILFI). LBC is among the most rigorous of sustainability programs in the world, encompassing the entire spectrum of human development activity in relation to local culture, economy, and the natural world.

In constructing the TRPL, the TRLF aims to:

- Honor the site’s past and present as a productive cultural landscape.
- Engage the local community and stakeholders.
- Restore and enhances ecological health and biodiversity.
- Foster education in sustainable grassland Land Management and Environmental Sciences.
- Design a landscape that provides access and calls attention to the site’s unique ecologies and terrains, and encourages visitors to slow down, look closer, and immerse themselves in the beauty of the Badlands.
- Contribute to the net positive water imperative by managing stormwater and restoration of degraded grassland to improve grassland vegetation and soil-water storage.

All projects pursuing LBC certification must define an LBC project boundary that represents the scope of work and potential construction site disturbance, so that these environmental impacts can be avoided and/or properly mitigated. The LBC boundary determines the “Project Area” used for calculations to determine compliance with certain LBC imperatives.

The LBC project boundary reflects the current scope of work in the SD base project together with the modified property ownership boundary, approximately 90 acres in total (Figure 1). The diagram also shows two potential options for the Theodore Roosevelt Presidential Library (TRPL) LBC project boundary.

Site Plan LBC Project Boundary Diagram

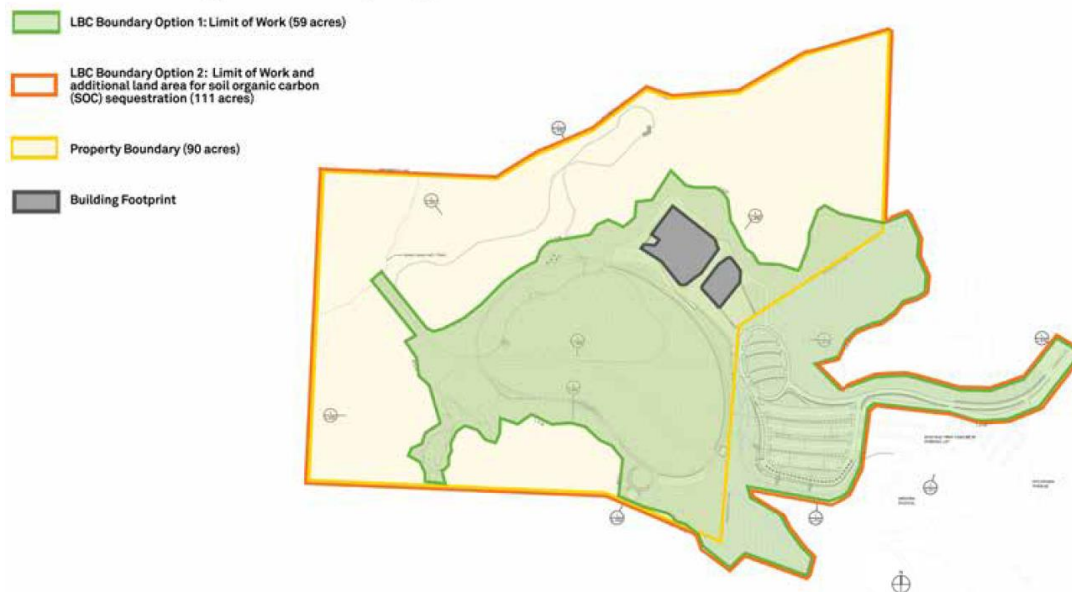


Figure 1 TRPL Site Living Building Challenge, Proposed Project Boundary

The TRPL Project team proposes "L2-Rural Zone" due to the history of farming, ranching and fire suppression on the site and prior ILFI clarification that open range land is considered prime agricultural land. This Transect is comprised primarily of land that used for agriculture and food production, plus outlying areas of towns.

The Living Building Challenge consists of seven performance categories or "Petals". All LBC projects must address the seven Petals through the Core Imperatives. Land Management is related to Ecology of Place (01), Net Positive Water (06), and Net Positive Carbon (08)

TRPL takes an ecological approach to land management by following these principles:

1. Design for a sustainable, native, regenerative, resilient, biologically rich and abundant landscape with healthy soils, which supports human use, biodiversity, wildlife habitat, and livestock grazing.
2. Connect the project culturally and ecologically to the larger regions – the Little Missouri Badlands and watershed, the Northern Great Plains, and grasslands worldwide.

The Living Building Challenge Criteria

The LBC criteria related to Land Management are summarized below.

Imperative 01 – Ecology of Place

- Protect wild and ecologically significant places and encourage ecological regeneration and enhanced function of the communities and places where projects are built.
- Avoid building on pristine greenfield, wilderness, prime farmland or in a floodplain.
- Preserve thriving vibrant ecological environments and habitats.
- Demonstrate a positive contribution to the ecology of a project's place and restore or enhance the ecological performance of the site towards a healthy ecological baseline.
- Assess cultural and social equity factors and needs in the community and consider those identified needs to inform design and process decisions.
- Use no petrochemical fertilizers or pesticides in the operations and maintenance of the on-site landscape. (ILFI indicated an exemption may be allowed to establishment a healthy landscape.)
- The TRPL site and Adaptive Land Management Plan will create and maintain an ecologically healthy and resilient landscape that responds to the community, provides access, and calls attention to the site's unique ecologies and terrains.

Imperative 06 - Net Positive Water

- 100 percent of a project's water needs must be met through captured precipitation or other natural closed-loop systems; all grey- and black-water must be treated and managed on-site through reuse, infiltration, or closed-loop system; and a one-week supply of potable must be stored on site for water resilience.
- The TRPL site and Land Management Plan will contribute to this requirement by managing stormwater with natural systems and restoring degraded grasslands to improve grassland vegetation and soils, and runoff infiltration and water storage.

Imperative 08 (I08) - Net Positive Carbon

- The facility and grounds must meet an exemplary standard for energy efficiency and carbon emissions management. The project strives to achieve holistic carbon neutrality over the long term, accounting for operational carbon, embodied carbon, and site sequestration.

- The project must supply 105% of annual energy usage with on-site renewable energy systems (12-month, verified performance); purchase a one-time offset for the embodied carbon in structural and interior materials and construction emissions; and implement a resilience strategy for one-week, emergency habitable operation supported by battery storage.
- The TRPL site and Land Management Plan will contribute to this requirement by sequestering carbon in the soils under a modified grazing-fire management regime; RES is providing a carbon sequestration methodology for review by ILFI and a third-party reviewer; if implemented, this is intended to reduce the amount of a one-time offset purchase for embodied carbon.

EXISTING CONDITIONS

Landscape Context

The TRPL site is located near the Little Missouri River just west of Medora, North Dakota. The site falls within the Little Missouri Badlands ecoregion, a highly dissected landscape forming a belt 300 km long and 15 to 40 km wide along the Little Missouri River in southwestern North Dakota. Adjacent land use includes ranching, urban development, agricultural practices, energy development and recreation.



Figure 2 Typical Badlands landscape (photos by RES & Snohetta)

Regional Climate and Seasonality

The region is part of a continental climate with long, cold winters and short, hot summers. Temperature ranges from 116° F to -40° F and annual precipitation is 15-16 inches. Weather includes violent thunderstorms, hailstorms, blizzards, and occasionally tornadoes.

Geology, Landforms & Soils

The site is underlain by weathered bedrock of the Sentinel Butte Formation, consisting of sandstone, siltstone, claystone, and lignite in layers several hundred feet deep. The rock of the Little Missouri Badlands is 55-65 million years old, deposited as sea bottoms during the Paleocene Epoch. The lowest exposed rock is the Bullion Creek Formation—a light, yellowish, soft sandstone seen in low creek valleys and near the Little Missouri River. Above this is the Sentinel Butte Formation, consisting of bluish gray silts and clays. This is the rock exposed at the TRPL

site. The Badlands began forming only 600,000 years ago, during the Pleistocene Ice Age. When continental glaciers arrived, a change in drainage patterns accelerated local erosion in the soft bedrock of the Bullion Creek and Sentinel Butte Formations (Godfred 1994). Erosion and alteration of the Badlands landscape continues today due to rain and melting snow, wind, frost-heave, and other forces (Bluemle 2016).

Groundwater & Water Features

There are no open water features on the TRPL site. Groundwater does not support open water systems on the Library site, but salty seepage areas—“saline seeps”—are present at many locations at the base of the blufftop. There are no floodplains in or around the site. The Little Missouri River lies to the east. It flows northward past Medora and through the Theodore Roosevelt National Park and enters the Missouri River in central North Dakota.

Vegetation, Land Cover, Land Use

Land cover includes relatively natural, usually vegetated, areas or habitats (e.g., forests, prairies, old fields, water bodies) and altered cultural areas (e.g., turf, cropland, impervious surfaces). Land use refers to practices on the land, such as timber harvesting, agriculture, and residential development. Land use influences land cover, but land cover mapping is preferred for assessing and managing natural resources.

Historical Vegetation & Land Use. The TRPL site was very likely dominated by mixed-grass prairie in the late 1800s. Shrubland was likely present in woody draws and on steep north-facing slopes. Wetlands in general were rare and saline seeps uncommon. Until the late 1800s, indigenous people managed the landscape’s vegetation and wildlife through repeated use of fire that cleared brush and maintained grasslands. Non-native shrubs, grasses, and forbs—invasives that moved into the Badlands since the late 1800s—have affected the structure, function and species composition of native ecosystems.

Trends in Vegetation & Land Use. European settlement in western North Dakota began in the 1870s and accelerated in the 1880s, introducing an agricultural lifestyle based on livestock and crop production. This settlement resulted in fire suppression, which eliminated a rejuvenating disturbance that had operated for several thousand years. Grazing shifted from short, intensive episodes with long rest periods, to season-long continuous grazing every year. Native grasslands have been adversely affected by this management change. Trees and shrubs have colonized and spread, native grass dominance and forb diversity have declined, and invasive plants have been allowed to gain a foothold and spread. The landscape continues to evolve as the climate, natural disturbances, and land use practices change over time.

Existing Land Cover. The TRPL site supports several ecological land cover types that provide wildlife habitat and act as a large pool of species for replenishing local plant communities as needed (Table 1, Figure 3).

Table 1. Ecological Land Cover Classification of the TRPL Site

RES Name	TRPL Site Location	USFS Name	Acres (In Site Bdy.)	Acres (In Site Layout)
Disturbed Prairie	Plowed ungrazed on blufftop	Western Wheatgrass - Crested Wheatgrass	0.4	10.6
Mixed-grass Prairie/Invasives	South-central plateau (lower ground)	Western Wheatgrass - Blue Grama - Threadleaf Sedge	10.4	10.5
Mixed-grass-Bluegrass Prairie	west and north sides of blufftop plateau	Western Wheatgrass - Blue Grama - Threadleaf Sedge	21.5	23.5
Fractured Bedrock Prairie	Eroding blufftop edge, sparse vegetation cover	Little Bluestem - Grama Grass - Threadleaf Sedge	6.1	6.1

RES Name	TRPL Site Location	USFS Name	Acres (In Site Bdy.)	Acres (In Site Layout)
North Slope Mixed-grass Prairie	Northerly-facing slopes	Little Bluestem - Grama Grass - Threadleaf Sedge	7.3	9.5
Woody Draw	Valley bottoms with watercourses; lower slopes of north-facing side valleys	Green Ash - Elm – Box-elder / Chokecherry	12.1	12.8
Valley/South Slope Mixed-grass Prairie	Southerly-facing slopes and narrow valleys	Western Wheatgrass - Green Needlegrass	17.8	20.5
Badlands Vegetation	North and south edges and west quarter of site	Badlands Sparse Vegetation	16.4	19.1
Mesic Prairie	Future Conditions: In parking lots and roads, and near building	Prairie Cordgrass - Sedge	N/A	N/A
Saline Seep	Southwest corner of site at base of bluff	Saltgrass - Foxtail Barley Great Plains Saline Marsh Division	0.9	0.9
Developed Land	East of Library site boundary	N/A	N/A	6.3

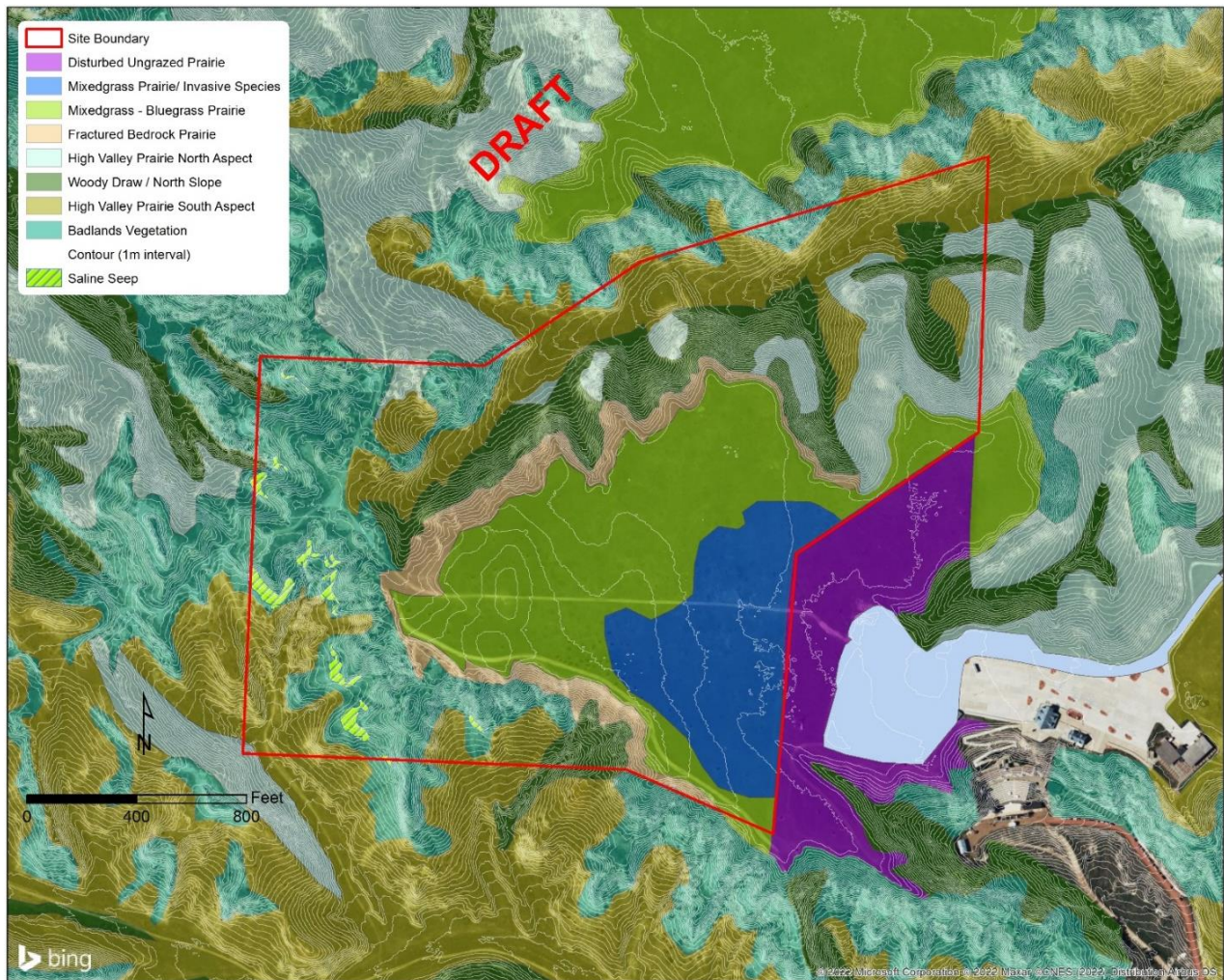


Figure 3 Ecological Land Cover at the TRPL Site.

LAND MANAGEMENT AREAS

Land management will focus on six kinds of areas. Each area is defined by its vegetation, function, location, and management practices. As decisions about the management regime are being refined, the information below is subject to change. Establishing dominance by native plant species is the goal of land management.

- 1. Grassland.** Areas where the final condition is grassland where grazing and fire management can be practiced.
- 2. Woody Draws.** Areas where the final condition is woodland where fire management and possibly grazing can be practiced.
- 3. Stormwater Management Areas.** Areas near impervious surfaces where management excludes prescribed burning and grazing.
- 4. Rooftop.** The roof of the Library building, where management excludes prescribed burning and grazing, but may include haying.
- 5. Lawns.** Areas subjected to frequent foot traffic.
- 6. Temporary Disturbed Area.** Areas that are disturbed and required rapid revegetation; usually replanted with a more durable planting palette.

1. Grassland Management Areas

These included current land cover of: Disturbed Prairie, Mixed-grass Prairie/Invasives, Mixed-grass - Bluegrass Prairie, Fractured Bedrock Prairie, North Slope Mixed-grass Prairie, Valley/South Slope Mixed-grass Prairie.

Disturbed Prairie, Mixed-Grass Prairie/Invasives

Areas will be seeded with the Mixed-Grass Restoration Mix in a complete replacement of disturbed areas with high diversity native plants. Long term management will involve grazing biomass to 50% biomass removal once a year and burning every 10 years. The outcome of management should be a nearly weed-free prairie with no trees or shrubs at end of year 3 after seeding.

Mixed-Grass - Bluegrass Prairie

Areas will be seeded with the Mixed-Grass Enhancement Mix intended for overseeding in existing prairie on level blufftop locations. Long term management will involve grazing to 50% biomass removal once a year and burning every 10 years. The outcome of management should be higher plant species diversity and no trees and few shrubs at end of year 3 after seeding.

North Slope Mixed-Grass Prairie, Fractured Bedrock Prairie

This area will be seeded with the North Slope Prairie Enhancement Mix intended for overseeding in existing prairie on northerly slopes. Long-term management will involve grazing to 50% biomass removal once a year and burning every 10 years. The outcome of management should be higher plant species diversity at end of year 3 after seeding.

Valley/South Slope Mixed-Grass Prairie

This area will be seeded with the Valley & South Slope Prairie Mix intended for overseeding in existing prairie in valley bottoms and on southerly slopes. Long term management will involve grazing to 50% biomass removal once a year and burning every 10 years. The outcome of management should be higher plant species diversity at end of year 3 after seeding.

2. Woody Draw

This area will be seeded with the Woody Draw Mix intended for ground-seeding in ravine bottoms where naturally heavy tree and shrub cover and fire-sterilized areas occur. Long term management will involve grazing to 50% biomass removal once a year and burning every 15-25 years. The outcome of management should be nearly continuous native groundcover at end of year 3 after seeding; good graminoid and forb diversity; canopy cover of trees and shrubs 75-100 percent.

3. Stormwater Management Areas

Stormwater Management Areas include rock swales and mesic prairie areas. Each area will be planted using live plants from their respective species mixes, Stormwater Rock Swale Mix and Stormwater Mesic Prairie Mix. Stormwater rock swales will be largely rock lined and planted with native shrubs, grasses, sedges and showy forbs. They function to carry stormwater runoff from parking lots, roadsides and impervious surfaces. Mesic prairies are large depressions in the stormwater management system, primarily in and around parking lots and the turnaround near the TRPL building. Long-term management includes hand removal of vegetation at end of growing seasons, inspections and repairs after large storm events. The outcome should be nearly continuous diverse native plant cover by end of the second year after installation.

4. Rooftop

This area will be planted using the Library Roof Mix. Live plants will be installed to establish a green 100,000 sf roof over the Library. Long-term management includes haying the roof once each a year (all cut material removed) to make next year's growth appear uniform and to maintain proper soil conditions for growth and flowering. The outcome should be continuous native cover and good native plant diversity, with complete season of bloom from May through October.

5. Native Lawn

Native lawn will receive heavy foot traffic by people. It will be seeded with the Lawn Mix for bare ground seeding of grasses and sedges that withstand human trampling. Long-term management includes overseeding as needed to restore native dominance and cover and mowing if desired to make vegetation uniform. The outcome should be nearly continuous low-stature graminoid cover, with self-healing capacity for minor damage.

6. Temporary Disturbed Ground

After initial restoration is completed, any future disturbed areas will be seeded with the Temporary Disturbed Soil Mix intended for low-cost bare ground seeding to provide temporary and quick-establishing cover where prairies are damaged. The temporary disturbed ground mix is an emergency mix, not intended for long-term cover and replaced in the next growing season. The outcome of applying the mix should be 75% cover by native plants and <5 percent by invasive plants at the end of the growing season.

ECOSYSTEM APPROACH

The land management approach recommended here is an “ecosystem approach”. In brief, this entails first using less expensive, nature-based methods to restore ecological processes and the vegetation structure and composition appropriate to an ecosystem and its location. This often involves replacing dominant invasive vegetation with native species of the target plant community. Typical tools include prescribed fire, restoration of hydrological regimes, biocontrol, and physical removal of invasive vegetation by haying, mowing or grazing. Only then is targeted herbicide application considered, combined with other interventions like seeding and planting. An ecosystem approach is designed to tap into nature’s self-healing capacity, improve a plant community’s ecological health and resilience, and do this using lower cost, nature-based solutions.

An ecosystem approach puts plant communities on a trajectory that is consistent with the trajectory prior to its disruption, making plant communities more adaptable to future change—to be resilient, in other words.

Actions that restore processes and structures are implemented first because these may restore vegetation structure and increase species diversity without seeding and planting. If that fails to restore the desired structure and biodiversity, seeding and planting become necessary.

The implementation sequence in an ecosystem approach is:

- Restore natural disturbance regimes (e.g., fire, flooding, grazing).
- Introduce biocontrols (i.e., natural enemies or predators of plants) where available and feasible.
- Remove and control invasive trees and shrubs physically.
- Install native trees and shrubs as needed to restore vegetation structure.
- Remove and control invasive herbs physically.
- Install herbaceous seeds and plants as needed to restore vegetation structure.
- Use herbicides sparingly and only when other methods fall short of goals.
- Add diversity if plant community does not respond.
- Monitor ecosystem response at all stages in the process and adaptively manage.

These actions occur in the initial restoration and short-term management phase. Once established, management enters the long-term phase. “Adaptive management” is structured decision-making given uncertainty of outcomes. It reduces uncertainty by using a cycle of planning, implementation, monitoring, evaluation, adjustment, and further implementation. Adaptive management, used in the best restoration programs, begins in the initial restoration phase and continues indefinitely during the long-term management phase.

Initial Restoration and Short-Term Management Phase

Ecological restoration has short- and long-term management phases. The short-term phases are often labor-intensive and costly (Figure 3). A significant investment is necessary for three or more years. Tasks often include re-introducing natural disturbances like fire and intensive-long rest grazing; re-establishing natural hydrological cycles; using biocontrol, physical methods, and herbicides to control invasive plant species; and seeding and planting native vegetation. The time required depends on starting condition, weather, response of vegetation, site size, and unique factors, such as access. After establishment, activities shift to long-term management.

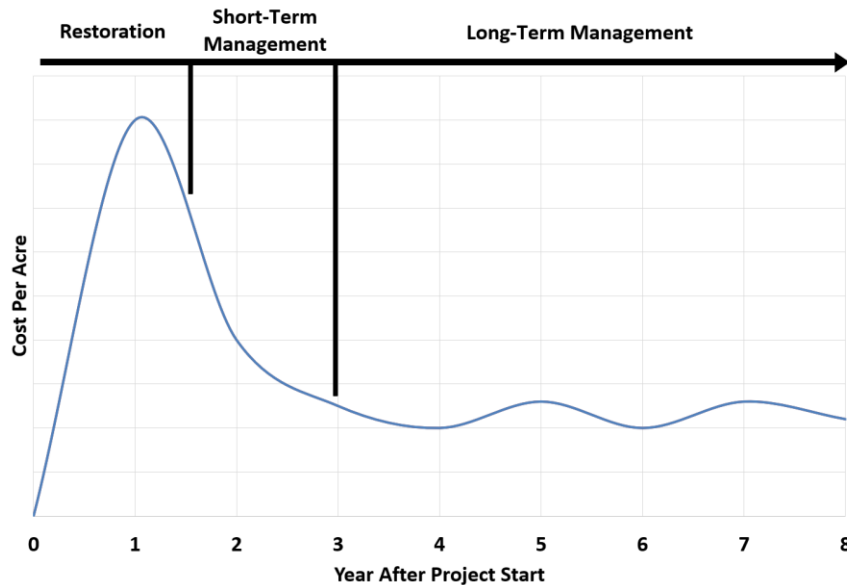


Figure 4 Generalized costs of restoration and management over time

Planting a new prairie or wetland is usually called “restoration” or “re-creation”, whereas “enhancement” describes activities where natural conditions exist and improvement can occur with less effort. For instance, enhancement might entail removing invasive shrubs and overseeding native grasses in an existing woodland.

Long-Term Management Phase

The TRPL construction schedule indicates long-term management of the land could begin in summer 2025 (Appendix B). Although it has a lower per-acre cost, long-term management is often neglected, putting the expensive restoration investment at risk. Monitoring and management occurs each year in the best restoration programs. Monitoring can be as simple as a “walkabout”—systematically walking and inspecting the site to identify issues that must be addressed in next year’s annual work plan. Or it can be a research program, quantitatively documenting ecosystem response to restoration and management and publishing the findings.

Land managers are focused on a few long-term management tasks.

- Maintain disturbances (e.g., fire, flooding) that perpetuate a diverse, resilient plant community.
- Selectively remove or control invasive plants (e.g., precise mechanical removal or spot-herbicide).
- Re-seed disturbed or poorly developing areas.
- Re-plant tree, shrubs, and herbaceous plants that have died.

Most North American ecosystems need disturbances that remove dead plant material, stimulate flowering and seed production, or create microhabitats for plants and animals to perpetuate themselves. Controlled or prescribed burns are a common tool to mimic the former North America fire regime in prairies, savannas, wetlands, and some forests and woodlands. Harvesting hay mimics fire effects, as does grazing, to a lesser extent.

Some people argue that nature has been around a very long time and can take care of itself. Others think that more important issues and problems face us and that managing natural ecosystems does not merit the expense. While these are valid views, they are not the whole story.

Studies over the last half century clearly demonstrate that, without ecological stewardship, natural resources change in ways do not always benefit people or support ecosystem services (Alstad et al. 2016, Le Maitret al. 1996, Leach

and Givnish 1996). A common problem in unmanaged grasslands, for instance, is invasion by non-native leafy spurge (*Euphorbia esula*), Canada thistle (*Cirsium arvense*), Kentucky bluegrass (*Poa pratensis*), smooth brome grass (*Bromus inermis*) and crested wheatgrass (*Agropyron cristatum*). When these non-native species invade natural areas, a cascade of negative effects follows. Another problem is accumulation of dead leaf litter due to fire suppression and too-light grazing.

Some of the more severe effects of not managing land or managing it without attention to ecological conditions, are that native plants are displaced, soil chemistry and plant composition change, and ground vegetation is shaded—leading to species loss, reduced biodiversity, additional invasions, and lower resilience during periods of extreme weather, for instance. Floral resources for pollinators are eliminated, reducing the amount and variety of food for wildlife and further depressing wildlife populations.

Large, protected and ecologically complex natural areas may resist these trends, but without proper management even here quality declines over time. With some level of consistent management, the situation can be stabilized and even improved. This management plan identifies and prioritizes management actions to improve the health and resilience of natural areas and resulting ecosystem services and recreational benefits at the TRPL site.

Ecosystem Services

Natural areas are vital to a community and visitors for many reasons. For example, natural areas absorb and store carbon from the air, helping to reduce greenhouse gases. Wetlands and forests in river and stream floodplains help reduce downstream flooding. Prairies, savannas, and forests on the landscape absorb huge quantities of rainfall, which in turn reduces the amount of runoff and sediment that reaches a watershed's rivers, streams and lakes. Schools, organizations, and families can learn about the natural world in natural areas; these are formative moments for children who otherwise spend much time making virtual connections indoors. Natural areas make life better because people can stroll, bike, take in the scenery, or simply relax in a natural setting.

Scientists call the benefits that natural resources provide “ecosystem services” (Figure 3). Ecosystem services support life on Earth—and they save people money over the long term by using nature to provide services that people would pay for by constructing infrastructure. A milestone scientific study completed in 2005, called the Millennium Ecosystem Assessment, summarized the state of ecosystem services worldwide (Hassan et al. 2005). Since then, dozens of scientific papers have been published demonstrating the financial savings of healthy ecosystems. For instance, building flood control structures or rebuilding after floods would be more costly without floodplains and the natural capacity of watersheds to absorb and regulate the water moving through them.

Besides supporting and regulating the human environment, the TRPL site will serve recreation and promote people's well-being. Research in the last 20 years has demonstrated a strong link between time spent in or near nature with better physical and mental health. Even viewing nature out a window can improve test scores in school children or elevate moods in adults. Of course, people love to fish, hike, bike, ski, picnic, camp, and be with family in nature. Just sitting still or within sight of nature can nourish the spirit and reduce stress.

TRPL's character also emerges from its natural resources. Natural resources create a sense of place that attracts people and businesses and convinces them to remain in an area. Healthy ecosystems not only a signal that ecosystem services are operating, but also that society and the economy are being supported and enriched. By protecting and managing TRPL's natural resources, the level of ecosystem services be stable and even improve.

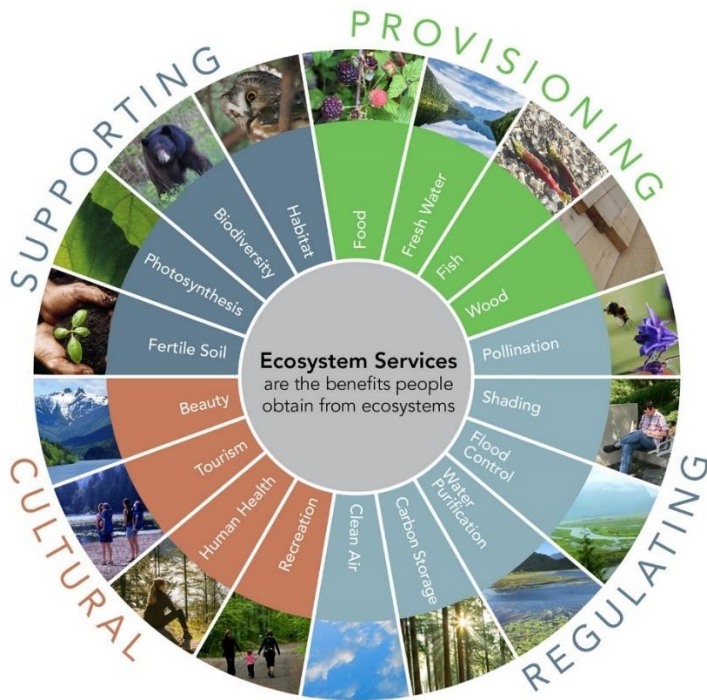


Figure 5 Ecosystem services that support life on Earth. Source: Metro Vancouver Regional Planning 2018

Evaluation of Ecosystem Recovery Potential

This evaluation was performed to meet the Living Building Challenge. The TRPL site was evaluated by comparing its attributes to a reference system, the Theodore Roosevelt National Park. RES ecologists completed the Evaluation of Ecosystem Recovery proforma based on their knowledge of both sites, quantitative sampling at both sites, and understanding the goals, objectives and site-specific indicators for the TRPL project (Appendix E).

From this evaluation, a Long-Term Recovery Wheel was generated (Figure 4). This evaluation relies on a five-star rating system, assigned to six attributes of ecosystems (Table 2) and 18 sub-attributes (Appendix G).

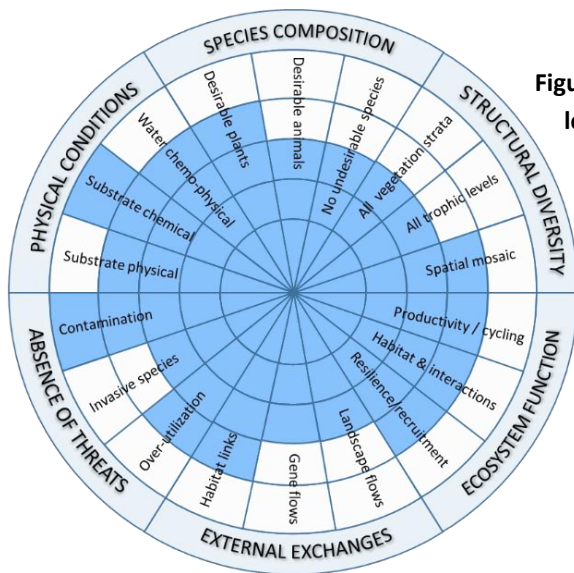


Figure 6 Recovery Wheel showing potential future recovery levels for the TRPL site under modified land management practices. (See Existing Conditions Report for current recovery wheel levels.)

RES Ecologists also complete a Recovery Wheel for the Performance Period (Figure 7, Appendix F). This period is expected to conclude at the end of 2027, after four years of ecological restoration and implementation of a new grazing regime of intensive short periods of grazing followed by a long rest period—called “adaptive multi-paddock (AMP) grazing”.

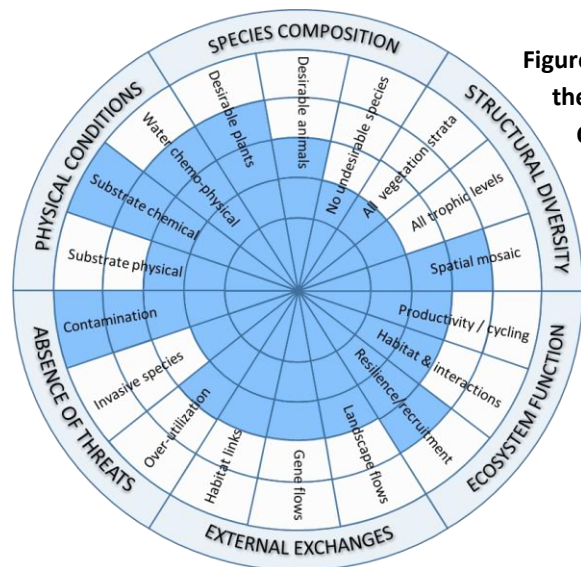


Figure 7 Recovery Wheel showing the status of the TRPL site at the end of the Performance Period in late 2027. (See Existing Conditions Report for current recovery wheel levels.)

Table 2. Key ecosystem attributes to evaluate baseline conditions (McDonald et al. 2016).

Attribute	Description
Absence of threats	Direct degradation drivers (e.g., overgrazing, contamination inputs, potential for invasive species introduction) are low or close to absent.
Physical conditions	Environmental conditions (including the physical and chemical conditions of soil, water, and topography) required to sustain the ecosystem are present.
Species composition	The native species characteristic of the appropriate ecosystem are present, whereas invasive species are minimal or effectively absent.
Structural diversity	Appropriate diversity of key structural components, including demographic stages, faunal trophic levels, vegetation strata, and spatial diversity are present.
Ecosystem function	Appropriate levels of growth and productivity, nutrient cycling, decomposition, habitat, species interactions, and types and rates of disturbance are present.
External exchanges	The ecosystem is appropriately integrated into its larger landscape or aquatic context through positive abiotic and biotic flows and exchanges.

LAND MANAGEMENT PRACTICES

Several land management practices are expected to be used in different management areas at the TRPL site.

- Integrated Pest Management (all management areas)
- Short-and Long-Rotation Fire Management (grassland management areas, woody draws)
- Grazing (grassland management areas)
- Haying (green roof, grassland management areas)
- Mowing (pavers, lawn, stormwater management areas)
- Seeding and Plant Installation (all management areas)

1. Grassland Management Areas

Grazing. The grazing concept for the TRPL site envisions a grazing-fire management regime to replicate the northern Great Plains conditions for over ten thousand years—to which plants, animals, and other life forms are adapted. This will be a change from the season-long continuous grazing with limited fire practiced widely since the 1880s.

Reasons and outcomes for this change are first and foremost to make the site safe—by reducing the accumulated dead plant materials resulting from no fire and too-light grazing. Maintaining and increasing biodiversity is an anticipated outcome of this change, together with additional atmospheric carbon incorporated into the soil and the improvement of nutrient cycles. There is an educational component, illustrating the region’s ecological and cultural history, the adaptive use Native Americans made of these processes and the region’s changing resources.

A grazing regime that replicates the occasional use by bison herds resulted in rapid plant removal, trampling and nitrogen-rich waste elimination. Grazing will not manage tree and shrub vegetation in woody draws and on northerly slopes; fire is used for this purpose. The buildings, road, and infrastructure are excluded, leaving some sixty acres of land on the blufftop and in valleys to manage with grazing. The easily eroded badlands slopes and fractured bedrock prairie are unlikely to attract grazing animals due to steep slopes and sparse vegetation.

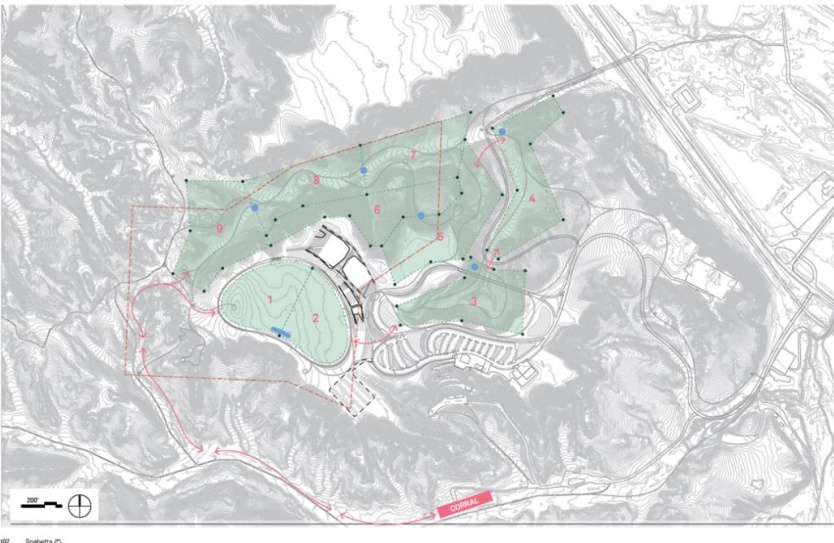


Figure 8 Illustrative concept for AMP grazing (subject to change)

An illustrative grazing concept explains how such a grazing regime would work (Figure 8). The actual grazing regime will be developed in later design, requiring discussions with grazers regarding the details of

implementation. The grazing regime ideally will achieve multiple goals of biodiversity protection and improvement, ranch operation efficiency, and education. Livestock would be driven from a corral to the entrance to pasture 1. When about 50 percent of biomass is removed or trampled—the utilization target—livestock are moved to pasture 2 and so forth until all pastures have been grazed. Livestock are then driven back to the corral.

A small herd of heifers, possibly with calves, is envisioned, which will reach the utilization target in each pasture in very few days. Grazing pressure, in pounds of animal per acre, must be high to replicate the effect of transient bison herds. Each pasture is not grazed long as the herd rotates through. Fire is introduced every 10 years to reduce dead leaf litter and set back trees and shrubs which often are not affected by grazing animals.

A perimeter fence and easily-installed electrified polywire fences would be used to define temporary pastures. Only two pastures would exist at any one time, built just before livestock arrive and removed after they leave. The next pasture is constructed before livestock are moved into it using the polywire from the pasture fencing being dismantled. Moving pasture fences takes less than an hour.

This is not traditional grazing where livestock grazes a large pasture continuously until up to 90 percent of the above-ground biomass is consumed. AMP grazing asks the grazer to monitor the effect of livestock on the vegetation each day. NDSU Extension has developed a Grazing Stick, an idea tool to measure biomass removal. (See <https://www.ag.ndsu.edu/livestockextension/grazing-management-folder/range-and-pasture.>)

A key difference between traditional rotational grazing and AMP grazing is the amount of biomass removed and the time required to graze it. In rotational grazing livestock are allowed to graze until biomass is mostly removed. Despite rest, removing over half the top of a plant stresses its root systems. The plant cannot photosynthesize enough sugar to keep all the roots alive. When roots die back, above-ground parts of the plants also die back, reducing plant cover and root competition, and opening grazed land to weed invasion. Forage quality suffers, too, as livestock avoid poor quality plants like Canada thistle and leafy spurge and concentrate on higher food-value plants. This leads to a change in biodiversity as “increasers” become numerous and “decreasers”—a significant part of a prairie’s biodiversity—dwindle. A grazer who follows an adaptive management cycle—design, implement, assess, adapt—by watching the effect of livestock grazing on vegetation, will achieve the desired outcomes more often than a grazer who does not.

Prescribed Fire Management. Grasslands worldwide have always burned, North American included. The grasslands and woodlands of the Great Plains in the continent’s center have experienced fires set by Native Americans for over 10,000 years—and lightning strikes for millennia before that. Native Americans used fire as a tool to attract and drive game and clear travel routes, among other reasons. The animals and plants of the Great Plains have been winnowed over time to respond positively to fire—increasing flowering and germinating seedlings on bare ground after fire. Fire reduces dead leaf litter, stimulating plant growth earlier in the year as sunlight warms the exposed soil. The pulse of nutrients released by fire are quickly taken up by plants.

Interestingly, a large wildfire burned the site and hundreds of acres around it on April 1, 2021. Areas dominated by the non-native crested wheatgrass and Kentucky bluegrass initially saw a reduction in the abundance of those species, with increases in blue grama, side oats grama and western wheat grass. However, the plentiful rain in early 2022 and throughout the growing season favored the quick spring growth of Kentucky bluegrass (*Poa pratensis*) over large areas on the western blufftop; in 2022 it was also evident that the wildfire also killed most of the little bluestem (*Schizachyrium scoparium*) that had characterized the western blufftop.

Grassland restorationists have taken advantage of the benefits of fire since the 1930s when Aldo Leopold, among others, began experimenting with prescribed burning in existing and created prairies. In the ninety years since, ecologists, range managers, and grassland restorationists have learned how to plan and safely carry out prescribed

burns. More recently, researchers have combined fire with grazing (“patch-burn grazing”) to further replicate the natural disturbance regime that shaped the ecology, plants and animals of Great Plains grasslands.

Climate, fire, and grazing are the three big disturbance factors that historically shaped the landscape. All affect the diversity and health of plants and animals across the Great Plains. While the climate is not controllable, grazing effects can be managed by the style of grazing, the season of use, and the type of animal. Fire can also be managed by the frequency and season of burning, and by weather conditions. These disturbances are interacting forces rather than independent factors (Weir et al. 2013).

A combination of grazing and burning has been shown to reduce woody vegetation invasion. Cattle have been used to enhance the effectiveness of a follow-up burns by knocking down dead standing fuels and creating openings in woody areas where grasses can grow (Smith et al. 2007). Restoring the fire-grazing interaction is one management strategy that could decrease the likelihood of wildfires (Kral-O’Brien et al. 2020, Winter et al. 2012).

Prescribed Burning in North Dakota. Individuals planning a prescribed burn should follow a Prescribed Burn Plan (Appendix D) developed by a qualified individual. This plan outlines the environmental conditions under which the burn can safely be conducted. A local Natural Resources Conservation Service (NRCS) or North Dakota Forest Service office can assist in developing a prescribed burn plan.

There are several factors to consider before carrying out a prescribed burn. These include fuel character on the day of the burn (amount, type, moisture content), wind (speed, direction, potential for change), relative humidity, air temperature, soil moisture, slope of the area, smoke management measures, and notifications of neighbors, and police and fire department (NRCS 2012). A permit may be needed.

Prescribed burns should not be conducted when the Rangeland Fire Index is in the Very High or Extreme category. The local sheriff’s department or the National Weather Service posts a Rangeland Fire Index each day. Fire weather forecasts also can be obtained from the National Weather Service (<http://www.crh.noaa.gov/bis/> or <http://gacc.nifc.gov/nrcc/predictive/weather/weather.htm>).

Management of Sharp Tailed Grouse. A mating or dancing ground (lek) of sharp-tailed grouse (*Tympanuchus phasianellus*) once existed on the south side of the blufftop. This bird uses vast grasslands with scattered brush and very few trees. Mating and courtship occur on the leks, a central focus of the local grouse population and part of the home ranges of individuals using the lek (Danzl 2018).

Sharp-tailed grouse begin breeding near the TRPL site in March or April (Drummer et al. 2011). Sharp-tailed grouse prefer leks with short, sparse vegetation of grass, forbs, and some shrubs (Danzl 2018). Changes in vegetation structure or other changes may cause birds to abandon a lek (NRCS 2007 and Prose 1987). Disturbance by people can cause birds to not reproduce despite a lek’s existence (Landel 1989, Connelly et al. 1997, Baydack et al. 1987).

Fire creates and maintains sharp-tailed grouse habitat. Grouse need cover and food provided by a variety of grasses, sedges, forbs, and shrubs (USDA 2007, Sexton 1979, Grange 1948). Severe fires in fall may eliminate valuable spring cover (Grange 1948). Spring fires stimulate flowering, seed and fruit production, and top-kill shrubs that may have become too dense. Considerations for managing leks are presented in Appendix C.

Seeding and Plant Installation. Lists of native species under consideration for use in the project are organized in the 100% Design Development Documents by land cover type and moisture tolerance. Species lists were developed by RES ecologists based on field observations during site visits and descriptions of native plant communities in the T. Roosevelt National Park South Unit (Von Loh et al. 2007).

All grasslands areas will be seeded with native forbs and graminoids. Disturbed Prairie and Blufftop Mixed-grass Prairie/Invasives areas will be seeded with the Mixed-Grass Restoration Mix intended for complete replacement of

disturbed areas by a high-diversity mixed-grass prairie. Other grassland management areas will be overseeded with enhancement mixes designed to increase plant species diversity and abundance by three years after seeding.

Native seed mixes require specific conditions for germination. Installing seed materials at inappropriate times can cause delays in seed germination and significantly reduce the viability of the plantings. For this reason, the specified permanent seed mixes should be installed when site conditions are appropriate for equipment operation and proper seed-soil contact.

Seed in restorations is usually provided as pure live seed (PLS) and genetic origin reported. All native and live seed material must have a genetic source origin within a 150-mile radius of the project site to ensure genetic adaptability to local climate and soil conditions.

2. Woody Draws

During an April 1, 2021, wildfire, woody draws, north slopes, and the edges of the blufftop prairie lost most of their juniper cover (*Juniper communis*, *J. horizontalis*, *J. scopulorum*). Post-burn observations in May found native shrubs resprouting: rose (*Rosa sp.*), skunkbush sumac (*Rhus trilobata*), chokecherry (*Prunus virginiana*), golden gooseberry (*Ribes aureum*) and snowberry (*Symphoricarpos orbiculatus*).

This area will be seeded with the Woody Draw Mix intended for bare ground seeding in ravine bottoms with naturally heavy tree and shrub cover and bare soils mineralized by intense fire. Woody Draws are the only places considered for shrub planting, besides near the building and parking lots.

Initial concept for management is to include woody draws in a grazing regime and carry out a prescribed burn once every 10-25 years. Implementing this management regime aims to establish nearly continuous native groundcover by the third year after seeding, with good graminoid and forb diversity.

3. Stormwater Management Areas

Stormwater Management Areas include rock swales and mesic prairies near impervious surfaces. Each area will be planted using live plants, according to planting palette Stormwater Rock Swale and Stormwater Mesic Prairie respectively. Local rock, native grasses, sedges and forbs will be installed in the conveyance swales of parking lots, roadsides and impervious areas. Mesic prairie will be planted in large depressions of the stormwater management system and in the parking lot and turnaround area near the building.

Long term management for both areas will include vegetation mowed and hand-removed at the end of each growing season; and inspections and repairs after large storm events. The outcome should be nearly continuous diverse native plant cover by the end of the second full growing season after installation.

4. Rooftop

RES recommends haying the green roof with a walk-behind tractor (single-axle / 2 wheeled version of a 4-wheel farm tractor). Walk behind tractors can operate the three implements necessary to hay a green roof (mower, hay rake and hay-baler). The operator will cut the hay using a sickle bar or disc mower attachment. After the hay dries properly, a hay rake is used to rake the hay into 'windrows', which allow more efficient gathering (by hand, or using a Hay-Baler). Some of the clippings are left behind to return to the soil as fertilizer while the rest is removed for hay. A bale wrapper can be fitted to the walking tractor, to convert green hay into "haylage" (silage) bales.

Aesthetically hay would be harvested at the end of the growing season, but for optimal forage quality hay should be harvested at the ideal nutrient and moisture range for the type of storage structure being used and livestock being fed (USDA 2010). To allow adequate recovery after hay harvest the TRPL may limit harvest to once every two years.

After mowing, one or more passes are made with a tedder, to fluff up and allow the hay to dry. At least one pass with a rake is needed, then one with the baler. Bales must be removed immediately to allow new growth to begin. Periodically allowing full flowering and seed set by plants on the roof will enable seed to be blown into the surrounding landscape.

To protect nesting birds haying should be postponed until after July 15 and haying begun in the center of the roof to flush birds towards the perimeter. Cutting towards the base of the roof, where it meets the ground, is an additional precaution that can protect nesting birds.

5. Native Lawns

Lawns will be seeded using the Lawn Mix, a bare ground mix of grasses and sedges that can withstand human trampling. Long term management includes overseeding as needed to restore native dominance and cover and mowing if desired to make vegetation uniform.

GENERAL MANAGEMENT PRACTICES

Integrated Pest Management

RES encourages employing an Integrated Pest Management (IPM) approach (Appendix A). All control measures (mechanical, cultural, biological, and chemical) are considered and used as appropriate. The combination is determined by the vulnerabilities of the invasive plants being controlled.

Spot herbicide application will be employed during the establishment period, when the ecosystem is actively being restored to bring back the dominance by native plants. During long-term management, however, herbicides will not be used except as a last resort after other methods have failed to control an aggressive invasive plant.

Herbicides with petrochemicals listed on published ingredients are on the LBC Red List (version 4.0). LBC would like to significantly curb or eliminate these items. Red List represents the “worst in class” materials, chemicals, and elements known to pose serious risks to human health and the greater ecosystem.

ILFI provided a list of herbicide products (Appendix A) that were submitted in 2018 by another LBC applicant. At that time, ILFI reviewed the published manufacturer ingredient lists for each product listed to determine compliance with LBC’s Red List of approved herbicides from previous project. RES evaluated whether the approved products below would be effective controls for three problem species at the TRPL: crested wheatgrass (*Agropyron cristatum*), Canada thistle (*Cirsium arvense*) and leafy spurge (*Euphorbia esula*)(Appendix A).

Invasive plants create a seedbank that germinates for years. Increasing native plant cover and root density is the most effective way to suppress the germination and growth of invasive plant seedlings.

Erosion Management – IN DEVELOPMENT

- Grading and Soil Preparation
 - Addressing Soil Compaction
- Preparing for Seed Installation
- Seed Installation
 - Temporary Stabilization of Disturbed Ground
- Final Stabilization Measures
 - Straw, Hydromulch, Erosion Control Blanket, Coir Rolls & Mats, Encapsulated Soil Lifts, Scour Protection
- Vegetation Establishment Maintenance

Adaptive Management

Restoration and management plans need to be flexible. Restoration is often not implemented according to plan because timing of funding may not align with field operations, the response of ecosystems may force adjustments in technique, and the management needs of an ecosystem may change in as new threats and conditions arise. New scientific findings and insights also change restoration plans and management practices. For these reasons, a land management plan should be viewed as a starting point in a process of restoring biodiversity and natural processes to natural areas, subject to amendment as conditions and information change.

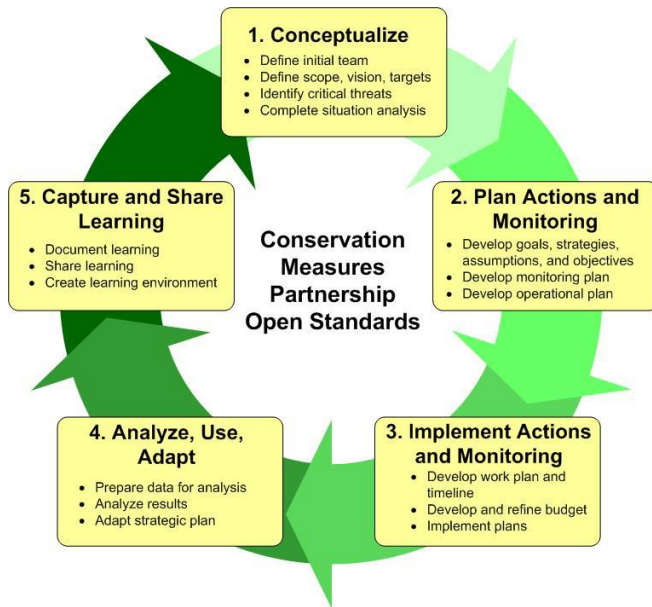


Figure 9 Adaptive management cycle. Source: Conservation Measures Partnership 2022

Regular monitoring and reporting provide feedback on a restoration program’s effectiveness. Monitoring also generates information to justify changes in the plan. Adaptive management is an approach to structured decision making in the face of uncertainty, with an aim to reducing uncertainty over time by using a cycle of planning, implementation, monitoring, evaluation, adjustment, and further implementation (Figure 6). Adaptive management is used in the best restoration programs, begins during initial restoration work, and continues indefinitely as natural areas are managed into the future.

INDICATORS OF ECOLOGICAL HEALTH AND RESILIENCE

General ecological health and resilience indicators help guide restoration and management actions for a given location at a given time. They help by identifying the point at which the expected outcome is achieved. Overall that outcome is to establish an ecologically healthy, relatively low-maintenance native plant community or ecosystem. Indicators chosen for the TRPL site are:

- Percent bare ground. The amount of bare ground in rangeland indicates the effect of grazing and is related to ecological processes such as runoff infiltration rate, plant cover, soil microbial activity, and germination of seedlings.
- Percent native plant cover. The amount of ground blanketed by native plant cover indicates the effect of grazing and suitability of habitat for many wildlife species. A higher percentage of native plant cover generally results in greater abundance of nectar, pollen, seeds, fruits, and insect life that provide much of the food at the lower levels of the food chain in grasslands.
- Percent invasive plant cover. The invasive plants at TRPL generally reduce the livestock forage value of the rangeland by competing with other more palatable species.
- Number and abundance of native plant species. In general, a high number of plant species distributed evenly across a landscape, results in a greater variety of food and animals using that landscape. Supporting rare plant species is also a way to preserve biodiversity in the Little Missouri Badlands region.
- Number and abundance of bird and butterfly species. Birds and butterflies indicate the suitability of habitat for two large groups of animals. Moreover, they are easy to detect, and most are easy to identify, making it possible for volunteers to carry out annual censuses of these species.
- Amount of soil organic carbon (SOC). Soil organic carbon accrues in grassland soils at different rates, depending on many factors, but most importantly, on the grazing regime. One grazing regime in particular, adaptive multi-paddock (AMP), results in higher rates of SOC accrual in soils than the current continuous grazing practice or other grazing practices such as reduced stocking or rotational grazing. Measuring SOC indicates the effectiveness of the grazing regime at replicating the historically high levels of SOC accrual that occurred in North American grasslands.
- Area of actively eroding locations. Several ravines are actively eroding, head-cutting into the nearby bluffs because the vegetation cover is too sparse. It is expected that changing the grazing regime and overseeding with native species will reduce water runoff by increasing the organic matter content in soils, which creates greater soil porosity and higher soil infiltration rates.

MONITORING – IN DEVELOPMENT

Seeing the trends in ecological health and resilience indicators requires regular monitoring. This can be a rapid, simple assessment or quantitative sampling and analysis. Scheduling a monitoring visit each year, followed by a management plan for the coming year, protects the restoration investment and ensures that a plant community continues its trajectory to greater ecological health.

Monitoring is best conducted by a qualified biologist, ecologist, or other professional able to identify native plant species and recognize undesirable plant species for treatment. In seeded areas, vegetation monitoring is done in the growing seasons, when vegetative cover is well developed and weeds can be readily identified and controlled. Measuring the indicators above will help establish whether trends in vegetation, soils and wildlife are positive, negative, or neutral.

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APPENDIX A – EVALUATION OF HERBICIDES FOR USE AT TRPL DURING ESTABLISHMENT PHASE

RED LIST APPROVED SPECIES

Lisa Carey Moore (ILFI staff) provided a list below of herbicide products that were submitted by another LBC project in 2018 (Table 1). At that time, ILFI reviewed the manufacturer’s ingredient lists for each product to determine compliance with LBC’s Red List of approved herbicides from previous project. RES reviewed these approved products for their effectiveness at controlling three problematic species at the TRPL site: crested wheatgrass (*Agropyron cristatum*), Canada thistle (*Cirsium arvense*), leafy spurge (*Euphorbia esula*).

Table 1. ILFI-Approved Herbicides and Suitability for Use at TRPL Site

Lontrel	Selective post-emergent herbicide that controls certain broad-leaf weeds in turf and certain ornamental plantings, such as conifers and non-leguminous woody species, in landscapes and nurseries. Lontrel can be used on warm-season and cool-season turf grasses. Can be used to control Canada thistle.
Oryzalin	These herbicides are selective and used as a pre-emergent applied herbicide for the control of broadleaf weeds and annual warm season grasses. Can be used as a pre-emergent to control leafy spurge.
Fusilade	Selective post emergent turf and ornamental herbicide that controls a long list of both perennial and annual grass weeds in a variety of turf and landscape areas. Not suitable for TRPL.
Gallery	Pre-emergence product for control of broadleaf weeds in established areas of turfgrass, landscape ornamentals, field grown ornamentals, container grown ornamentals, groundcovers/perennials, ornamental bulbs, non-cropland, and Christmas tree/conifer plantations. Not suitable for TRPL.
Image	Post-emergent herbicide that can be used on southern turf grass and selected ornamentals. Not suitable for TRPL.
Katan	Katana Turf Herbicide is a selective herbicide that controls a broad range of broadleaf weeds in zoysia grass, buffalo grasses, bermudagrass, centipede grass, seashore paspalum and other warm-season turfgrass. Not suitable for TRPL.
Q4	Selective pre-emergent control of grass and broadleaf weeds that are in established turfgrass. Not suitable for TRPL.
Resolute	Selective pre-emergent control of grass and broadleaf weeds that are in established turfgrasses, sod nurseries, field-grown, landscape and container ornamentals; established wildflower and perennial plantings; and Christmas tree farms. Not suitable for TRPL.
RoundUp	NOT ON ILFI APPROVED LIST. Strongly recommended for use at TRPL during 5-year restoration and establishment phase of project, but not thereafter. Effective on Canada thistle and crested wheatgrass.
2,4-D	NOT ON ILFI APPROVED LIST. Strongly recommended for use at TRPL during 5-year restoration and establishment phase of project, but not thereafter. Effective on leafy spurge. See below memo regarding IPM approach to leafy spurge control.

In addition, RES strongly recommends that glyphosate (trade name RoundUp) be approved for use during the restoration and establishment period (years 1-5) because it is an effective control for Canada thistle, leafy spurge and crested wheatgrass. Due to its effectiveness, short residence time in the soil, and low risk at the concentrations used in ecological restoration, it is widely used in ecological restoration. (Reported risks of cancer and damage to the environment from glyphosate are based on its use at higher agricultural concentrations and in broadcast spraying of cropland.) RES strongly recommends that 2,4-D also be approved for use during the

restoration and establishment period because it is an effective control for leafy spurge and does not harm native grasses; this would preserve the surrounding grass matrix to compete with and suppress leafy spurge seedlings.

Experienced, trained restoration workers can apply both herbicides discretely with minimal drip or drift. They would not, however, be used beyond the restoration and establishment period, when carrying out long-term management activities.

Land management at the TRPL site will use an Integrated Pest Management (IPM) approach in which biocontrol , mechanical removal, and cultural practices are employed before chemicals are used. Each invasive plant species is evaluated for life history traits that are vulnerable to attack, and specific controls are prescribed in a holistic sequence. Successful IPM requires several years and managers must be flexible in their use of control tools. The effect of a control tool should be evaluated each year and the next year's work planned based on the response of the invasive plant to the control.

Soil disturbance should always be avoided as that creates opportunities for weed seeds in the soil seed bank to germinate. Control measures should always be implemented before plants produce seed, to reduce the seed rain that replenishes the soil seed bank. Ideally managers should strive to detect new colonies of invasive plants and control them while they are small. In addition, managers should avoid spreading invasive plant seed by washing boots and tools and cleaning vehicles, equipment and animals that have been within infested areas. Weed control measures will be communicated to the US Forest Service and Medora Foundation.

If herbicides must be used, they will be applied at rates recommended for site conditions and specified on the product label. Herbicides will be used during the restoration and establishment period, to re-establish the native plant cover and biodiversity that has been lost due to continuous grazing. This period can last up to five years, or until 2028. Thereafter, in long-term management, an IPM approach would employ mechanical removal, biocontrol, and cultural practices first, and use limited quantities of herbicides in discrete areas only if other techniques failed and the risk of invasive plant expansion on the site was severe enough.

PROBLEMATIC INVASIVE PLANT SPECIES AT THE TRPL SITE

Leafy spurge is one of the most aggressive and damaging weeds in the northern Great Plains, preventing grazing on tens of thousands of acres of rangeland.

- Fairly successful biological control is available (flea beetles). Control is never fully achieved, however, due to fluctuations in beetle abundance from year to year. Biological control is most effective in combination with one or two other techniques.
- Mechanical control (mowing, hand-pulling, tilling) typically is not successful because the entire root system must be removed. Mechanical methods can even increase plant density if root fragments remain.
- Sheep or goats can be confined to areas with high leafy spurge density and reduce the plant's cover. Multiple grazing episodes are needed in a single year to kill plants. Native plants will be subject to the same grazing pressure, which will also kill them.
- Because other methods will not eliminate spurge, and because spurge can quickly return to areas from which it was removed, herbicide application is strongly recommended to kill the remaining plants.

Crested wheatgrass crowds out native plants; it grows in tight bunches that leave little room for other plants.

- No insect biological control agents are available.

- Palatability to livestock means grazing can be used before seed production begins. Mowing can occur prior to seed production and will deplete the plant's root energy reserves. Repeated mowing or grazing is not recommended due to its impact on native plants.
- Crested wheatgrass is distinguishable from native grasses.
- Dense stands can be controlled with glyphosate when the plants are 8-15 cm tall and before seed formation. Up to three years of spot application are required to eliminate crested wheatgrass.
- An effective petrochemical-free herbicide does not exist to manage crested wheatgrass.

Canada thistle quickly spreads via vegetative shoots and seeds, forms dense stands, and is not eaten by livestock.

- Biological control is practiced in North Dakota, but is not suitable for large infestations or landscape-level control.
- Cutting thistles prior to late-June flowering is key to preventing spread. Canada thistle flowers after cutting, however, so cutting must be repeated from mid- to late summer. Equipment used must be inspected and thoroughly cleaned to ensure that seeds are not being spread elsewhere.
- Increasing the cover of competitive native plant species together with mechanical control will suppress Canada thistle. Native plants that germinate and grow quickly (i.e., early successional species) can be seeded and used to control thistle where native plant cover is sparse or soil has been disturbed.
- Herbicide application is optimal in fall when Canada thistle is building root mass (rather than growing stems, leaves and seeds). Systemic herbicides are carried with sugar into the roots. Lontrel is an ILFI approved herbicide. Table 2 identifies a list of herbicides that are recommended to be effective against Canada thistle by North Dakota State University.

Other major problematic species at the TRPL site are Kentucky bluegrass (*Poa pratensis*), smooth brome grass (*Bromus inermis*), and yellow sweet clover (*Melilotus officinalis*). As these are widespread and firmly embedded in the mixed-grass prairie community, TRPL will control them by improving range quality using AMP grazing and overseeding with native plant seed mixes.

BIOLOGICAL CONTROL AGENTS

Leafy Spurge Biological Control

Effective and well-established biocontrol agents include the black flea beetle and leafy spurge beetle (*Aphthona A. nigricutis*, *A. lacertosa*) and the longhorn stem/root-boring beetle, *Oberea erythrocephala*.

Aphthona adults feed on leafy spurge foliage larvae feed on the roots. Larvae feed on both the fine feeder roots used by the plant to absorb water and nutrients and the storage tissue of the root crown. This feeding both destroys root tissue directly and causes the plant to be more susceptible to other methods of control, such as herbicides and infection from soil borne pathogens. Research at North Dakota State University found flea beetle establishment was best on silt loam, silt clay loam, clay loam and clay soils with an organic matter content of 6 percent to 9.5 percent.

Flea beetles were least productive in fine sand to loamy fine sand soils with an organic matter content of 1 percent to 3 percent. In addition, the release area needs to be well-drained and not subject to frequent prolonged flooding or standing water, which will kill the larvae. Generally, flea beetles have not been very successful in controlling leafy spurge growing along waterways, in shaded areas or in very sandy soil.

Black Flea Beetle (*Aphthona nigricutis*) (photo by Noah Poritz). Native to Europe and adapted to drier sites and sandier soils, the black flea beetle has been most successful in establishing and controlling leafy spurge in dry, open, sandy-loam sites. It has performed poorly in high-density leafy spurge infestations on clay soils. Wild populations in North America are 85-99 percent female. Collect this beetle in July to allow females to mate with the low number of males; otherwise most females will be unmated and the released population may fail.



Near Edmonton, Canada, leafy spurge cover decreased from 40 to 1.7 percent five years after the black flea beetle was released. At two sites in North Dakota, black flea beetle and leafy spurge beetle reduced leafy spurge cover from 45 to 7 percent over three years and reduced stem density nearly 40-fold.

Herbicides combined with black flea beetles or leafy spurge beetles or with the gall midge (*Spurgia esulae*) controlled leafy spurge better than either method alone. It is necessary to employ the biocontrol separately from herbicide application to avoid harming the flea beetle population.



Leafy Spurge Beetle (*Aphthona lacertosa*) (photo by Noah Poritz). Native to Eurasia on loamy to loamy-clay soils, in dry or wet habitats, its effect in North America at controlling leafy spurge is best on moderately dry to moist sites. The leafy spurge beetle has a broad ecological amplitude, enabling it to persist and control spurge over a larger range of habitats than the black flea beetle.

Longhorn Beetle (*Oberea erythrocephala*) (photo by Noah Poritz). The longhorn beetle is native to Eurasia where it feeds within the stems and roots of spurge. Adults appear in June and July and feed on young leaves, flowers and stems for two weeks before laying eggs. Adult beetles girdle the upper stem, chewing a hole just above the girdle where they insert an egg and seal it with latex.



During the next month, larvae mine down the stem into the root crown and roots. Larvae feed on the crown and roots until March or April the next year and pupate in the root crown in May. The beetle is most effective in sunny areas near streams and on the banks of large rivers. It is less reliable as a biocontrol than the two flea beetles.

Crested Wheatgrass Biological Control

No insect biological control agents are available.

Canada Thistle Biological Control

Two biological control agents were introduced and a third accidentally introduced. None are effective at reducing the weed on a large scale.

Memo

To: Amy McCann, Tony Erickson, T. Roosevelt Presidential Library

Cc: Kurt Marsh, Matt McMahan, Snohetta

Doug Mensing, Matt Lasch, Ryan Templeton, RES

Fr: Kim Chapman, RES

Re: Leafy Spurge Control at TRPL

Dt: 10/6/2022

No: RES 104838

Issue

- Leafy spurge (*Euphorbia esula*), a North Dakota-listed noxious weed that reduces the economic value of rangeland, grows at the TRPL site.
- Leafy spurge grows in small patches of <10 square meters and larger patches covering a quarter acre or more. See Figure 1 below for details.
- Controlling leafy spurge is essential to optimally using the TRPL site for grazing and so that the site can serve as an example of good range management.
- Leafy spurge is difficult to control due to its deep and extensive root system. It is not harmed by fire and resprouts from roots. Once established, it expands colonies by root growth and seed, which can be ejected from the seed pod up to 15 feet from the mother plant. Germination is high and seed remains viable in the soil for up to ten years.
- Different methods are used to control leafy spurge. Each method has its pros and cons.
- The more aggressive the control measures, the more damage that will occur to native plants. Accepting some leafy spurge—rather than total eradication—increases options for treatment, especially biocontrol which generally does not eradicate leafy spurge but, of the tools discussed below, has the least impact on native plants.

Control Tools

- **Pasture Management.** Establishing and maintaining a dense cover of native vegetation, with its equally dense root mass below, reduces the density of leafy spurge through competition for light, water, and nutrients. Dense native plant cover is more resistant to leafy spurge invasion than pasture with sparser vegetation. Continuous grazing with insufficient rest between grazing episodes weakens root systems, producing sparser vegetation generally and creating opportunities for leafy spurge germination. Close-cropping of pasture also weakens root systems. Short periods of intensive grazing that remove no more than half the plant biomass, followed by a long period of rest, is the best way to maintain dense native vegetation, promote root growth, and in turn create resistance to leafy spurge invasion.
- **Biological Control.** Larvae of the black flea beetle (*Apthona nigriscutis*) and of the leafy spurge beetle (*A. lacertosa*) feed on roots of leafy spurge, damaging them and reducing the vigor of plants. They are the most successful leafy spurge biocontrol species in North Dakota. If burning, mowing or herbicides are used in combination with beetles, do not use these techniques during the growing season (May-September) when adult beetles are active. Biocontrol avoids harm to all other plants

and the general environment, but a few years are needed for the beetles to establish control over leafy spurge. Also, since the beetles rely on leafy spurge for survival, their population will fall if they successfully and dramatically reduce leafy spurge cover. This can set in motion a boom-bust cycle of rising beetle abundance followed by rising leafy spurge abundance. In years of low leafy spurge abundance, other measures may be used to drive the spurge abundance lower. In general, however, if biocontrol is used without other measures, some leafy spurge will persist. In healthy range, however, competition from native plants will help keep spurge density and abundance low.

- **Herbicide Control.** A few to several applications of a systemic herbicide for up to three years can greatly reduce or even eliminate leafy spurge. Among several herbicides recommended (imazapic, picloram, glyphosate, dicamba), the broadleaf herbicide 2,4-D may be most effective at reducing leafy spurge with the fewest side effects. It has among the shortest half-lives of the widely used herbicides. It targets broadleaf plants, leaving native grasses largely unharmed. While potentially toxic to mammals, birds and fish (but not honeybees), the risk can be managed by careful application at the lowest concentration possible. Spot-spraying is most effective. While there is a risk of drip and drift with spot-spraying, a careful operator working under ideal weather conditions can minimize side effects. Spot-spraying uses less herbicide than wick-application (though wick-application is more targeted). If wick-application is used to minimize drip and drift, the style of wick should be appropriate for the plant's growth form—sparse, short leaves and a narrow, flexible stem. It may not be possible to wick-apply using an ATV if the spurge height is equal to that of surrounding vegetation. Using a hand-held wick-applicator is more time-consuming than spot-spraying and ATV wick-application. Lastly, a prescribed burn prior to herbicide application will stimulate growth of leafy spurge and remove dead thatch, making herbicide application more effective. If thatch is minimal due to a prior fire and grazing, then there is less benefit from a prescribed burn before herbicide application.
- **Mechanical Control.** Mowing or burning combined with herbicide application can reduce the density of leafy spurge. Mowing or burning alone will not reduce density unless repeated multiple times in a growing season—but many native plant species will be harmed by frequent mechanical control because the roots will be starved of nutrition from photosynthesis by the leaves. Hand pulling individual stems of young plants, or clipping individual older plants, can reduce leafy spurge growth temporarily, but to be effective the practice must be repeated three or four times in a growing season until the spurge no longer resprouts.
- **Grazing.** Goats or sheep grazing in confined pastures can reduce leafy spurge density; cattle and horses avoid leafy spurge. Allow the animals time to eliminate leafy spurge seed from their digestive tract before moving them off the site. The animals may need to graze each pasture several times before leafy spurge is noticeably reduced. However, the frequent, close grazing required to control leafy spurge will negatively affect many native species as well.

Recommended Approach at TRPL Site

Small Patches

- **Pasture Management.** 2023. Rest the pasture to increase the density of native plant cover and allow native plant root systems to expand.
- **Herbicide Control.** June 2023. Spot-spray 2,4-D herbicide at lowest effective concentration to individual plant stems and leaves of leafy spurge. (Wear gloves and mask. Wash clothes after applying herbicide.) Observe effect two weeks later. If effect is weak, re-apply in October 2023.
- **Herbicide Control.** 2024. Repeat herbicide application on surviving individuals.

Large Patches

- **Pasture Management.** 2023. Rest the pasture to increase the density of native plant cover and allow native plant root systems to expand.
- **Biological Control.** June-July 2023. Collect beetles from off-site areas and release them in June-early July in the dense patches outside the limits-of-work line (see Figure 2 below). Large patches lie

a) west and north of the proposed building and downslope and b) in the grasslands of the valley north of the building and on adjacent grassy slopes (not shown in Figure 2).

- **Biological Control.** June-July 2024. Check effect of beetles on leafy spurge. If the beetles are effective, some reduction in density should be seen; two years after introducing beetles, leafy spurge stem density may be 50 percent lower than the initial density. If effect is weak, collect and release a second round of beetles in June-early July 2025 in the dense patches.
- **Herbicide Control.** June 2023. Spot-spray 2,4-D herbicide at lowest effective concentration to scattered individual plants and plants at the edges of the large patches. (Wear gloves and mask. Wash clothes after applying herbicide.) Observe effect two weeks later. If effect is weak, re-apply in October 2023. Herbicide in combination with flea beetles is more effective than flea beetles alone.
- **Herbicide Control.** 2024. Repeat herbicide application on surviving individuals.
- **Pasture Management.** 2024. Consider using sheep in small pastures around leafy spurge patches. Sheep in combination with flea beetles are more effective than flea beetles alone. Time the grazing to not fall within the time that the herbicide remains active, to minimize risk to grazing animals.

Figure 1. Leafy spurge concentrations on the TRPL site

Leafy spurge at TRPL is concentrated around the proposed building location, with scattered small colonies elsewhere on the blufftop. Blue dots represent large patches and purple dots small ones of less than 10 square meters each. Leafy spurge also grows in small and large patches in the valleys south and north of the blufftop and along the north edge of the blufftop, extending downhill towards the woody draw.

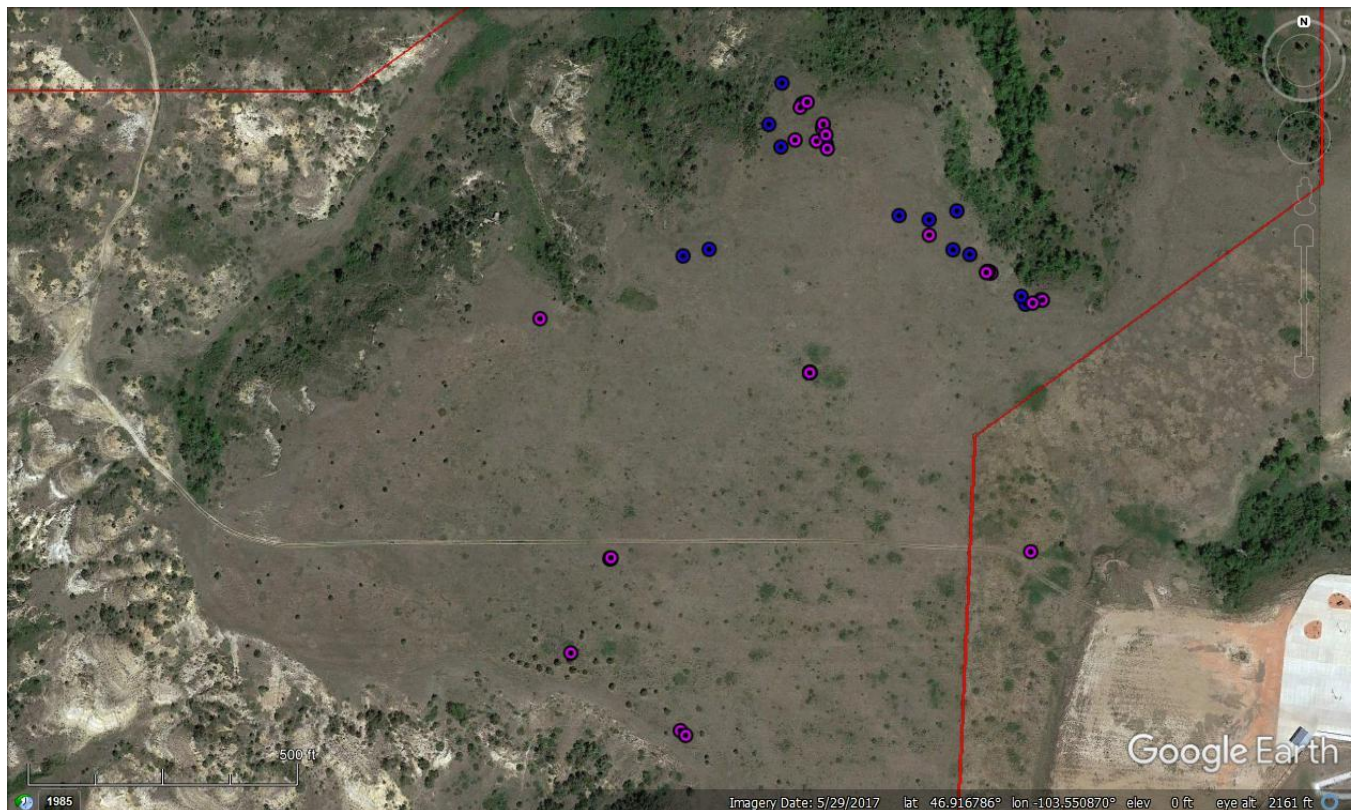


Figure 2. Limits-of-work line at the TRPL site

Limits-of-work line is shown in red. Areas inside this line are expected to be graded, excavated and disturbed during the construction of the building and other infrastructure. Leafy spurge control is not needed inside the limits-of-work line.



APPENDIX B – SCHEDULE OF PLANT PROCUREMENT AND CONSTRUCTION (CURRENT 7/20/2022)

Project Phase		DESIGN DEVELOPMENT & CONSTRUCTION DOCS (TO JULY 2023)								BIDDING - AUG-OCT		CONSTRUCTION (TO DEC 2025)								July 4 Opening	
LOD = Limits of Disturbance		2022				2023				2024				2025				2026			
Plant Material	Area Involved	Activity	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
Native seed	All restoration & enhancement zones & native lawns	Seed Procurement	Assess commercial availability				Assess commercial availability														
			Wild collect seed June-Oct				Wild collect seed June-Oct														
			Clean, test & tag bagged wild harvest seed - Nov-Feb				Clean, test & tag bagged wild harvest seed - Nov-Feb														
		Grow Seed in Nursery Beds					Nursery bed planting (live plugs of key forbs) - May				Nursery bed planting (live plugs of key forbs) - May										
											Harvest, clean, test & tag bagged										
		Installation					Installer quals & product meet performance standards				Drill restoration seed mix in disturbed areas - March				Drill? key forb seed from nursery beds into disturbed areas - March						
							Installer quals & product meet performance standards				Broadcast enhancement seed mix in existing prairies - March				Broadcast key forb seed into existing prairies from nursery beds - March						
Long Term Maintenance									Year 1 Establishment Maintenance -				Year 2 Establishment Maintenance -				Long-Term Maintenance Begins				
Native live plants	Library roof, stormwater mesic prairies & bioswales; building grounds, trail verges, etc.	Procure Seed to Grow Live Plants									Use wild harvest, commercial purchase, & nursery bed harvest										
		Test Mock-Up	Secure live plants & build mock-up				Evaluate performance				Evaluate performance										
		Plant Growing (Greenhouse)									Grow live plant plugs - Dec-Mar				Quality acceptance by owner						
		Installation													Live plug 50s (72s?) 9" o.c. w/irrigation - April-May						
															Year 1 maintenance				Year 2 maintenance		

APPENDIX C – SHARP-TAILED GROUSE AND LEK HABITAT

Sharp tailed grouse (*Tympanuchus phasianellus*) are found on vast grassland areas with various amounts of interspersed brushy components and few trees present. Mating and courtship occur on congregating areas called leks. These areas are a focal element of their local population centers and occupy a portion of their relatively large individual home ranges (Danzl 2018).

Vegetation

The plains grouse is typically found in medium to tall grasslands for courtship and nesting. Aldrich (1963) details Lek habitat as including a variety of open cover of rolling knobs and hills with nearby grass, herbs, and shrubs for feeding and roosting. Higher elevation areas are selected to increase visibility from male to male when establishing territories, approaching females within the lek, and from predators (Manske and Barker 1987). Close proximity of concealment cover is necessary and should include a variety of grass structure including short grasses and interspersed bunchgrasses (Danzl 2018).

Sharp tailed grouse prefer leks sites with short, sparse vegetation such as grasses, weeds, forbs, and some shrubs. Sparse and open vegetation on leks enables aggressive displays by males and minimizes predation. Sparse shrubs providing escape cover from predators, are often found adjacent to leks. Leks are sometimes associated with recently burned or grazed sites. Changes in land use on a lek resulting in taller, denser vegetation have been shown to cause eventual abandonment of the lek. An excess of woody cover can adversely affect leks (Prose 1987). Leks cover a relatively small area ranging from the size of a small house to a baseball diamond. Lek locations are generally traditional from year to year, providing the habitat is still suitable. Lek locations may change if a lek is covered with water, or if taller, denser vegetation develops (NRCS 2007).

Manske and Barker (1987) detail vegetation at lek sites in southeast North Dakota as consisting mainly of blue grama (*Bouteloua gracilis*), needle and thread (*Hesperostipa comata*), sun sedge (*Carex inops/heliophila*), big bluestem (*Andropogon gerardii*), little bluestem (*Schizachyrium scoparium*), and switchgrass (*Panicum virgatum*). Females select the nest site in grassland with brushy cover, usually less than a mile from the lek, in a place with vegetation at least 3 inches high (Manzer et al 2005).

Breeding Season

In the region sharp-tailed grouse begin their breeding season in early spring during the month of March or April (Drummer et al. 2011).

Management of Leks

Maintain low and open grass on lek sites, and mow or burn over mature vegetation within a half-mile radius. Several land management practices are detrimental to sharp-tails: tree planting, primarily conifer and hybrid poplar plantations; allowing brush to grow to trees; extensive agricultural development; fire suppression; and insecticide application. Additional threats to sharp-tail habitat include urban sprawl and associated development (USDA 2007).

Fire is an important factor in creating and maintaining sharp-tailed grouse habitat. Fire helps to maintain early successional stages of grasses, sedges, forb, and shrubs, all of which provide cover and food for sharp-tailed grouse [Grange 1948]. Sharp-tailed grouse need open habitat with good horizontal visibility for lek sites, so fires that reduce tall cover would enhance lek availability and quality [Sexton 1979].

Fire is considered beneficial to sharp-tailed grouse, severe fire may eliminate valuable cover essential for nesting, roosting, hiding, and feeding. Severe fires in autumn may eliminate the entire winter food and cover resource, making winter survival in that area nearly impossible (Grange 1948).

Disturbance

Early experiments by Baydack & Hein (1987) revealed that female grouse are more susceptible to human presence on leks than are males. Female sharp-tailed grouse in Manitoba, Canada, avoided disturbed leks, while males returned to their lek soon after a disturbance had ceased. Females tend to visit leks 1–10 times within a breeding season and may attend more than one lek (Landel 1989, Connelly et al. 1997). As a result, disturbance may result in the reproductive failure of local leks.

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APPENDIX D – SAMPLE WILDFIRE PROTECTION PLAN OUTLINE – IN DEVELOPMENT

Example Wildfire Protection Plan Outline

1. Regional Wildfire Risk
2. Wildfire Risk at the Prineville-Millican Solar Energy Facility
3. Wildfire Protection Measures at the Prineville-Millican SEF
 - 3.1 Fire Break Establishment and Maintenance
 - 3.1.1 On the Site
 - 3.1.2 Off the Site
 - 3.2 Fuel Management
 - 3.2.1 On the Site
 - 3.2.2 Off the Site
 - 3.3 Other Land-Based Measures
4. Wildfire Condition Monitoring and Early Wildfire Detection
5. Municipal and Agency Wildfire Coordination
 - 5.1 Regulatory Requirements
 - 5.2 Resource Sharing
6. Prineville-Millican Wildfire Action Plan
 - 6.1 Wildfire Protection Strategy
 - 6.2 Wildfire Response Coordination
 - 6.2.1 Equipment
 - 6.2.2 Water Sources
 - 6.2.3 Access
 - 6.3 Documentation and Reporting
7. References
8. Attachments
 - 8.1 Project General Land Cover
 - 8.2 Emergency Management Plan
 - 8.3 County Fire & Rescue Letter of Approval

Available Fire Protection Best Practices

Source: North Dakota Forest Service – Community Wildfire Planning

<https://www.ag.ndsu.edu/ndfs/documents/community-fire-planning-guidance.pdf>

- Six steps to create a comprehensive, workable wildfire plan. By following these steps, communities should be able to: achieve wide stakeholder involvement, assess vulnerabilities to the community's current resources and infrastructure, identify areas that need improvement, and implement an emergency response and hazard mitigation plan. This document lists available grants and publications to create a fire prevention plan.

STEP 1 – IDENTIFY STAKEHOLDERS

The effectiveness of a wildfire plan in making significant changes in a community depends on the support of the people who live and work there. Involving a broad range of appropriate stakeholders in the planning process helps the plan address all of the relevant issues and gain greater acceptance from the community. A governmental entity or a commission appointed by a governmental entity should take the lead in the planning process since the local government is the only entity legally able to make decisions on public safety and spending.

STEP 2 – DESCRIBE THE COMMUNITY

Identify the area the wildfire plan will affect, as well as resources that can be used to achieve the goals of the plan.

1. Planning Committee Members List

List the names, affiliations and phone numbers of the planning committee members.

2. Population

Provide information regarding the population of the area covered by this plan, both rural and municipal. The area the plan will affect should correspond to the fire protection districts that surround the community.

3. Estimated Property Values at Risk

Provide an approximation of the estimated current values of residential and commercial property covered by the plan (the county assessor should be able to assist with this information). List the number of structures affected.

4. Economic Values at Risk

Describe how the loss of businesses and homes would affect the local economy (tourism, lost pasture land, out-migration)

5. Natural Resources at Risk

Describe the natural resources at risk in the surrounding area, such as parks, lakes, rivers, conservation areas, and wildlife refuges.

6. Historical Structures and Sites at Risk

List any historical structures and/or culturally significant sites.

7. Commercial Entities

List the contact information, location, and potential need for wildfire risk assessment for commercial entities.

8. Formal Associations

List the contact information for civic groups, churches, volunteer organizations, and so forth.

9. Media Support

List the contact information for local media, such as newspapers, television and radio.

10. Schools

List the contact information for all public and private schools.

11. Transportation

List the contact information for any railroad, highway, or other public transportation.

12. Restrictive Covenants, Ordinances, etc.

Describe any pertinent restrictive covenants, ordinances, or other regulations that concern or impact wildfire. For example, list any regulations regarding building construction materials, burning permits, vegetation removal, tree trimming requirements and so forth.

STEP 3 – INFRASTRUCTURE ASSESSMENT

An infrastructure assessment evaluates conditions that may improve or hamper emergency response during a wildfire. The community should work with the municipal and rural road superintendents and utility companies to complete this section.

- Access/Community Location
- Roads
- Driveways
- Structures
- Bridges and culverts
- Utilities
- Wild Fire Risk

STEP 4 – WILDFIRE MITIGATION

State the goals of the community, identifies specific actions needed to meet these goals, identifies timelines for achieving the goals, and lists responsible parties, resources and priorities.

STEP 5 - WILDFIRE RESPONSE

List emergency support equipment and identifies what the emergency support units require to safely and efficiently respond to a wildfire.

STEP 6 – MAPS

Identify areas that contain hazardous fuels, infrastructure that will not support emergency vehicles, evacuation routes and so forth. The maps provide emergency response personnel with crucial information needed during an incident, such as the exact location of transportation routes and critical facilities

Source: National Wildfire Coordinating Group: Wildland Urban Interface Wildfire Mitigation Desk Reference Guide (2019)

Provides basic background information on relevant programs and terminology for those, whether community members or agency personnel, seeking to enhance their community's wildfire mitigation efforts

- Provide a reference to assist with integrating wildland urban interface mitigation principles into national wildland fire training;
- Promote common wildfire mitigation language and culture;
- Establish an authoritative source for wildland urban interface mitigation information; and
- Provide consistent definitions for use by all media.

NFPA (National Fire Protection Association). 2013. Community wildfire safety through regulation: A best practice guide.

<https://www.ag.ndsu.edu/ndfs/documents/community-fire-planning-guidance.pdf>ces guide for planners and regulators. National Fire Protection Association Quincy, MA.

Guide for planners to reduce the danger of wildfires and involve the community in the decision making. Best practices included in this guide are provided below.

Best practice

Defensible Space

Reduce the flammable vegetation that fuels wildfires and you directly reduce the risk of wildfire. Studies show that keeping wildfire 100 – 200 feet away from structures should protect them from ignition in most cases. Defensible space is intended to create this low-fuel buffer and is often divided into the following three zones:

Update Weed Ordinance

Vegetation that is deemed a wildfire hazard is declared a nuisance and the landowner will be given a warning or citation and given a fixed time (e.g., 30 days) to reduce their vegetation, usually consistent with the defensible space requirements above. This approach is entirely dependent on proactive enforcement because compliance is not linked to any permit or regular compliance process

Fire-Resistant Roof

Require Class A or B roofs in the highest risk areas, Class B in moderate risk areas, and Class C in lowest risk areas. Some communities ban all wood roofing materials even though Class A wood shake roofs are available.

Additional Approaches

Community Scale WUI Tools	
Hazard mapping	Conduct hazard assessment (risk of wildfire) and risk assessment (risk of loss of structures or life).
Zoning overlays	Consider using existing zoning overlays for wildfire purpose or develop new overlays applicable to known wildfire areas.
Restriction of sensitive or hazardous uses	Restrict land uses with vulnerable populations (hospitals), large populations (stadiums), or flammable materials (gas stations) in wildfire risk areas.

Neighborhood/Subdivision Scale WUI Tools	
Residential clustering requirements	Require new lots in subdivisions to be located away from wildfire hazard areas, and allow smaller lots if necessary to avoid economic harm to the landowner
Water supply	Require firefighting water supply. Provide hydrants with adequate pressure and volume or a year round water source of 4,000 – 5,000 gallons in the form of a dry well, cistern, pond, or swimming pool.
Density reductions in high hazard areas	Reducing permitted development density in high wildfire hazard areas. Transfer of Development Rights (TDR) programs may also be useful.

Proper access	Require adequate road (20 to 28 ft.) and driveway (12 ft.) widths and clearance (13.5 ft. vertical and 10 ft. horizontal) to accommodate fire-fighting equipment. Limit grade of roads to 10 -15% and require multiple access points for larger developments.
Signs	Require that street signs and address markers be noncombustible, easy-to-read, and well-located. Dead-end roads should be clearly signed.

Individual Site Scale WUI Tools	
Site-specific hazard assessment	Require or allow landowners to perform wildfire hazard assessment of their own property to confirm or establish wildfire hazard level. Use that analysis as the basis for project site design.
Location of accessory structures and flammable materials	Require accessory structures to be separated from other structures (e.g., 30 ft.). Require wood piles and gas tanks to be located 20-30 ft. from primary structure. Fences must be of non-flammable material – or at least within a minimum distance from the structure
Fire-resistant landscaping	Ensure that only fire-resistant landscaping is allowed in hazard area.

Building Scale WUI Tools	
Siding	Require one-hour fire resistant materials, or brick, stone, stucco, or large timber siding, and generally prohibit metal siding in most fire hazard classifications.
Windows	Require or encourage double-paned or small-paned windows.
Eaves and soffits	Require eaves and soffits to be covered and boxed in or covered with mesh that will not allow embers into attic.
Gutters	Require designs that do not collect leaves/needles (and require regular cleaning).
Attic vents	Require mesh coverings with a maximum mesh size of 1/8 inch, or install approved ember-resistant vents.
Chimney spark arresters	Require spark arresters on all chimneys
Decks and porches	Require that under-deck areas of structures 3 ft. or less above the ground be enclosed with wire mesh or fire resistive material. Require that structures farther from the ground be enclosed with a solid fire resistive skirt, and ensure that these features be constructed of heavy timber or other fire resistant material.

APPENDIX E – LONG-TERM RECOVERY OF TRPL SITE WITH ECOSYSTEM MANAGEMENT

ATTRIBUTE CATEGORY	RECOVERY LEVEL (1-5)	EVIDENCE FOR RECOVERY LEVEL
ATTRIBUTE 1. Absence of threats		
Over-utilization	4	Shift to AMP grazing with periodic prescribed fire at 10-25 yr return interval
Invasive species (external)	3	Informal agreements with USFS and Medora Fdn. To manage leafy spurge, Canada thistle, crested wheatgrass on lands surrounding Library site
Contamination	5	No change from baseline condition; spills and other contamination during construction will be avoided
ATTRIBUTE 2. Physical conditions		
Substrate physical	4	Shift to AMP grazing prescribed fire will reduce erosion and rate of gully formation; no plans for structural stabilization
Substrate chemical	5	No change from baseline condition; spills and other contamination during construction will be avoided
Water chemo-physical	4	Shift to AMP grazing with prescribed fire will increase infiltration rates and reduce sheet-flow runoff and associated erosion; bioswales and mesic prairie detention basins reduce runoff from parking lots; building's green roof self-regulates its runoff
ATTRIBUTE 3. Species composition		
Desirable plants	4	Will seed or plant 100 species of native plants on Library site; forbs diversity and abundance will increase; overall vegetation cover in pastures expected to increase despite grazing
Desirable animals	3	Grassland butterfly numbers expected to increase as abundance of forbs increases; more vegetation cover may attract grassland bird species
No undesirable species	3	Shift to AMP grazing with fire expected to control Kentucky bluegrass; IPM approach to control leafy spurge, Canada thistle, yellow sweet clover; herbicide use will be limited to initial establishment period and not used for long-term management
ATTRIBUTE 4. Structural diversity		
All strata present	3	Good herbaceous cover and biological soil crust (BSC) well developed; tree canopy limited to woody draws
All trophic levels	3	Some change from baseline; more insects and small mammals will benefit reptiles and passerine bird community; raptors less favored due to high visitation by public; large ungulates limited to cattle, horses, deer
Spatial mosaic	4	Some change from baseline: mesic prairie basins for stormwater management add new plant community to site, but near cars and building and less useful to some species
ATTRIBUTE 5. Ecosystem function		
Productivity, cycling etc	4	Expect increase in root grown, soil microbial diversity, carbon sequestration rate and stocks and soil infiltration rate, and reduced runoff
Habitat interactions	4	AMP grazing with with fire and overseeding will increase forb and pollinator abundance, greater abundance of dung beetles and other insects overall; supporting higher trophic levels
Resilience, recruitment etc	4	AMP grazing with fire re-establishes historical disturbance regime to which species on site are adapted; resilience during and after drought expected to be better than at present; plant germination rates expected to increase
ATTRIBUTE 6. External exchanges		
Landscape flows	3	No change from baseline condition, unless USFS changes management practices on lands to west and south
Gene flows	3	No change from baseline conditions; seed collection ongoing to use locally-adapted genetic materials within 150 miles of site
Habitat links	4	Collaboration occurring with North Dakota State University; National Park Service collaboration may also occur.

APPENDIX F – PERFORMANCE PERIOD RECOVERY OF TRPL SITE WITH ECOSYSTEM MANAGEMENT

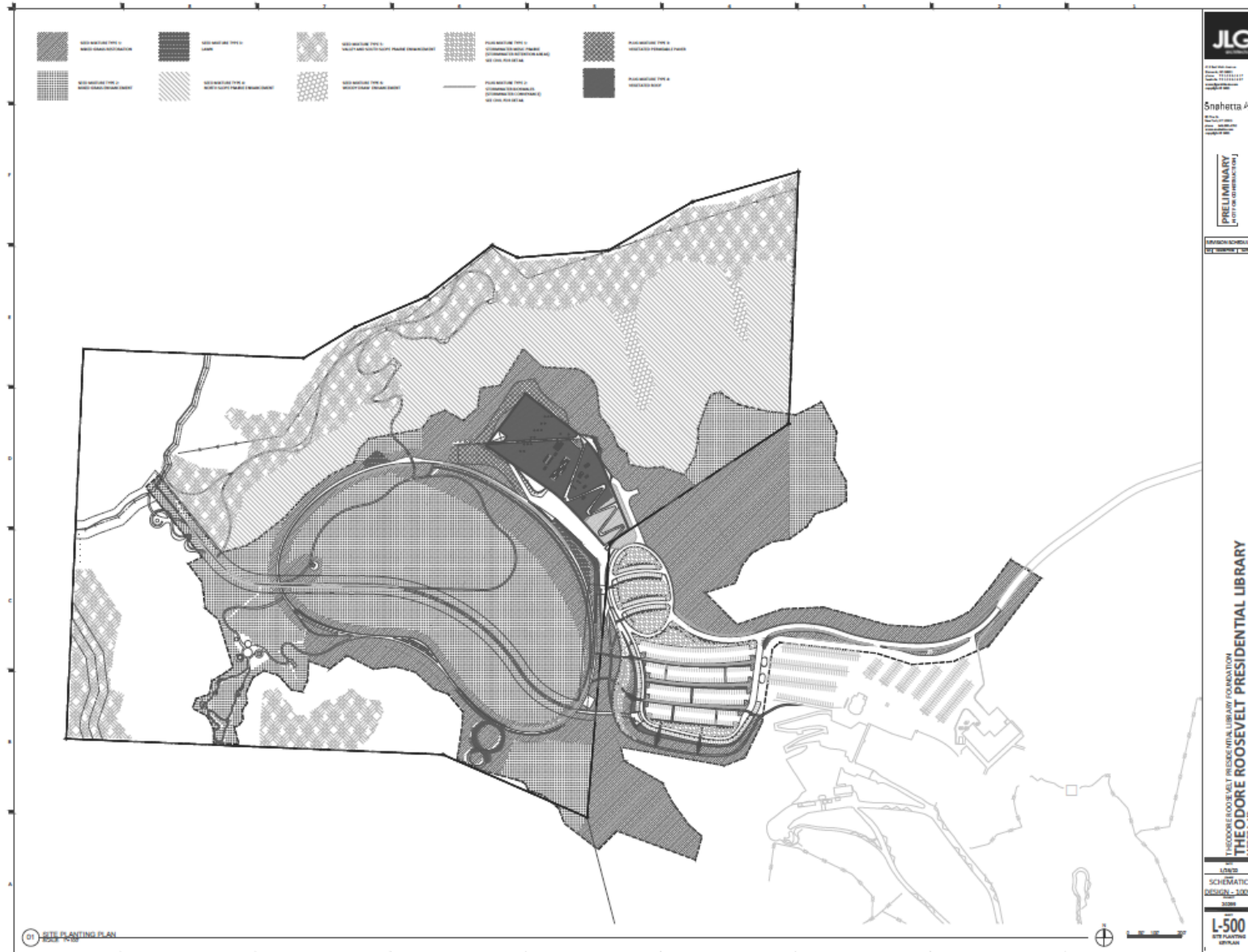
ATTRIBUTE CATEGORY	RECOVERY LEVEL (1-5)	EVIDENCE FOR RECOVERY LEVEL
ATTRIBUTE 1. Absence of threats		
Over-utilization	3	Shift to AMP grazing with periodic prescribed fire at 10-25 yr return interval results in some recovery of native species cover
Invasive species (external)	2	Informal agreements will have just gotten underway with USFS and Medora Fdn. To manage leafy spurge, Canada thistle, crested wheatgrass on lands surrounding Library site
Contamination	5	No change from baseline condition; spills and other contamination during construction will be avoided
ATTRIBUTE 2. Physical conditions		
Substrate physical	3	Shift to AMP grazing prescribed fire will begin to reduce erosion and rate of gully formation; no plans for structural stabilization
Substrate chemical	5	No change from baseline condition; spills and other contamination during construction will be avoided
Water chemo-physical	4	Shift to AMP grazing with prescribed fire will increase infiltration rates and reduce sheet-flow runoff and associated erosion; bioswales and mesic prairie detention basins reduce runoff from parking lots; building's green roof self-regulates its runoff
ATTRIBUTE 3. Species composition		
Desirable plants	4	Will seed or plant 100 species of native plants on Library site; forbs diversity and abundance will increase; overall vegetation cover in pastures expected to increase despite grazing
Desirable animals	3	Grassland butterfly numbers expected to increase as abundance of forbs increases; more vegetation cover may attract grassland bird species
No undesirable species	2	Shift to AMP grazing with fire expected to begin to control Kentucky bluegrass; IPM approach to control leafy spurge, Canada thistle, yellow sweet clover; herbicide use will be limited to initial establishment period and not used for long-term management
ATTRIBUTE 4. Structural diversity		
All strata present	2	Herbaceous cover and biological soil crust (BSC) will improve; tree canopy limited to woody draws
All trophic levels	2	Some change from baseline; more insects and small mammals will benefit reptiles and passerine bird community; raptors less favored due to high visitation by public; large ungulates limited to cattle, horses, deer
Spatial mosaic	4	Some change from baseline: mesic prairie basins for stormwater management add new plant community to site, but near cars and building and less useful to some species
ATTRIBUTE 5. Ecosystem function		
Productivity, cycling etc	3	Expect first evidence of increase in root grown, soil microbial diversity, carbon sequestration rate and stocks and soil infiltration rate, and reduced runoff
Habitat interactions	3	AMP grazing with with fire and overseeding beginning to increase forb and pollinator abundance, greater abundance of dung beetles and other insects overall; supporting higher trophic levels
Resilience, recruitment etc	4	AMP grazing with fire re-establishes historical disturbance regime to which species on site are adapted; resilience during and after drought expected to be better than at present; plant germination rates expected to increase
ATTRIBUTE 6. External exchanges		
Landscape flows	3	No change from baseline condition, unless USFS changes management practices on lands to west and south
Gene flows	3	No change from baseline conditions; seed collection ongoing to use locally-adapted genetic materials within 150 miles of site
Habitat links	3	Collaboration occurring with North Dakota State University; will seek collaboration with National Park Service

APPENDIX G – RECOVERY SCALE TO MEASURE RESTORATION PROGRESS (MCDONALD ET AL. 2016).

<i>Attribute</i>	<i>1-star</i>	<i>2-star</i>	<i>3-star</i>	<i>4-star</i>	<i>5-star</i>
Absence of threats	Further deterioration discontinued and site has tenure and management secured	Threats from adjacent areas beginning to be managed or mitigated	All adjacent threats being managed or mitigated	Larger scale threats starting to be managed or mitigated	All threats managed or mitigated to high extent
Physical conditions	Gross physical and chemical problems remediated (e.g. pollution, erosion, and compaction)	Substrate chemical and physical properties (e.g. pH and salinity) on track to stabilize within natural range	Substrate stabilized within natural range and supporting growth of characteristic biota	Substrate maintaining conditions suitable for ongoing growth and recruitment of characteristic biota	Substrate exhibiting physical and chemical characteristics highly similar to that of the reference ecosystem with evidence they can indefinitely sustain species and processes
Species composition	Colonizing indigenous species (e.g. ~2% of the species of reference ecosystem); no threat to regeneration niches or future successions	Genetic diversity of stock arranged and a small subset of characteristic indigenous species establishing (e.g. ~10% of reference); low threat from exotic invasive or undesirable species	A subset of key indigenous species (e.g. ~25% of reference) establishing over substantial proportions of the site, with nil to low threat from undesirable species	Substantial diversity of characteristic biota (e.g. ~60% of reference) present on the site and representing a wide diversity of species groups; no inhibition by undesirable species	High diversity of characteristic species (e.g. >80% of reference) across the site, with high similarity to the reference ecosystem; improved potential for colonization of more species over time
Community structure	One or fewer strata present and no spatial patterning or trophic complexity relative to reference ecosystem	More strata present but low spatial patterning and trophic complexity relative to reference ecosystem	Most strata present and some spatial patterning and trophic complexity relative to reference ecosystem	All strata present Spatial patterning evident and substantial trophic complexity developing, relative to the reference ecosystem	All strata present and spatial patterning and trophic complexity high Further complexity and spatial patterning able to self-organize to highly resemble reference ecosystem
Ecosystem function	Substrates and hydrology are at a foundational stage only, capable of future development of functions similar to the reference	Substrates and hydrology show increased potential for a wider range of functions including nutrient cycling, and provision of habitats/resources for other species	Evidence of functions commencing, e.g. nutrient cycling, water filtration and provision of habitat resources for a range of species	Substantial evidence of key functions and processes commencing including reproduction, dispersal, and recruitment of a species	Considerable evidence of functions and processes on a secure trajectory toward reference and evidence of ecosystem resilience likely after reinstatement of appropriate disturbance regimes
External exchanges	Potential for exchanges (e.g. of species, genes, water, and fire) with surrounding landscape or aquatic environments identified	Connectivity for enhanced positive (and minimized negative) exchanges arranged through cooperation with stakeholders and configuration of site	Connectivity increasing and exchanges between site and external environment starting to be evident (e.g. more species, flows, etc.)	High level of connectivity with other natural areas established, observing control of pest species and undesirable disturbances	Evidence that potential for external exchanges is highly similar to reference and long term integrated management arrangements with broader landscape in place and operative

Note: This five-star scale represents a cumulative gradient from very low to very high similarity to the reference ecosystem. It provides a generic framework only; requiring users to develop indicators and a monitoring metric specific to their system and ecosystem type.

APPENDIX H – LAND MANAGEMENT AREAS AT THE TRPL SITE



Outdoor Heritage Fund
Grant Round 22
Application Summary Page
GR 22-7

Project Title: Pembina County Community Orchard
Applicant: Pembina County Historical Society
Primary Contact: Lillian Stegman
Total Project Costs: \$16,665
OHF Request: \$11,000

Match Amount	Funding Source	Match Type
\$3,000	Volunteer Hours	In-Kind
\$515	Soil Conservation	In-Kind
\$450	Personal Donations	In-Kind
\$1,000	NDSU Master Gardener Grants	Cash
\$500	Pembina County Health Giving Garden Grants	Cash
\$200	NDSU Master Gardener Program	In-Kind
\$5,665.00	Total	

Percentage of Matching Funds: 34%

Project Duration: One year

Major Directive: B

Additional Directive: C & D

Summary of Project: Project involves installation of a water line from the Pembina County Museum to the Pembina County Community Orchard (\$8,900), a maintenance shed (\$1,500) wood mulch (\$1,000), and the installation of a shelter belt (\$1,500).

Technical Committee Comments:

- Pleased to see they are working with NDSU
- Buildings and storage shed components are not eligible for OHF
- Recommended Conditions for Planting plan from the Pembina County Soil Conservation district for a windbreak should be provided. "For tree/shrub/grass plantings: provide a planting plan describing the site design, planting methods, number of trees/shrubs by species and stock size, grass species and future maintenance. A statement certifying that the applicant will adhere to USDA-NRCS tree/shrub/grass planting specifications along with the name of the governmental entity designing the planting may be substituted for a planting plan."

Technical questions from the OHF Advisory Board members:

Pembina County Historical Society has not previously received funds.

***Total OHF funds awarded to date: \$0.00. Total OHF funds spent to date: \$0.00.**

Pembina County Historical Society has not submitted any unsuccessful applications.

OHF Advisory Board Recommendation

Contingencies: **Do not fund maintenance shed, wood mulch, or shelter belt**

Conflicts of Interest: **None**

Funding Vote: **9-0**

Funding Amount Vote: **\$8,900**

Outdoor Heritage Fund Grant Application



Instructions

After completing the form, applications and supporting documentation may be submitted by e-mail to ndicgrants@nd.gov. It is preferred that only electronic copies are submitted.

You are not limited to the spacing provided, except in those instances where there is a limit on the number of words. If you need additional space, please indicate that on the application form, answer the question on a separate page, and include with your submission.

The application and all attachments must be received by the application deadline. You may submit your application at any time prior to the application deadline. **Applicants are strongly encouraged to submit applications prior to the deadline for staff review in order ensure that proposals will be complete when submitted on deadline date.** Incomplete applications may not be considered for funding.

Please review the back of this form to determine project eligibility, definitions, budget criteria, and statutory requirements.

Project Name: Pembina County Community Orchard

Name of Organization: Pembina County Historical Society

Federal Tax ID#: 45-030-6575

Contact Person/Title: Lillian Stegman, Master Gardener in charge of the orchard

Address: 13918 Cottage Grove Road

City: Cavalier

State: ND

Zip Code: 58220

E-mail Address: lillianstegman@gmail.com

Web Site Address (If applicable)

Phone: (701) 520-2709

List names of co-applicants if this is a joint proposal:
Zelda Hartje and Elisa Ratliff

MAJOR Directive:

Choose only one response

Directive A. Providing access to private and public lands for sportsmen, including projects that create fish and wildlife habitat and provide access for sportsmen;

Directive B. Improving, maintaining and restoring water quality, soil conditions, plant diversity, animal systems and by supporting other practices of stewardship to enhance farming and ranching;

Directive C. Developing, enhancing, conserving and restoring wildlife and fish habitat on private and public lands; and

Directive D. Conserving natural areas and creating other areas for recreation through the establishment and development of parks and other recreation areas.

Additional Directive:

Choose all that apply

Directive A.

Directive B.

Directive C.

Directive D.

Type of organization:

State Agency

Political Subdivision

Tribal Entity

Tax-exempt, nonprofit corporation.

Abstract/Executive Summary.

Summarize the project, including its objectives, expected results, duration, total project costs and participants. (no more than 500 words)

The Pembina County Community Orchard was established by the Pembina County Historical Society in 2016. About 40 fruit trees were planted, including several varieties of apples, plums, and cherry bushes, as well as a central pollinator garden. The volunteers at the Historical Society have a weekly day of ground maintenance where they mow the orchard and water with a tractor-mounted tank when needed. In 2022, I (Lillian Stegman) and Elisa Ratliff, NDSU certified Master Gardeners, were put in charge of the orchard. We have a vision to showcase native North Dakota trees and plants, increase awareness of the cultivated fruit trees that can be grown in ND, create habitat for pollinators, and to create an educational, health-centered, community space that can be enjoyed by all.

The orchard badly needs to be protected by winds via a shelter belt of native trees (which would also serve to provide habitat for birds and pollinators), but before Soil Conservation can plant the trees, we are required to have irrigation to the orchard. We also want to use extra space in the orchard for an NDSU experimental orchard, where they'd test trees for our area in our orchard. However, before taking part in that experiment, we'd again need to have irrigation. We plan to plant grafted varieties of pears, apricots, and a more diverse selection of apples, in addition to the native berry patch we've already planted this spring. We've already established a second pollinator garden in the orchard and are in the process of planting a Bee Lawn as food for native pollinators. All these projects need water, which has been difficult without a spigot in the orchard – the closest water outlet is a half-mile away at the museum building.

Bringing a water line to the orchard from the main building would cost \$8,900 and would be installed by Chad Thorlakson. We're also asking for \$1,500 for a "maintenance area": a tool shed with a combination lock, a hose system for watering the trees and plants, tools for working in the orchard, a large trash can, and a secure donation box. Wood mulch is very important for the health of the trees and plants, and we're asking for \$1,000 worth of mulch to be delivered to the orchard. Additionally, we're asking for \$1,500 to keep in reserve for spring 2024 to plant a shelter belt to protect the orchard.

Project Duration: We hope to have the water line and maintenance area installed in the orchard within a month of receiving the funds. The care of the orchard will be ongoing for decades to come. The shelter belt of native trees will need to be planted in spring of 2024, as the window for purchasing trees this year from Soil Conservation has passed.

Indicate the intended schedule for drawing down OHF funds.

The money for irrigation and a maintenance area would be used within weeks of being awarded. The trees for the shelter belt would be bought and planted in spring of 2024.

Amount of Grant request: \$11,000

Total Project Costs: \$16,665

Note: in-kind and indirect costs can be used for matching funds.

Amount of Matching Funds: \$ 5,665

A minimum of 25% Match Funding is required. Indicate if the matching funds will be in-kind, indirect or cash. Please provide verification that these matching funds are available for your project. Note that effective as of July 1, 2015 no State General Fund dollars can be used for a match unless funding was legislatively appropriated for that purpose.

Amount of Match	Funding Source	Type of Match (Cash, In-kind or Indirect)
\$3,000	Volunteer hours	In-kind

\$515	Soil Conservation	In-kind (free plants)
\$450	Personal donations	In-kind (mulch and water bought by orchard volunteers)
\$1,000	NDSU Master Gardener Grants	Cash
\$500	Pembina County Health Giving Garden Grants	Cash
\$200	NDSU Master Gardener Program	In-kind (placards for identifying plants)

Certifications

OX I certify that this application has been made with the support of the governing body and chief executive of my organization.

OX I certify that if awarded grant funding none of the funding will be used for any of the exemptions noted in the back of this application.

Narrative

Organization Information – Briefly summarize your organization’s history, mission, current programs and activities.

Include an overview of your organizational structure, including board, staff and volunteer involvement. (no more than 300 words)

The Pembina County Historical Society was created in 1967. It has a board of directors and two paid employees, the Administrator (Zelda Hartje, Administrator for 30 years), and the Museum Attendant. Its grounds are located five miles west of Cavalier, ND, directly across the road from Icelandic State Park and the end of Cavalier’s bike path. The mission of the PCHS is to collect, preserve, and educate. On the grounds of the PCHS is the Pembina County Museum, which yearly averages nearly 4,000

visitors from all over the world. There are also several historic buildings that are restored and maintained by PCHS volunteers. Also included on the grounds are several large, modern sheds containing hundreds of historic farm machinery and vehicles. There's also a large sawmill, victory garden, and extensive other historic artifacts. PCHS is involved in the education of school-aged children in the community via museum tours and summer Kaleidoscope classes. With the exception of the two paid positions, PCHS is run and maintained by volunteers.

Every Sunday after Labor Day weekend, PCHS has its annual Pioneer Machinery Show, a highly-attended, family-friendly event that showcases all of the historic artifacts and activities on the grounds. PCHS is also doing a "cemetery project" – recording all the deaths and burials in Pembina County. There's a Veteran's Memorial on the grounds which seeks to honor all the Veterans in the county, as well.

The Pembina County Community Orchard was planted in 2016 with a mission to provide nutritious food for the community, foster community spirit through having volunteers working together on the orchard, and provide educational opportunities around growing and preserving food.

Purpose of Grant – Describe the proposed project identifying how the project will meet the specific directive(s) of the Outdoor Heritage Fund Program

Identify project goals, strategies and benefits and your timetable for implementation. Include information about the need for the project and whether there is urgency for funding. Indicate if this is a new project or if it is replacing funding that is no longer available to your organization. Identify any innovative features or processes of your project. Note: if your proposal provides funding to an individual, the names of the recipients must be reported to the Industrial Commission/Outdoor Heritage Fund. These names will be disclosed upon request.

For tree/shrub/grass plantings: provide a planting plan describing the site design, planting methods, number of trees/shrubs by species and stock size, grass species and future maintenance. A statement certifying that the applicant will adhere to USDA-NRCS tree/shrub/grass planting specifications along with the name of the governmental entity designing the planting may be substituted for a planting plan.

For projects including Section 319 funding: provide in detail the specific best management practices that will be implemented and the specific projects for which you are seeking funding.

For projects including fencing: A minimum cost share of 40% by the recipient is preferred. Include detailed information on the type of fencing to be installed, whether funding is requested for boundary fencing, new or replacement of existing fencing, and/or cross fencing.

The most time-sensitive portion of our project is the irrigation line that we're trying to bring to the orchard. Planting new fruiting trees, shrubs, and pollinator plants as well as establishing a Bee Lawn requires water, and the current system is awkward and difficult. Museum volunteers bring their own water in buckets, or the grounds maintenance volunteers bring a tractor over with a tank full of water on Thursday, their grounds-maintenance day.

As part of the Comprehensive Conservation Plan, we seek to plant a shelter belt of native trees in spring of 2024. We have already partnered with the local Soil Conservation to bring mulch to the orchard, plant bare-root fruit trees, and they've donated the plants for the new Pollinator Garden as well

as giving us a significantly discounted rate on the native fruit trees and shrubs planted this spring. We would partner with them to plan and plant the shelter belt next spring, emphasizing using native fruiting species. The irrigation system will need to be in place before we can plant the shelter belt.

Is this project part of a Comprehensive Conservation Plan? Yes No

If yes, provide a copy with the application.

Note: Projects involving buildings and infrastructure will only be considered if part of a Comprehensive Conservation Plan. Please refer to the "Definitions" section at the back of the form for more details.

Please see attached document for the Comprehensive Conservation Plan.

Management of Project – Provide a description of how you will manage and oversee the project to ensure it is carried out on schedule and in a manner that best ensures its objectives will be met.

Include a brief background and work experience for those managing the project.

The primary people executing the improvements made to the orchard will be Elisa Ratliff and Lillian Stegman. We will be overseen by the board of the Pembina County Historical Society and their administrator, Zelda Hartje.

Elisa Ratliff is a microbiologist and soon-to-be published author of college Biology textbooks. She's a local high school science teacher and dual-enrollment college professor at a local high school. She has two children in the local 4H club, and is a 4H volunteer and sits on the 4H planning committee. She's the president of the Cavalier Farmer's Market Board, an NDSU certified Master Gardener, and an avid gardener and orchard enthusiast, owning a 4-acre property with more than 20 fruit trees on it. She's passionate about preserving local history and protecting pollinators and native plants.

Lillian Stegman has five homeschooled children and is the head of the local county-wide homeschooling group which meets several times a month during the school year for group educational activities. She's also an NDSU Certified Master Gardener, as well as being a passionate and experienced gardener and orchardist. She is an at-large member of the board of the Cavalier Farmer's Market and has sold vegetables and baked goods for 12 years at the market. She has planted and tended hundreds of trees, had an annual garden for more than a dozen years, and dabbled in fruit tree grafting. A native of California until 2008 when she moved to Pembina County, Lillian is highly interested in the plant life of North Dakota and showcasing what can be grown in a state that isn't known for its orchards. Lillian graduated from UC Berkeley in 2008 with a Bachelor's Degree in Art Practice and has a vision to incorporate local art into the orchard. Lillian has four children enrolled in the local 4H club, and is involved in the education of the community via the Extension Office's Kaleidoscope program.

The irrigation line has already received a quote from Thorlakson Construction, the primary construction company that works with the water line, for \$89000. Elisa, Lillian, and other volunteers would purchase and install the materials needed for a watering system once the water line is brought to the orchard, as well as purchasing and installing the locked shed, tools inside it, trash can, and

cash box. Lillian would purchase \$1,000 of mulch from a local hardware store to be delivered to the orchard and spread around trees and shrubs by volunteers. In spring of 2024, Soil conservation would plant a variety of fruiting and shade trees for a long shelter belt on the west side of the orchard. They'd put down plastic around the trees to keep weeds down, and the orchard volunteers would water the new trees at least twice a week.

Evaluation – Describe your plan to document progress and results.

Please be specific on the methods you will utilize to measure success. Note that regular reporting, final evaluation and expenditure reports will be required for every grant awarded.

We'll measure success in the size and health of the trees (both the fruiting trees in the orchard and the trees in the shelter belt), the quality of the soil improving via soil tests, the frequency and variety of pollinators visiting the pollinator garden through projects like "The Monarch Monitoring Project," and by monitoring the amount of visitors to the orchard and the distance they've travelled to visit it.

Financial Information

Project Budget – Use the table below to provide an itemized list of project expenses and describe the matching funds being utilized for this project.

Indicate if the matching funds are in the form of cash, indirect costs or in-kind services. The budget should identify all other committed funding sources and the amount of funding from each source. **A minimum of 25% match funding is required.** An application will be scored higher the greater the amount of match funding provided. (See Scoring Form.)

Certain values have been identified for in-kind services as detailed under "Budget Information" at the back of this form. Refer to that section and utilize these values in identifying your matching funds.

NOTE: No indirect costs will be funded. Supporting documentation for project expenses, including bids, must be included or application will be considered incomplete.

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
Irrigation Line	\$8,9000	\$500	\$3,000	\$	\$	\$12,400
Shed and tools	\$1,500	\$	\$500	\$	\$	\$2,000
Shelter Belt 2024	\$1,500	\$	\$515	\$	\$	\$2,015
Mulch	\$1,000	\$	\$450	\$	\$	\$1,450
	\$	\$	\$	\$	\$	\$
	\$	\$	\$	\$	\$	\$
Total Costs	\$12,900	\$500	\$4,465	\$	\$	\$17,865

Note: Costs for seeding, fencing, pipelines, wells, and cover crops cannot exceed NRCS Field Office Tech Guide without justification. Projects involving perimeter fencing must follow NRCS eligibility standards.

Budget Narrative – Use the space below to provide additional detail regarding project expenses.

I had to revise this budget when Scot Becker, the president of PCHS, sent me a copy of the estimate for the water line on Saturday, May 27. I had been verbally told that the price of the water line would be \$7,000, but the actual estimate from the water company said \$8,900. I was able to secure \$500 in donations from a local business to make up the 25% matching difference if the in-kind volunteer hours don't count towards the total.

It is difficult to tabulate just how many volunteer hours have been and will be used on this project, as all the planting and maintenance of the orchard so far has been done completely by volunteer hours and will continue to be. Nearly all the costs for establishing the orchard have been awarded by grants or donated by volunteers, and there are so many grant opportunities that will continue to be available in the future.

Sustainability – Indicate how the project will be funded or sustained in future years.

Include information on the sustainability of this project after OHF funds have been expended and whether the sustainability will be in the form of ongoing management or additional funding from a different source.

The Pembina County Historical Society gives the orchard a budget of \$400 yearly and pays for all the water used for the orchard. There are several yearly grants through the NDSU Certified Master Gardener program available for the upkeep of a project like a community orchard. The Master Gardeners involved in the care of the orchard have a required 20 hours per year minimum in volunteer hours to keep up their Master Gardener certification, so having the Master Gardeners in the county will ensure the upkeep of the orchard by qualified persons.

Partial Funding – Indicate how the project will be affected if less funding is available than that requested.

The most important part of the project that we're asking to be funded is the irrigation line. If we received less than the \$7,000 for the irrigation line to be dug in, we would still buy needed maintenance equipment like mulch and tools, but for the life and longevity of the fruiting plants and pollinator garden, the water line is essential.

Partnership Recognition - If you are a successful recipient of Outdoor Heritage Fund dollars, how would you recognize the Outdoor Heritage Fund partnership? * *There must be signage at the location of the project acknowledging OHF funding when appropriate.*

As stated, we would put signage at the front entrance of the orchard to recognize the Outdoor Heritage Fund partnership. We'd also write a letter to the local paper recognizing the Outdoor Heritage Fund in bringing water and needed updates to the orchard to make it into the pollinator and native plant conservation area that we aim to create. A third way is Word of Mouth. Already in seeking information for this grant application, we've spoken with people about the Outdoor Heritage Fund including our pastor at the Cavalier Evangelical Free Church, who was essential in using the OHF for building our town's 8-mile-long bike path that ends at Icelandic

State Park, which also happens to be directly across the street from the orchard. I explained in detail what the OHF is to Zelda Hartje, the administrator of the museum on the grounds of the Pembina County Historical Society, and Kari Helgoe, the local NDSU Extension Agent. Many people in our community have become aware of our need for updates including irrigation for the orchard, and we've spoken with them about this grant opportunity through the OHF.

Awarding of Grants - Review the appropriate sample contract for your organization on the website at <http://www.nd.gov/ndic/outdoor-infopage.htm>.

Can you meet all the provisions of the sample contract? Yes No

If there are provisions in that contract that your organization is unable to meet, please indicate below what those provisions would be:

With the above link, I was unable to access the sample contract. However, from every other stipulation written in this application, we can meet the provisions of the OHF for this grant.

ABOUT OHF:

The purpose of the North Dakota Outdoor Heritage Fund is to provide funding to state agencies, tribal governments, political subdivisions, and nonprofit organizations, with higher priority given to projects that enhance **conservation** practices in this state by:

Directive A. Providing access to private and public lands for sportsmen, including projects that create fish and wildlife habitat and provide access for sportsmen;

Directive B. Improving, maintaining and restoring water quality, soil conditions, plant diversity, animal systems and by supporting other practices of stewardship to enhance farming and ranching;

Directive C. Developing, enhancing, conserving and restoring wildlife and fish habitat on private and public lands; and

Directive D. Conserving natural areas and creating other areas for recreation through the establishment and development of parks and other recreation areas.

EXEMPTIONS

Outdoor Heritage Fund grants may not be used to finance the following:

- Litigation;
- Lobbying activities;
- Any activity that would interfere, disrupt, or prevent activities associated with surface coal mining operations; sand, gravel, or scoria extraction activities; oil and gas operations; or other energy facility or infrastructure development;
- The acquisition of land or to encumber any land for a term longer than twenty years; or

- Projects outside this state or projects that are beyond the scope of defined activities that fulfill the purposes of Chapter 54-17.8 of the North Dakota Century Code.

OHF funds may not be used, except after a finding of exceptional circumstances by the Industrial Commission, to finance:

- A completed project or project commenced before the grant application is submitted;
- A feasibility or research study;
- Maintenance costs;
- A paving project for a road or parking lot;
- A swimming pool or aquatic park;
- Personal property that is not affixed to the land;
- Playground equipment, except that grant funds may be provided for up to 25% of the cost of the equipment not exceeding \$10,000 per project and all playground equipment grants may not exceed 5% of the total grants per year (see Definitions/Clarifications for how this will be calculated);
- Staffing or outside consultants except for costs for staffing or an outside consultant to design and implement an approved project based on the documented need of the applicant and the expenditures may not exceed 5% of the grant to a grantee if the grant exceeds \$250,000 and expenditures may not exceed 10% of the grant to a grantee if the grant is \$250,000 or less (see Definitions/Clarifications for how this will be calculated);
- A building except for a building that is included as part of a comprehensive conservation plan for a new or expanded recreational project (see Definitions/Clarifications for definition of comprehensive conservation plan and new or expanded recreational project); or
- A project in which the applicant is not directly involved in the execution and completion of the project.

The goal of the Industrial Commission is that at a minimum 15% of the funding received for a biennium will be given priority for recreation projects that meet Directive D.

The following projects are not eligible for funding, unless there is a finding of exceptional circumstances by the Industrial Commission include:

- Construction or refurbishment of indoor/outdoor ice rinks,
- Construction or refurbishment of indoor/outdoor athletic courts and sports fields,
- Other substantially similar facilities.
- Infrastructure that is not part of a comprehensive conservation plan.
- Projects not meeting a minimum funding request of \$2,500.

Budget Information

In-kind services used to match the request for Outdoor Heritage Fund dollars shall be valued as follows:

- Labor costs \$15.00 an hour
- Land costs Average rent costs for the county as shown in the most recent publication of the USDA, National Agricultural Statistics Services, North Dakota Field Office
- Permanent Equipment Any equipment purchased must be listed separately with documentation

- Equipment usage showing actual cost. (For example: playground equipment)
- Seed & Seedlings Actual documentation
- Transportation Mileage at federal rate
- Supplies & materials Actual documentation

More categories will be added as we better understand the types of applications that will be submitted. We will use as our basis for these standards other State and Federal programs that have established rates. For example, the North Dakota Nonpoint Source Pollution Management Program has established rates. If your project includes work that has an established rate under another State Program, please use those rates and note your source.

Definitions/Clarifications:

Building - Defined as “A structure with a roof either with walls or without walls and is attached to the ground in a permanent nature.”

Comprehensive Conservation Plan - Defined as “A detailed plan that has been formally adopted by the governing board which includes goals and objectives--both short and long term, must show how this building will enhance the overall conservation goals of the project and the protection or preservation of wildlife and fish habitat or natural areas.” This does not need to be a complex multi-page document. It could be included as a part of the application or be an attachment.

New and Expanded Recreational Project means that the proposed building cannot be a replacement of a current building. The proposed building must also be related to either a new or expanded recreational project--either an expansion in land or an expansion of an existing building or in the opportunities for recreation at the project site.

Playground equipment calculation - Only the actual costs of the playground equipment (a bid or invoice showing the amount of the equipment costs must be provided) - cannot include freight or installation or surface materials or removal of old equipment, etc.

Staffing/Outside Consultants Costs - If you are requesting OHF funding for staffing or for an outside consultant, you must provide information in your application on the need for OHF funding to cover these costs. For example, if you are an entity that has engineering staff you must explain why you don't have sufficient staff to do the work or if specific expertise is needed or whatever the reason is for your entity to retain an outside consultant. If it is a request for reimbursement for staff time then a written explanation is required in the application of why OHF funding is needed to pay for the costs of that staff member(s)' time. **The budget form must reflect on a separate line item the specific amount that is being requested for staffing and/or the hiring of an outside consultant.** This separate line item will then be used to make the calculation of 5% or 10% as outlined in the law. Note that the calculation will be made on the grant less the costs for the consultant or staff.

Maintenance – Activities that preserve or keep infrastructure in a given existing condition, including repairs. Repair means to restore to sound condition after damage, to renew or refresh; except repairs due to damage caused by Acts of God.

Scoring of Grants

Oral Presentation. Please note that you will be given an opportunity to make a ten-minute Oral Presentation at a meeting of the Outdoor Heritage Fund Advisory Board. These presentations are strongly encouraged.

Open Record. Please note that your application and any attachments will be open records as defined by law and will be posted on the Industrial Commission/Outdoor Heritage Fund website.

All applications will be scored by the Outdoor Heritage Fund Advisory Board after your ten-minute oral presentation. The ranking form that will be used by the Board is available on the website at <http://www.nd.gov/ndic/outdoor-infopage.htm> .

Awarding of Grants

All decisions on requests will be reported to applicants no later than 30 days after Industrial Commission consideration. The Commission can set a limit on duration of an offer on each application or if there isn't a specific date indicated in the application for implementation of the project, then the applicant has until the next Outdoor Heritage Fund Advisory Board regular meeting to sign the contract and get the project underway or the commitment for funding will be terminated and the applicant may resubmit for funding. Applicants whose proposals have been approved will receive a contract outlining the terms and conditions of the grant.

Responsibility of Recipient

The recipient of any grant from the Industrial Commission must use the funds awarded for the specific purpose described in the grant application and in accordance with the contract. The recipient cannot use any of the funds for the purposes stated under Exemptions on the first page of this application.

If you have any questions about the application, the Commission can be reached at 701-328-3722 or outdoorheritage@nd.gov.

Revised: November 4, 2019, April 12, 2023



Cavalier Do it Best Home & Lumber
 PO Box 395
 Cavalier ND 58220
 701-265-8435/L 701-265-4787/H



QUOTE

2305-644153 R1 PAGE 1 OF 1

SOLD TO
ANDREW OR LILLIAN STEGMAN 14048 104th ST.NE NECHE ND 58265

JOB ADDRESS
ANDREW OR LILLIAN STEGMAN 14048 104th ST.NE NECHE ND 58265 701-265-2708

ACCOUNT	JOB
2652708	0
CREATED ON	05/26/2023
EXPIRES ON	06/25/2023
BRANCH	1000
CUSTOMER PO#	
STATION	C10
CASHIER	JN
SALESPERSON	
ORDER ENTRY	JN
MODIFIED BY	JN

Thank you for your business!

Item	Description	D	Quantity	U/M	Price	Per	Amount
CUSTOM	LANDSCAPE SELECT 2 CU. FT. DYED BROWN SHREDDED HARDWOOD MULCH		120	EACH	7.7900	EACH	934.80
L9	DELIVERY		1	EACH	18.4600	EACH	18.46
					Subtotal		953.26
					ND Tax 5.00%	Sales Tax	46.74
					Total		1,000.00

Buyer:

Signature

WATER INSTALLATION ESTIMATE

Date 4 - 13 - 23

Name: Pembin County Historical

Location: _____

	Footage	Price/Foot	Total
Standard Membership Fee			\$1,500.00
Existing main to curb stop valve (1) (Bored)	675'	\$12 ⁰⁰ /ft	\$ 8100.00
Curb stop Valve to House (2)	20	\$10 ⁰⁰ /ft	\$ 200.00
Drill Hole in Floor or Wall			\$ 200.00
Incidental plumbing in basement			
Other: <u>2 poly pack TEE Curb stops + Risers</u>	2	\$200 EA	\$ 400.00
Other: <u>Hydrant - Contractor</u>			Contractor
Total Estimate			\$ 8900.00

(1) Pipeline from existing main to, and including curb stop is NRWD's line. All pipe, fittings, and curb stop valve is furnished by NRWD. Pipeline is installed by NRWD's contractor. The member pays ALL installation costs and the line is maintained by NRWD.

(2) Pipeline from curb stop to house is the member's line (a minimum of 160 psi poly pipe). The member pays the installation cost and the line is maintained by the member. Member pipeline can be installed by contractor of choice.

All metering equipment is furnished by Northeast Regional Water District and maintained by NRWD. Hand valves are furnished by NRWD, but they are maintained by the member.

Please note that this is only an estimate!

Prepared by: Jeff J. Harshbarger Date: 4-13-23

Outdoor Heritage Fund
Grant Round 22
Application Summary Page
GR 22-8

Project Title: The Conservation Capacity Program
Applicant: North Dakota Wildlife Federation
Primary Contact: John Bradley
Total Project Costs: \$45,000
OHF Request: \$30,000

Match Amount	Funding Source	Match Type
\$10,000	North Dakota Wildlife Federation	Cash
\$2,500	North Dakota Wildlife Federation	In-Kind
\$2,500	Small Conservation Organizations	In-Kind
\$15,000.00	Total	

Percentage of Matching Funds: 33%

Project Duration: Two years

Major Directive: C

Additional Directive: A, B & D

Summary of Project: NDWF proposes providing project funds as sub-grants to North Dakota conservation clubs for projects ranging from fencing, rotational grazing, pollinator plantings, and shooting range improvements.

Technical Committee Comments:

- Need to ensure that projects from sub-organizations meet the intent of OHF, the directives and the rules
- Goal for OHF dollars to be on the ground, not in admin costs; admin costs would not be upfront, would only be assessed after grant dollars were awarded
- NDWF would serve as a liaison for smaller conservation clubs without the resources for Non-profit status

Technical questions from the OHF Advisory Board members:

- Are OHF grants eligible for sub-granting?

North Dakota Wildlife Federation has not previously received funds.

***Total OHF funds awarded to date: \$0.00. Total OHF funds spent to date: \$0.00.**

North Dakota Wildlife Federation has not submitted any unsuccessful applications.

OHF Advisory Board Recommendation

Contingencies: **None**

Conflicts of Interest: **1**

Funding Vote: **9-0**

Funding Amount Vote: **\$30,000**

Outdoor Heritage Fund Grant Application



Instructions

After completing the form, applications and supporting documentation may be submitted by e-mail to ndicgrants@nd.gov. It is preferred that only electronic copies are submitted.

You are not limited to the spacing provided, except in those instances where there is a limit on the number of words. If you need additional space, please indicate that on the application form, answer the question on a separate page, and include with your submission.

The application and all attachments must be received by the application deadline. You may submit your application at any time prior to the application deadline. **Applicants are strongly encouraged to submit applications prior to the deadline for staff review in order ensure that proposals will be complete when submitted on deadline date.**

Incomplete applications may not be considered for funding.

Please review the back of this form to determine project eligibility, definitions, budget criteria, and statutory requirements.

Project Name: The Conservation Capacity Program

Name of Organization: North Dakota Wildlife Federation

Federal Tax ID: 23-7071000

Contact Person/Title: John Bradley, Executive Director

Address: 1605 E. Capitol Ave. Suite 102

City: Bismarck

State: North Dakota

Zip Code: 58501

E-mail Address: jbradley.ndwf@gmail.com

Web Site Address: northdakotawildlife.org

Phone: 701-390-7196

Objective of Grant:

The North Dakota Wildlife Federation's Conservation Capacity Program would provide the opportunity for small conservation organizations in North Dakota to utilize Outdoor Heritage Fund (OHF) dollars to increase their conservation impact on the ground.

MAJOR Directive:

Choose only one response

- Directive A.** Providing access to private and public lands for sportsmen, including projects that create fish and wildlife habitat and provide access for sportsmen;
- Directive B.** Improving, maintaining and restoring water quality, soil conditions, plant diversity, animal systems and by supporting other practices of stewardship to enhance farming and ranching;
- Directive C.** Developing, enhancing, conserving and restoring wildlife and fish habitat on private and public lands; and
- Directive D.** Conserving natural areas and creating other areas for recreation through the establishment and development of parks and other recreation areas.

Additional Directive:

Choose all that apply.

- Directive A.**
- Directive B.**
- Directive C.**
- Directive D.**

Type of organization:

- State Agency
- Political Subdivision
- Tribal Entity
- Tax-exempt, nonprofit corporation.

Abstract/Executive Summary.

Summarize the project, including its objectives, expected results, duration, total project costs and participants. (No more than 500 words)

The Conservation Capacity Program would provide the opportunity for small conservation organizations in North Dakota to utilize Outdoor Heritage Fund (OHF) dollars to increase their conservation impact on the ground.

NDWF affiliate clubs have voiced their desire to participate in the Outdoor Heritage Fund. Unfortunately, many of NDWF affiliate clubs and other small conservation organizations lack the administrative capacity, organizational structure, and upfront funds to apply for Outdoor Heritage Fund grants. During the two-year program, NDWF is seeking to be the intermediary of these small organizations and the OHF, filling in the missing pieces of upfront funding and grant administration.

With the \$30,000 requested from OHF, NDWF will promote the benefits of the Outdoor Heritage Fund in communities across the state by helping small organizations administer and implement local projects that fit the four directives of OHF. NDWF has a suite of ready-to-go projects already identified ranging from fencing for rotational grazing systems, pollinator plantings, shooting range safety improvements, etc. The money will be distributed on a first come, first served basis for projects that fit the four OHF directives.

Project Duration:

Indicate the intended schedule for drawing down OHF funds.

The project dollars will be spent over the next two years ending in Spring 2025. In year one, NDWF will work with conservation groups to develop and execute small grant contracts. In years one and two, NDWF will support those conservation organizations in implementing their local conservation project. When projects are completed in year two, NDWF will complete final documentation and submission to OHF.

Amount of Grant request: \$30,000

Total Project Costs: \$45,000

Note: in-kind and indirect costs can be used for matching funds.

Amount of Matching Funds: \$15,000

A minimum of 25% Match Funding is required. *Indicate if the matching funds will be in-kind, indirect or cash. Please provide verification that these matching funds are available for your project. Note that effective as of July 1, 2015 no State General Fund dollars can be used for a match unless funding was legislatively appropriated for that purpose.*

Amount of Match	Funding Source	Type of Match (Cash, In-kind or Indirect)
\$10,000	North Dakota Wildlife Federation	Cash
\$2,500	North Dakota Wildlife Federation	In-kind
\$2,500	Small Conservation Organizations	In-kind

Certifications

I certify that this application has been made with the support of the governing body and chief executive of my organization.

I certify that if awarded grant funding none of the funding will be used for any of the exemptions noted in the back of this application.

Narrative

Organization Information – Briefly summarize your organization’s history, mission, current programs and activities. *Include an overview of your organizational structure, including board, staff and volunteer involvement. (no more than 300 words)*

The North Dakota Wildlife Federation (NDWF) is a grassroots organization, which protects and enhances North Dakota’s wildlife and sporting traditions. Since 1935, NDWF has advocated for the conservation of wildlife, habitat, and access for North Dakota’s hunters, anglers, and other outdoor users. NDWF has a storied history of uniting local wildlife clubs, hunters and anglers, farmers and ranchers, and other outdoor enthusiasts on conservation issues around the state.

NDWF has traditionally depended on memberships, donations, grants, and a variety of other fundraising activities for its annual operating expenses and on the ground projects. In 2019, NDWF was the recipient of a bequest from a family trust in Stutsman County. The estate was bequeathed for the broad purposes of wildlife conservation in North Dakota. This estate is the primary source of match to this grant proposal. Through NDWF’s strategic planning efforts, our organization is looking to provide maximum impact with this gift.

The North Dakota Wildlife Federation has leveraged these dollars in the past by working with our affiliate clubs on public and private land habitat and access projects. NDWF would like to expand these partnerships with smaller community-based wildlife organizations across the state.

Purpose of Grant – Describe the proposed project identifying how the project will meet the specific directive(s) of the Outdoor Heritage Fund Program

Identify project goals, strategies and benefits and your timetable for implementation. Include information about the need for the project and whether there is urgency for funding. Indicate if this is a new project or if it is replacing funding that is no longer available to your organization. Identify any innovative features or processes of your project. Note: if your proposal provides funding to an individual, the names of the recipients must be reported to the Industrial Commission/Outdoor Heritage Fund. These names will be disclosed upon request.

The Conservation Capacity Program looks to provide small conservation organizations in North Dakota the opportunity to utilize Outdoor Heritage Fund (OHF) dollars to increase their conservation impact on the ground. Over the two years of the Conservation Capacity Program, NDWF will promote the benefits of the Outdoor Heritage Fund by helping small organizations administer and implement projects that fit the four directives of OHF. The money will be distributed on a first come, first served basis for projects that fit the directives.

NDWF will create a suite of projects:

- Fencing for rotational grazing systems,
- Cover crops
- Food plots
- Pollinator plantings
- Shooting range safety improvements
- Boat landings and fishing pier upgrades

Goals, Strategies, and Benefits: The goal of the program is to create a conservation funding pool that is accessible to small conservation organizations who would otherwise not seek OHF grant dollars. The prerequisites required for a small organization to access OHF grants in the past have been too great of a burden. Many small organizations lack the administrative capacity and organizational structure needed to participate in the OHF. This program seeks to achieve the OHF's four directives, while increasing the awareness of the Outdoor Heritage Fund to smaller communities across the state.

The Conservation Capacity Program will provide matching NDWF funds and in-kind from NDWF and the participating organization on projects that fit the OHF directives. Funding from OHF will allow a greater range of projects to be completed and will be an introduction of numerous small groups across the state to the Outdoor Heritage Fund. If successful, the Outdoor Heritage Fund will have a broader spectrum of projects and participants.

Is this project part of a Comprehensive Conservation Plan? Yes No

If yes, provide a copy with the application.

Note: Projects involving buildings and infrastructure will only be considered if part of a Comprehensive Conservation Plan. Please refer to the "Definitions" section at the back of the form for more details.

Management of Project – Provide a description of how you will manage and oversee the project to ensure it is carried out on schedule and in a manner that best ensures its objectives will be met.

Include a brief background and work experience for those managing the project.

The North Dakota Wildlife Federation will provide management, coordination, and administration to the Conservation Capacity Program. NDWF staff will work collectively to provide affiliate clubs and outside organizations with the needed information to assist program participants.

The North Dakota Wildlife Federation will complete all program coordination from our office located in Bismarck, ND. John Bradley, Executive Director and Cara Greger, Western North Dakota Conservation Coordinator, will serve as the program coordinators. NDWF staff have years of experience administering and executing small grants, including youth shooting sports grants and affiliate program grants. NDWF will provide tracking and reporting for all project agreements following grant guidelines.

All OHF grant funds will be paid as agreements once development activities are completed and proper documentation of the completed project is supplied to NDWF. Funding will be provided through continuous enrollment, meaning there will be no batching period and funding stops when the funds are spent. If any prioritization is required to determine the best projects, NDWF Board of Directors and staff will provide that oversight, utilizing input from outside experts as needed.

Evaluation – Describe your plan to document progress and results.

Please be specific on the methods you will utilize to measure success. Note that regular reporting, final evaluation and expenditure reports will be required for every grant awarded.

Planning -- The essential element of the Conservation Capacity Program will be planning. NDWF will work closely with the conservation organization and through a contract clearly formulate objectives and deliverables with a corresponding budget.

Administration and Monitoring – NDWF will check in frequently with the conservation organization’s volunteers to ensure that projects are being completed on time and within the contracted budget. Photos and site visits will take place to ensure that projects were completed to the contracted standards.

Communication – NDWF will have clear lines of communication with the conservation organization executing the contract. In addition, NDWF will provide a final evaluation and expenditure report to the Outdoor Heritage Fund Board. NDWF will also share successful projects with other conservation clubs and alert them to future OHF opportunities.

Financial Information

Project Budget – Use the table below to provide an itemized list of project expenses and describe the matching funds being utilized for this project.

Indicate if the matching funds are in the form of cash, indirect costs or in-kind services. The budget should identify all other committed funding sources and the amount of funding from each source. **A minimum of 25% match funding is required.** An application will be scored higher the greater the amount of match funding provided. (See Scoring Form.)

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
Wildlife Habitat Projects	\$10,000	\$3,334				\$13,334
Private Land Stewardship Projects	\$10,000	\$3,333				\$13,333
Recreation Development Projects	\$10,000	\$3,333				\$13,333
Conservation Organization-Volunteer Hours on Project					\$2,500	\$2,500
NDWF Administration			\$2,500			\$2,500
Total Costs	\$30,000	\$10,000	\$2,500		\$2,500	\$45,000

Note: Costs for seeding, fencing, pipelines, wells, and cover crops cannot exceed NRCS Field Office Tech Guide without justification. Projects involving perimeter fencing must follow NRCS eligibility standards.

Budget Narrative – Use the space below to provide additional detail regarding project expenses.

The NDWF's Conservation Capacity Program will provide a 50% match to the Outdoor Heritage Fund dollars. The NDWF will provide \$10,000 cash for projects related to this program, and \$2,500 of in-kind funding for administration of the program. Local conservation organizations will provide \$2,500 of in-kind match for hours committed to the project.

Wildlife Habitat Projects – This section of funding is primarily earmarked for pollinator plantings and food plots, but would be open to other projects that fit Directive A.

Private Land Stewardship Projects – This section of funding is earmarked for fencing projects for improved grazing systems, cover crop seeding, and native grass plantings. Additional projects that fit Directive B will be considered.

Recreation Development Projects – This section of funding is earmarked for improvements on public recreational shooting and fishing sites. It would be open to berm and tree plantings at ranges for improved safety, as well as boat ramp and fishing pier improvements.

This grant request is for a suite of projects that fit the four directives of the Outdoor Heritage Fund. NDWF seeks flexibility to adjust goals and transfer funds between the projected line-item expenses to meet the needs of the on the ground project. NDWF's match, as well as well as the in-kind match, will remain the same.

Sustainability – Indicate how the project will be funded or sustained in future years.

Include information on the sustainability of this project after OHF funds have been expended and whether the sustainability will be in the form of ongoing management or additional funding from a different source.

The projects identified and any additional projects will be implemented and continue to serve the local community after the project cycle ends.

This grant program has great interest from local conservation clubs. If the projects from this grant round prove successful, NDWF expects greater interest from additional conservation clubs to implement similar projects that utilize the Outdoor Heritage Fund. NDWF will look for further opportunities to connect local conservation clubs with OHF dollars in future grant rounds.

Partial Funding – Indicate how the project will be affected if less funding is available than that requested.

Portions of the project could proceed with limited OHF funding. The opportunities identified by the North Dakota Wildlife Federation's affiliates have exceeded the funds that the North Dakota Wildlife Federation has allocated for these types of projects. Additionally, one of the goals of this project is to increase awareness of the Outdoor Heritage Fund with smaller organizations outside of the Federation's affiliates. If funds are limited, the Federation would be forced to reduce the number of organizations we could engage with.

Partnership Recognition - *If you are a successful recipient of Outdoor Heritage Fund dollars, how would you recognize the Outdoor Heritage Fund partnership? * There must be signage at the location of the project acknowledging OHF funding when appropriate.*

The North Dakota Wildlife Federation will recognize the Outdoor Heritage Fund in the project negotiation phase with small conservation organizations, NDWF would also publicize OHF projects in our quarterly newsletter, Flickertales. For ongoing and finished projects NDWF would post physical signs "This project is supported by the Outdoor Heritage Fund."

Additionally, the Federation will use their Facebook and Instagram platforms to both advertise the program's availability and tout its successes, noting the key role played by OHF.

Awarding of Grants - *Review the appropriate sample contract for your organization on the website at <http://www.nd.gov/ndic/outdoor-infopage.htm>.*

Can you meet all the provisions of the sample contract? Yes No

If there are provisions in that contract that your organization is unable to meet, please indicate below what those provisions would be:

ABOUT OHF:

The purpose of the North Dakota Outdoor Heritage Fund is to provide funding to state agencies, tribal governments, political subdivisions, and nonprofit organizations, with higher priority given to projects that enhance **conservation** practices in this state by:

Directive A. Providing access to private and public lands for sportsmen, including projects that create fish and wildlife habitat and provide access for sportsmen;

Directive B. Improving, maintaining and restoring water quality, soil conditions, plant diversity, animal systems and by supporting other practices of stewardship to enhance farming and ranching;

Directive C. Developing, enhancing, conserving and restoring wildlife and fish habitat on private and public lands; and

Directive D. Conserving natural areas and creating other areas for recreation through the establishment and development of parks and other recreation areas.

EXEMPTIONS

Outdoor Heritage Fund grants may not be used to finance the following:

- Litigation;
- Lobbying activities;
- Any activity that would interfere, disrupt, or prevent activities associated with surface coal mining operations; sand, gravel, or scoria extraction activities; oil and gas operations; or other energy facility or infrastructure development;
- The acquisition of land or to encumber any land for a term longer than twenty years; or
- Projects outside this state or projects that are beyond the scope of defined activities that fulfill the purposes of Chapter 54-17.8 of the North Dakota Century Code.

OHF funds may not be used, except after a finding of exceptional circumstances by the Industrial Commission, to finance:

- A completed project or project commenced before the grant application is submitted;
- A feasibility or research study;
- Maintenance costs;
- A paving project for a road or parking lot;
- A swimming pool or aquatic park;
- Personal property that is not affixed to the land;
- Playground equipment, except that grant funds may be provided for up to 25% of the cost of the equipment not exceeding \$10,000 per project and all playground equipment grants may not exceed 5% of the total grants per year (see Definitions/Clarifications for how this will be calculated);
- Staffing or outside consultants except for costs for staffing or an outside consultant to design and implement an approved project based on the documented need of the applicant and the expenditures may not exceed 5% of the grant to a grantee if the grant exceeds \$250,000 and

expenditures may not exceed 10% of the grant to a grantee if the grant is \$250,000 or less (see Definitions/Clarifications for how this will be calculated);

- A building except for a building that is included as part of a comprehensive conservation plan for a new or expanded recreational project (see Definitions/Clarifications for definition of comprehensive conservation plan and new or expanded recreational project); or
- A project in which the applicant is not directly involved in the execution and completion of the project.

The goal of the Industrial Commission is that at a minimum 15% of the funding received for a biennium will be given priority for recreation projects that meet Directive D.

The following projects are not eligible for funding, unless there is a finding of exceptional circumstances by the Industrial Commission include:

- Construction or refurbishment of indoor/outdoor ice rinks,
- Construction or refurbishment of indoor/outdoor athletic courts and sports fields,
- Other substantially similar facilities.
- Infrastructure that is not part of a comprehensive conservation plan.
- Projects not meeting a minimum funding request of \$2,500.

Budget Information

In-kind services used to match the request for Outdoor Heritage Fund dollars shall be valued as follows:

- Labor costs \$15.00 an hour
- Land costs Average rent costs for the county as shown in the most recent publication of the USDA, National Agricultural Statistics Services, North Dakota Field Office
- Permanent Equipment Any equipment purchased must be listed separately with documentation showing actual cost. (For example: playground equipment)
- Equipment usage Actual documentation
- Seed & Seedlings Actual documentation
- Transportation Mileage at federal rate
- Supplies & materials Actual documentation

More categories will be added as we better understand the types of applications that will be submitted. We will use as our basis for these standards other State and Federal programs that have established rates. For example, the North Dakota Nonpoint Source Pollution Management Program has established rates. If your project includes work that has an established rate under another State Program, please use those rates and note your source.

Definitions/Clarifications:

Building - Defined as "A structure with a roof either with walls or without walls and is attached to the ground in a permanent nature."

Comprehensive Conservation Plan - Defined as "A detailed plan that has been formally adopted by the governing board which includes goals and objectives--both short and long term, must show how this building will enhance the overall conservation goals of the project and the protection or preservation of wildlife and fish habitat or natural areas." This does not need to be a complex multi-page document. It could be included as a part of the application or be an attachment.

New and Expanded Recreational Project means that the proposed building cannot be a replacement of a current building. The proposed building must also be related to either a new or expanded recreational project--either an expansion in land or an expansion of an existing building or in the opportunities for recreation at the project site.

Playground equipment calculation - Only the actual costs of the playground equipment (a bid or invoice showing the amount of the equipment costs must be provided) - cannot include freight or installation or surface materials or removal of old equipment, etc.

Staffing/Outside Consultants Costs - If you are requesting OHF funding for staffing or for an outside consultant, you must provide information in your application on the need for OHF funding to cover these costs. For example, if you are an entity that has engineering staff you must explain why you don't have sufficient staff to do the work or if specific expertise is needed or whatever the reason is for your entity to retain an outside consultant. If it is a request for reimbursement for staff time then a written explanation is required in the application of why OHF funding is needed to pay for the costs of that staff member(s)' time. **The budget form must reflect on a separate line item the specific amount that is being requested for staffing and/or the hiring of an outside consultant.** This separate line item will then be used to make the calculation of 5% or 10% as outlined in the law. Note that the calculation will be made on the grant less the costs for the consultant or staff.

Maintenance – Activities that preserve or keep infrastructure in a given existing condition, including repairs. Repair means to restore to sound condition after damage, to renew or refresh; except repairs due to damage caused by Acts of God.

Scoring of Grants

Oral Presentation. Please note that you will be given an opportunity to make a ten-minute Oral Presentation at a meeting of the Outdoor Heritage Fund Advisory Board. These presentations are strongly encouraged.

Open Record. Please note that your application and any attachments will be open records as defined by law and will be posted on the Industrial Commission/Outdoor Heritage Fund website.

All applications will be scored by the Outdoor Heritage Fund Advisory Board after your ten-minute oral presentation. The ranking form that will be used by the Board is available on the website at <http://www.nd.gov/ndic/outdoor-infopage.htm> .

Awarding of Grants

All decisions on requests will be reported to applicants no later than 30 days after Industrial Commission consideration. The Commission can set a limit on duration of an offer on each application or if there isn't a specific date indicated in the application for implementation of the project, then the applicant has until the next Outdoor Heritage Fund Advisory Board regular meeting to sign the contract and get the project underway or the commitment for funding will be terminated and the applicant may resubmit for funding. Applicants whose proposals have been approved will receive a contract outlining the terms and conditions of the grant.

Responsibility of Recipient

The recipient of any grant from the Industrial Commission must use the funds awarded for the specific purpose described in the grant application and in accordance with the contract. The recipient cannot use any of the funds for the purposes stated under Exemptions on the first page of this application.

If you have any questions about the application, the Commission can be reached at 701-328-3722 or outdoorheritage@nd.gov.

Revised: November 4, 2019, April 12, 2023

Outdoor Heritage Fund
Grant Round 22
Application Summary Page
GR 22-9

Project Title: North Dakota Partners for Wildlife Project 3
Applicant: North Dakota Natural Resources Trust
Primary Contact: Terry Albee
Total Project Costs: \$3,387,000
OHF Request: \$1,957,500

Match Amount	Funding Source	Match Type
\$68,000	ND Natural Resources Trust	Cash
\$25,000	ND Natural Resources Trust	In-Kind
\$70,000	ND Partners For Fish and Wildlife	Cash
\$35,000	ND Partners For Fish and Wildlife	In-Kind
\$1,231,500	ND Landowners	Cash
\$1,429,500.00	Total	

Percentage of Matching Funds: 42%

Project Duration: Five years

Major Directive: C

Additional Directive: B

Summary of Project: The Project involves a third phase of two previous OHF projects, and would include grazing system agreements, wetland restoration agreements, and cover crop agreements with North Dakota landowners.

Technical Committee Comments:

- Earlier phases of the project have been working well

Technical questions from the OHF Advisory Board members:

Funded Projects

Contract	Total Project Cost	Title	Award Amount	Amount Expended	Project Timeframe
2-20	\$400,000	Water Storage Piggyback	\$300,000	\$300,000	Completed
¹ 5-77	\$257,441	Beginning Farmer Enhancement	\$132,884	\$132,844	Completed
6-90	\$1,467,250	Working Grassland Partnership	\$1,097,250	\$1,079,015.16	2016-2026
² 8-97	\$438,681	Grasslands Enhancement Pilot Project	\$230,000	\$170,133.71	2017-2020
³ 9-109	\$500,000	Water Storage and Grass Seeding	\$67,500	\$67,500	Completed
⁴ 9-112	\$250,420	Grand Forks County Prairie Management Toolbox	\$121,200	\$97,353	Completed
⁵ 10-115	\$1,773,750	Working Grassland Partnership (Phase II)	\$903,750	\$708,023.79	2017-2027
11-124	\$743,250	Working Grassland Partnership Phase III	\$396,850	\$320,648.57	2018-2028
11-128	\$3,845,000	Bakken Development & Working Lands Program	\$2,170,000	\$1,655,279.37	2018-2023
12-131	\$277,700	Livestock & Wildlife Dams - Creation & Enhancement	\$138,850	\$138,850	Completed
⁶ 13-140	\$255,000	ND Grassland Restoration Project	\$104,500	\$104,396.81	Completed
14-154	\$2,235,000	Working Grassland Partnership IV	\$1,225,000	\$751,185.78	2019-2023
15-160	\$255,000	North Dakota Grassland Restoration Project 2	\$100,000	\$79,905.08	2019-2022
17-173	\$6,390,383	Bakken Development and Working Lands Program II	\$3,308,100	\$675,242.96	2020-2025
17-174	\$1,303,000	North Dakota Partners For Wildlife Project	\$716,500	\$558,433.92	2020-2024
18-178	\$495,000	Wildlife and Livestock Dams - Wetlands Creation, Restoration and Enhancement	\$240,000	\$106,285.27	2021-2025

¹ Returned commitment of \$40.

² Ducks Unlimited is co-applicant.

³ Returned commitment of \$3,369.

⁴ Audubon Dakota is co-applicant.

⁵ Co-applicants are ND Association of Soil Conservation Districts, Ducks Unlimited, and Pheasants Forever.

⁶ Returned commitment of \$103.

18-179	\$2,150,000	Grazing Resiliency in the Bakken (GRB)	\$1,270,000	\$270,168.02	2021-2026
19-194	\$1,857,500	Working Grassland Partnership 5	\$985,000	\$517,472.35	2021-2026
20-197	\$1,734,800	North Dakota Partners For Wildlife Project 2	\$1,016,500	\$129,851.99	2022-2026
20-198	\$3,280,000	Grazing Resiliency in the Bakken (GRB) II	\$1,970,000	\$145,394.85	2022-2025
21-211	\$1,410,000	Working Grasslands Partnership 6	\$740,000	\$0	2022-2027
Totals	\$31,319,175.00		\$17,233,884.00	\$8,007,984.63	

Unsuccessful Applications				
Round	Request	Total Project Cost	Title	Vote
1-DDD	\$3,750,000	\$4,405,000	Working Lands Partnership	5-7
3-22	\$3,525,000	\$4,700,000	Conservation Cover Program (Pilot)	1-10
11-17	\$897,250	\$1,847,250	Dakota Skipper Habitat Enhancement Project	4-8
13-9	\$897,250	\$1,847,250	Dakota Skipper Habitat Restoration/Enhancement Partnership	5-5
Totals	\$9,069,500.00	\$12,799,500.00		

OHF Advisory Board Recommendation

Contingencies: **None**

Conflicts of Interest: **None**

Funding Vote: **7-2**

Funding Amount Vote: **\$1,957,500**

Outdoor Heritage Fund Grant Application



Instructions

After completing the form, applications and supporting documentation may be submitted by e-mail to ndicgrants@nd.gov. It is preferred that only electronic copies are submitted.

You are not limited to the spacing provided, except in those instances where there is a limit on the number of words. If you need additional space, please indicate that on the application form, answer the question on a separate page, and include with your submission.

The application and all attachments must be received by the application deadline. You may submit your application at any time prior to the application deadline. **Applicants are strongly encouraged to submit applications prior to the deadline for staff review in order ensure that proposals will be complete when submitted on deadline date.** Incomplete applications may not be considered for funding.

Please review the back of this form to determine project eligibility, definitions, budget criteria, and statutory requirements.

Project Name North Dakota Partners For Wildlife Project 3

Name of Organization North Dakota Natural Resources Trust

Federal Tax ID# 36-3512179

Contact Person/Title Terry Allbee, Business Manager/Biologist

Address 1605 East Capitol Ave., Ste. 101

City Bismarck

State North Dakota

Zip Code 58501

E-mail Address terry@naturalresourcestrust.com

Web Site Address (If applicable) www.ndnrt.com

Phone 701-223-8501

List names of co-applicants if this is a joint proposal

MAJOR Directive:

Choose only one response

Directive A. Providing access to private and public lands for sportsmen, including projects that create fish and wildlife habitat and provide access for sportsmen;

Directive B. Improving, maintaining and restoring water quality, soil conditions, plant diversity, animal systems and by supporting other practices of stewardship to enhance farming and ranching;

Directive C. Developing, enhancing, conserving and restoring wildlife and fish habitat on private and public lands; and

Directive D. Conserving natural areas and creating other areas for recreation through the establishment and development of parks and other recreation areas.

Additional Directive:

Choose all that apply

Directive A.

Directive B.

Directive C.

Directive D.

Type of organization:

State Agency

Political Subdivision

Tribal Entity

Tax-exempt, nonprofit corporation.

Abstract/Executive Summary.

Summarize the project, including its objectives, expected results, duration, total project costs and participants. (no more than 500 words)

The last winter in North Dakota was tough throughout most of the state. Cattle producers struggled to keep livestock healthy, and the wildlife populations also struggled to survive. It comes without saying that everyone was ready for warmer weather and no snow on the ground. The start of the growing season in North Dakota triggered many producers to start exploring new management actions on their property. Many did this by reaching out to conservation groups to understand whether funding was available, and partnerships could be forged to address the needs of the producer and North Dakota's wildlife. This grant proposal is a response and effort to address the continued strong demand from North Dakota landowners to improve grazing systems, restore grassland acres, and restore wetland acres on their properties.

The North Dakota Partners for Wildlife Project 3 (NDPWP3) is a new phase of two successful grants supported by the Outdoor Heritage Fund (OHF). The North Dakota Natural Resources Trust (Trust) and U.S. Fish and Wildlife Service's private lands program, the North Dakota Partners for Fish and Wildlife Program (ND PFW), have been very appreciative of past support and want to deliver new OHF grant funds to willing landowners statewide. Landowners who participated in the previous NDPWP grants have understood that OHF has been critical in helping achieve natural resource improvements and along with their farming/ranching operations.

All previous grant funds received by the Trust for NDPWP have been obligated with signed landowner agreements except a portion of the NDPWP2 cover crop cost-share. Accomplishments of the original NDPWP, which was approved in fall of 2020, include 27 signed grazing system agreements for 11,580 acres of managed grasslands, 12 wetland restoration agreements restoring on 176 wetland acres, and 11 cover crop agreements. The grant duration was 4 years, and through the first two plus years of the grant, it is over 82% (\$125,751 remaining of \$716,500 grant) completed. Completed meaning development projects are installed, and payments to landowners have been made. The remaining balance of funds are associated with grazing systems and cover crop seedings. It is expected that these activities will be completed in 2023.

The NDPWP2 grant was approved in spring of 2022 with a 4-year duration. The Trust and ND PFW have been busy working with landowners and promoting this OHF grant. During the late winter and early spring of 2023, landowner interest was strong. To date, the NDPWP2 has obligated all grazing system funds with 26 signed landowner agreements on 21,000 acres, three signed grass seeding agreements for 316 acres, six signed wetland restoration agreements on 54 acres and two signed cover crop agreements on 181 acres. The Trust expects 50%-75% of the grazing systems to be completed in 2023, all remaining grass seeding to be completed in 2023, all wetland restoration to be completed in fall of 2023 (fall weather is the limiting factor), and more cover crop agreements to be signed in 2023, with 30% being completed in 2023. This is a great testimonial to the OHF Advisory Board on the success of these previous grants and the need from producers for further funding.

Project Duration: 5 Years

Indicate the intended schedule for drawing down OHF funds.

2023	\$700,000
2024	\$850,000
2025-2027	\$407,500

Amount of Grant request: \$1,957,500.00

Total Project Costs: \$3,387,000.00

Note: in-kind and indirect costs can be used for matching funds.

Amount of Matching Funds: \$1,429,500.00 (42% matching funds)

A minimum of 25% Match Funding is required. Indicate if the matching funds will be in-kind, indirect or cash. Please provide verification that these matching funds are available for your project. Note that effective as of July 1, 2015 no State General Fund dollars can be used for a match unless funding was legislatively appropriated for that purpose.

Amount of Match	Funding Source	Type of Match (Cash, In-kind or Indirect)
\$68,000.00	ND Natural Resources Trust	Cash
\$25,000.00	ND Natural Resources Trust	In-Kind
\$70,000.00	ND Partners For Fish and Wildlife	Cash
\$35,000.00	ND Partners For Fish and Wildlife	In-Kind
\$1,231,500.00	ND Landowners	Cash

Certifications

X I certify that this application has been made with the support of the governing body and chief executive of my organization.

X I certify that if awarded grant funding none of the funding will be used for any of the exemptions noted in the back of this application.

Narrative

Organization Information – Briefly summarize your organization’s history, mission, current programs and activities.

Include an overview of your organizational structure, including board, staff and volunteer involvement. (no more than 300 words)

The North Dakota Natural Resources Trust was created in 1986 and was originally called the North Dakota Wetlands Trust until 2000. The Trust's mission is to promote the retention, restoration, creation and wildlife friendly management of wetlands, grasslands, and riparian areas by presenting practical conservation opportunities throughout North Dakota. The Trust achieves this mission by partnering with agricultural and conservation organizations to 1) promote the productive use of private agricultural lands private property rights that result in the enhancement and protection of private lands; 2) effectively use North Dakota's public lands both for agriculture and recreation; 3) promote good land use planning along urban river corridors, and 4) enhance the state's significant water resources. The Trust helps shape

the landscape through its programs and does its best to help shape both public attitude and public policy to support natural resource protection.

From its inception, the Trust has played a role as facilitator between agricultural and conservation interests. In addition to facilitating and funding sound, on-the-ground conservation of natural resources, its goal is to identify common issues, create dialogue, and resolve conflicts.

The ND PFW Program has a long history of working closely with private landowners by providing financial and technical assistance through voluntary conservation efforts to restore, enhance, and create wetland and grassland habitats on private land. The ND PFW Program works with private landowners through short-term (10 year) conservation agreements to foster partnerships on working lands that help conserve important wildlife habitat and provide economic benefits for North Dakota's farmers and ranchers and other private landowners. The ND PFW Program in North Dakota was established in 1987. The ND PFW Program is known nationwide as one of the leading Federal programs that promotes and implements voluntary, incentive-based community-based stewardship for fish and wildlife conservation.

Purpose of Grant – Describe the proposed project identifying how the project will meet the specific directive(s) of the Outdoor Heritage Fund Program

Identify project goals, strategies and benefits and your timetable for implementation. Include information about the need for the project and whether there is urgency for funding. Indicate if this is a new project or if it is replacing funding that is no longer available to your organization. Identify any innovative features or processes of your project. Note: if your proposal provides funding to an individual, the names of the recipients must be reported to the Industrial Commission/Outdoor Heritage Fund. These names will be disclosed upon request.

For tree/shrub/grass plantings: provide a planting plan describing the site design, planting methods, number of trees/shrubs by species and stock size, grass species and future maintenance. A statement certifying that the applicant will adhere to USDA-NRCS tree/shrub/grass planting specifications along with the name of the governmental entity designing the planting may be substituted for a planting plan.

For projects including Section 319 funding: provide in detail the specific best management practices that will be implemented and the specific projects for which you are seeking funding.

For projects including fencing: A minimum cost share of 40% by the recipient is preferred. Include detailed information on the type of fencing to be installed, whether funding is requested for boundary fencing, new or replacement of existing fencing, and/or cross fencing.

Over the next five-year duration, the goal of NDPWP3 program is to restore and enhance private agricultural property through voluntary wetland and grassland conservation practices statewide. The NDPWP3 will provide landowners with a ten-year partnership agreement with buyback provisions, technical support, voluntary terms, and cost-share.

Wetland Restoration: The NDPWP3 will utilize ND PFW standards for wetland restoration and/or creation. ND PFW standards for wetland restorations follow, and in many cases exceed, NRCS Wetland Restoration Standards. Where required by ND State law, ND PFW will manage permitting from ND State Water Commission for construction and/or water

appropriation. NDPWP3 will cost-share wetland construction, and the Trust will provide a one-time incentive payment based on actual surface acres of water.

Grass Seeding: The NDPWP3 will adhere to ND PFW grass seeding specifications and/or USDA-NRCS planting specifications. We will encourage the use of no-till grass drills when possible. A combination of warm and cool season grasses will be obtained from a reputable seed dealer with weed-free assurance. The grass seeding will have a restriction of no haying prior to July 15th, with preference to delays until August 1, ND's Primary Nesting Season. The cost-share is based on total acres seeded, actual seed costs, and management costs.

Grazing Systems: The NDPWP3 will provide funding for grazing system developments that include livestock water and fencing. The developments will be cost-shared at a rate of 60% from the grant and 40% from landowners. Technical advice will be provided to applicants and supporting partners and developed in consultation with landowners. Landowners will select the fence type that will best meet their operation need. Fencing cost-share will be provided at a per foot rate and will be adjusted to accommodate the different fence types. The rate will be based on USDA Tech Guide Allowable costs with the full funding rate determined by NRCS's practice scenario amount. Water development cost-share will be provided based on documented actual costs. The Trust and ND PFW will provide additional cost-share for components of the grazing system that may not be considered under current OHF guidelines.

This proposal is an innovative approach to bring partners together to prioritize natural resource restoration and enhancements on privately-owned lands across North Dakota. The NDPWP3 will provide private landowners with an opportunity to combine multiple conservation practices in a manner that assists them with achieving their desired management outcomes. Many of the conservation practices that will be implemented through the NDPWP3 to complement one another and can be delivered in a manner that is not burdensome for landowners.

Because project practices will be selected by interested landowners, and certain practices may be more popular than others. We are asking that this grant provide the flexibility to adjust acreage goals and transfer funding to the practices based on practice demand. The OHF funds and match will remain at the same levels.

All participating landowners will be informed about public hunting access opportunities through the North Dakota Game and Fish Department's PLOTS program.

In addition to the traditional landowner promotion, the NDPWP3 would be marketed through the North Dakota Conservation District Employee Association's Dakota Prairie Legacy Initiative and additionally through the Meadowlark Initiative.

Is this project part of a Comprehensive Conservation Plan? Yes No

If yes, provide a copy with the application.

This grant proposal does benefit many of the species of conservation concern and the conservation actions identified in the North Dakota State Wildlife Action Plan (2015)

(NDSWAP). The NDSWAP conservation actions that align with this proposal include 1) offering of incentives and programs to protect, enhance, and restore habitat, 2) promote and support holistic grazing and work with grass-based agriculture groups, and 3) use best management practices.

Note: Projects involving buildings and infrastructure will only be considered if part of a Comprehensive Conservation Plan. Please refer to the "Definitions" section at the back of the form for more details.

Management of Project – Provide a description of how you will manage and oversee the project to ensure it is carried out on schedule and in a manner that best ensures its objectives will be met.

Include a brief background and work experience for those managing the project.

The Trust will oversee and coordinate all activities associated with the NDPWP3 proposal. The NDPWP3 will be offered throughout the entire state of North Dakota with priority given to projects with the highest densities of wetlands and grasslands. The Trust will develop site specific agreements with landowners which will include a map defining boundaries, the payments amount, ND PFW matching funds, landowner contributions, and the Trust matching funds. All agreements will be signed and dated by the landowner and the Trust. A signed agreement by the Trust will be used to determine the level of obligated funds for the grant. The Trust will honor all signed agreements, as our organization recognizes them as legally binding documents.

The Trust's staff will coordinate the NDPWP3 from our office located in Bismarck, ND. The Trust and/or ND PFW will provide technical assistance to landowners including wetland restoration design and construction management, grazing system technical assistance, and grass seeding specific seed mix design, seeding dates, and post management recommendations.

The Trust will provide tracking and reporting of all participant agreements following grant guidelines.

The ND PFW Program has a staff of six biologists working to deliver voluntary private land conservation projects across the state. The ND PFW program focuses on migratory bird habitat as well as species of decline or special concern by working with private landowners to restore wetlands and grasslands and implement rotational grazing systems. The ND PFW Program private lands biologists, located throughout ND, will assist and help deliver NDPWP3 to landowners. ND PFW assistance with this proposal will include financial assistance and technical assistance that includes actions such as providing grass seeding dates, designing seed mixes, recommendations for managing the grass, surveying wetlands, wetland construction oversight, etc.

NDPWP3 is built on an existing delivery network that has proven to be successful. This partnership can deliver private landowner working lands agreements in an efficient and friendly manner. Evaluation of success of the NDPWP3 is directly related to landowner's enrollment into the program. High landowner interest is the key to the NDPWP3 success.

The acreage goal can only be achieved by the willingness of landowners to enroll into the NDPWP3.

The Trust will monitor all NDPWP3 agreements. Evaluations and progress reports will be completed. The Trust's programs are structured to be flexible and accommodating to agreement participants. Maintaining good communication with agreement participants and the partners is important to the Trust.

Evaluation – Describe your plan to document progress and results.

Please be specific on the methods you will utilize to measure success. Note that regular reporting, final evaluation and expenditure reports will be required for every grant awarded.

We worked diligently to create this diverse partnership for implementation and evaluation reasons in addition to doing optimal outreach to producers. Our partners enable “boots on the ground” contact with landowners, and the focus on developing strong local relationships sets the tone for positive results in how the program can benefit their operation and wildlife habitat. Our field agent partners help with contract facilitation and the implementation aspects, verifying that fence and water resources are completed as prescribed and following up on grazing plans. Our administration ensures timely payments and support lines for both participating landowners and partners. More specifically, success will be measured on the level of agreements completed with landowners and the number of acres benefited by the lease and development activities by increased conservation habitat for grassland birds, satisfied landowners, and increased access for public enjoyment.

Financial Information

Project Budget – Use the table below to provide an itemized list of project expenses and describe the matching funds being utilized for this project.

Indicate if the matching funds are in the form of cash, indirect costs or in-kind services. The budget should identify all other committed funding sources and the amount of funding from each source. **A minimum of 25% match funding is required.** An application will be scored higher the greater the amount of match funding provided. (See Scoring Form.)

Certain values have been identified for in-kind services as detailed under “Budget Information” at the back of this form. Refer to that section and utilize these values in identifying your matching funds. **NOTE: No indirect costs will be funded. Supporting documentation for project expenses, including bids, must be included or application will be considered incomplete.**

Project Expense	OHF Request	Applicant's Match Share (Cash)	Other's Match Share (Cash)	Applicant's and Other's Match Share (In-Kind)	Landowner's Share (Cash)	Total Each Project Expense
Wetland Restoration	\$60,000	\$32,500	\$20,000	\$0	\$0	\$112,500
Grazing Systems	\$1,800,000	\$20,000	\$40,000	\$0	\$1,200,000	\$3,060,000
Grass Seeding	\$52,500	\$10,500	\$10,000	\$	\$31,500	\$104,500
Contracted Services/Support	\$10,000	\$5,000	\$0	\$0	\$0	\$15,000
Staffing	\$35,000	\$0	\$0	\$60,000	\$0	\$95,000
Total Costs	\$1,957,500	\$68,000	\$70,000	\$60,000	\$1,231,500	\$3,387,000

Note: Costs for seeding, fencing, pipelines, wells, and cover crops cannot exceed NRCS Field Office Tech Guide without justification. Projects involving perimeter fencing must follow NRCS eligibility standards.

Budget Narrative – Use the space below to provide additional detail regarding project expenses.

Wetland Restoration – Provide cost-share and incentives to restore and/or create wetland habitat in North Dakota. The cost-share is based on an average of \$1,200 per acre for a restoration goal of 65 acres. OHF would provide \$900 or 75% per acre and ND PFW would provide \$300 or 25% per acre. Any costs over \$1,200 per acre will be provided by ND PFW. Costs include dirt work, materials and all associated contractor costs necessary to complete the work. Payment will be based on actual costs of the construction activity. The Trust will provide an incentive to landowners willing to restore and/or create wetlands at \$500 per acre.

Wetland Creation/Restoration – 65 acres goal
 OHF (\$900/acre) = \$ 60,000
 ND PFW (\$300/acre) = \$ 20,000
 Trust Incentive (\$500/acre) = \$ 32,500
 Total \$112,500

Grazing Systems – Grazing systems will include components of both fencing and water developments with a goal of 28,000 acres. Fencing will follow the NRCS Office Tech Guide Allowable Cost recommendations by OHF. The grant will provide landowners a 60% cost-share payment based on these cost-share payment rates. Landowners will provide the remaining 40% cost-share. The fence and water developments will follow the NRCS Office Tech Guide Allowable Cost with full funding rate determined by NRCS's practice scenario amount. The OHF grant will provide 60% cost-share of these rates for fencing by selected fence type. The OHF grant will pay 60% cost-share based on actual costs for all water developments. The landowners will provide the remaining 40% cost-share. The Trust will provide additional cost-share for components of the grazing system that would be classified as equipment such as portable power supplies, portable water delivery systems, and/or other additional cost-share on any unique practices. ND PFW will provide cost-share for other fencing costs and/or additional cost-share on any unique practices.

Grazing Systems - 28,000 acres goal	
OHF (60% of costs) =	\$1,800,000
Landowner (40% of costs) =	\$1,200,000
ND PFW (\$40,000 =	\$ 40,000
Trust (\$20,000) =	\$ 20,000
Total	\$3,060,000

Grass Seeding –Cost-share for grass restoration will be based on total seeding and management costs per acre of \$145. This includes \$100 per acre for native/tame grass seed (OHF \$75/acre, Trust \$15/acre, ND PFW \$10/acre). ND PFW will fund any additional seed costs over \$100 per acre up to \$120 per acre (estimated total cost at \$3,000) and \$45 per acre in landowner match for seedbed preparation, seeding, and establishment management. The goal is to restore 700 acres of grassland.

Grass Seeding - 700 acres goal	
OHF (\$75/acre) =	\$ 52,500
Trust (\$15/acre) =	\$ 10,500
ND PFW (\$10/acre) =	\$ 7,000
ND PFW (> \$100/acre) =	\$ 3,000
Landowner (\$45/acre) =	\$ 31,500
Total	\$104,500

The majority of the landowners will be planting diverse mixtures of native perennial grasses/forbs and/or mixtures of introduced perennial and native grasses. The total OHF cost-share amount will follow the 2023 or most up-to-date NRCS Field Office Tech Guide Allowable Costs.

Contracted Services/Support – This grant proposal is requesting \$10,000 for any additionally required contracted services for items such as engineering, cultural resources, surveys, specialized equipment rentals, soil testing, habitat assessments, partnership coordination meetings, and for any additional delivery and/or program monitoring. If contracted services request is not utilized during the grant period for these services, the funds would be used for additional conservation practices identified in the proposal. The Trust will provide a cash match of \$5,000 toward contracted services and/or outreach, education, support, and workshops that help landowners receive information about technical assistance and the availability of the grant proposal activities.

Staffing – This grant proposal requests \$35,000 of staffing funding for the Trust from OHF. Additional staffing costs will be provided by the Trust and ND PFW and be considered in-kind match based on actual costs of Trust and ND PFW staff salary, benefits, and travel. Staffing activities includes Trust and ND PFW time to complete program promotion and outreach, meeting with landowners, providing technical assistance, completing landowner agreements, partnering with state, federal, local, and nongovernmental organizations, processing payments, providing agreement monitoring, and completing all grant administration.

With this grant proposal offering a suite of three different activities to interested landowners, we are asking that this grant provide the flexibility to adjust acreage goals and transfer funding to the activities based on practice demand. The OHF funds and match will remain at the same levels.

Sustainability – Indicate how the project will be funded or sustained in future years.

Include information on the sustainability of this project after OHF funds have been expended and whether the sustainability will be in the form of ongoing management or additional funding from a different source.

NDPWP3 will only be available to private landowners. The NDPWP3 is a completely voluntary project that will focus on increasing wildlife habitat, increasing agricultural productivity and improving soil health. It is our vision in this proposal that landowners will select options to fit their farming/ranching operational goals by providing a modest cost-share and that these activities will be retained long after the NDPWP3 agreement has ended.

The NDPWP3 proposal is requesting a higher level of funding than the past NDPWP and NDPWP2 proposals. The intent of this higher funding request is to extend the timeline of any additional request to OHF in the future. If funded, NDPWP3 would have adequate funding for 2 plus years. The Trust and ND PFW will continually gauge landowner interest in NDPWP type activities. It is our belief that these working lands style practices will be of great interest to private landowners in the state and new OHF grant proposals for NDPWP developments may be submitted in the future.

Partial Funding – Indicate how the project will be affected if less funding is available than that requested.

The Trust thanks the OHF Advisory Board for considering our NDPWP3 proposal. This request for \$1,957,500 of OHF funds with an additional \$1,429,500 in match is very important for participating landowners. The NDPWP3 along with Trust and ND PFW bring additional cash resources to landowners to progressively enhance their operation in a natural resource-friendly manner. If the OHF Advisory Board recommends a reduction in funding from the original proposal, this will result in a lower number of agreements with landowners, a smaller number of acres achieved, and a reduction in the amount of cash and in-kind match available by the Trust, ND PFW, and landowners.

Partnership Recognition - If you are a successful recipient of Outdoor Heritage Fund dollars, how would you recognize the Outdoor Heritage Fund partnership? ** There must be signage at the location of the project acknowledging OHF funding when appropriate.*

This NDPWP3 will provide OHF recognition on all landowner agreements by including OHF logo on top of agreements, and all discussions with landowners in the delivery of this project will identify OHF as a funding source. If any signs are placed at project locations, it will include the OHF logo. All NDPWP3 distributed information for outreach and/or media will identify OHF as a funding source. Additionally, all presentations or discussions to partners and/or other organizations will acknowledge OHF as a funding source.

Awarding of Grants - Review the appropriate sample contract for your organization on the website at <http://www.nd.gov/ndic/outdoor-infopage.htm>.

Can you meet all the provisions of the sample contract? Yes No

If there are provisions in that contract that your organization is unable to meet, please indicate below what those provisions would be:

ABOUT OHF:

The purpose of the North Dakota Outdoor Heritage Fund is to provide funding to state agencies, tribal governments, political subdivisions, and nonprofit organizations, with higher priority given to projects that enhance **conservation** practices in this state by:

Directive A. Providing access to private and public lands for sportsmen, including projects that create fish and wildlife habitat and provide access for sportsmen;

Directive B. Improving, maintaining and restoring water quality, soil conditions, plant diversity, animal systems and by supporting other practices of stewardship to enhance farming and ranching;

Directive C. Developing, enhancing, conserving and restoring wildlife and fish habitat on private and public lands; and

Directive D. Conserving natural areas and creating other areas for recreation through the establishment and development of parks and other recreation areas.

EXEMPTIONS

Outdoor Heritage Fund grants may not be used to finance the following:

- Litigation;
- Lobbying activities;
- Any activity that would interfere, disrupt, or prevent activities associated with surface coal mining operations; sand, gravel, or scoria extraction activities; oil and gas operations; or other energy facility or infrastructure development;
- The acquisition of land or to encumber any land for a term longer than twenty years; or
- Projects outside this state or projects that are beyond the scope of defined activities that fulfill the purposes of Chapter 54-17.8 of the North Dakota Century Code.

OHF funds may not be used, except after a finding of exceptional circumstances by the Industrial Commission, to finance:

- A completed project or project commenced before the grant application is submitted;
- A feasibility or research study;
- Maintenance costs;
- A paving project for a road or parking lot;
- A swimming pool or aquatic park;
- Personal property that is not affixed to the land;
- Playground equipment, except that grant funds may be provided for up to 25% of the cost of the equipment not exceeding \$10,000 per project and all playground equipment

grants may not exceed 5% of the total grants per year (see Definitions/Clarifications for how this will be calculated);

- Staffing or outside consultants except for costs for staffing or an outside consultant to design and implement an approved project based on the documented need of the applicant and the expenditures may not exceed 5% of the grant to a grantee if the grant exceeds \$250,000 and expenditures may not exceed 10% of the grant to a grantee if the grant is \$250,000 or less (see Definitions/Clarifications for how this will be calculated);
- A building except for a building that is included as part of a comprehensive conservation plan for a new or expanded recreational project (see Definitions/Clarifications for definition of comprehensive conservation plan and new or expanded recreational project); or
- A project in which the applicant is not directly involved in the execution and completion of the project.

The goal of the Industrial Commission is that at a minimum 15% of the funding received for a biennium will be given priority for recreation projects that meet Directive D.

The following projects are not eligible for funding, unless there is a finding of exceptional circumstances by the Industrial Commission include:

- Construction or refurbishment of indoor/outdoor ice rinks,
- Construction or refurbishment of indoor/outdoor athletic courts and sports fields,
- Other substantially similar facilities.
- Infrastructure that is not part of a comprehensive conservation plan.
- Projects not meeting a minimum funding request of \$2,500.

Budget Information

In-kind services used to match the request for Outdoor Heritage Fund dollars shall be valued as follows:

- Labor costs \$15.00 an hour
- Land costs Average rent costs for the county as shown in the most recent publication of the USDA, National Agricultural Statistics Services, North Dakota Field Office
- Permanent Equipment Any equipment purchased must be listed separately with documentation showing actual cost. (For example: playground equipment)
- Equipment usage Actual documentation
- Seed & Seedlings Actual documentation
- Transportation Mileage at federal rate
- Supplies & materials Actual documentation

More categories will be added as we better understand the types of applications that will be submitted. We will use as our basis for these standards other State and Federal programs that have established rates. For example, the North Dakota Nonpoint Source Pollution Management Program has established rates. If your project includes work that has an established rate under another State Program, please use those rates and note your source.

Definitions/Clarifications:

Building - Defined as "A structure with a roof either with walls or without walls and is attached to the ground in a permanent nature."

Comprehensive Conservation Plan - Defined as “A detailed plan that has been formally adopted by the governing board which includes goals and objectives--both short and long term, must show how this building will enhance the overall conservation goals of the project and the protection or preservation of wildlife and fish habitat or natural areas.” This does not need to be a complex multi-page document. It could be included as a part of the application or be an attachment.

New and Expanded Recreational Project means that the proposed building cannot be a replacement of a current building. The proposed building must also be related to either a new or expanded recreational project--either an expansion in land or an expansion of an existing building or in the opportunities for recreation at the project site.

Playground equipment calculation - Only the actual costs of the playground equipment (a bid or invoice showing the amount of the equipment costs must be provided) - cannot include freight or installation or surface materials or removal of old equipment, etc.

Staffing/Outside Consultants Costs - If you are requesting OHF funding for staffing or for an outside consultant, you must provide information in your application on the need for OHF funding to cover these costs. For example, if you are an entity that has engineering staff you must explain why you don't have sufficient staff to do the work or if specific expertise is needed or whatever the reason is for your entity to retain an outside consultant. If it is a request for reimbursement for staff time then a written explanation is required in the application of why OHF funding is needed to pay for the costs of that staff member(s)' time. **The budget form must reflect on a separate line item the specific amount that is being requested for staffing and/or the hiring of an outside consultant.** This separate line item will then be used to make the calculation of 5% or 10% as outlined in the law. Note that the calculation will be made on the grant less the costs for the consultant or staff.

Maintenance – Activities that preserve or keep infrastructure in a given existing condition, including repairs. Repair means to restore to sound condition after damage, to renew or refresh; except repairs due to damage caused by Acts of God.

Scoring of Grants

Oral Presentation. Please note that you will be given an opportunity to make a ten-minute Oral Presentation at a meeting of the Outdoor Heritage Fund Advisory Board. These presentations are strongly encouraged.

Open Record. Please note that your application and any attachments will be open records as defined by law and will be posted on the Industrial Commission/Outdoor Heritage Fund website.

All applications will be scored by the Outdoor Heritage Fund Advisory Board after your ten-minute oral presentation. The ranking form that will be used by the Board is available on the website at <http://www.nd.gov/ndic/outdoor-infopage.htm> .

Awarding of Grants

All decisions on requests will be reported to applicants no later than 30 days after Industrial Commission consideration. The Commission can set a limit on duration of an offer on each application or if there isn't a specific date indicated in the application for implementation of the project, then the applicant has until the next Outdoor Heritage Fund Advisory Board regular meeting to sign the contract and get the project underway or the commitment for funding will

be terminated and the applicant may resubmit for funding. Applicants whose proposals have been approved will receive a contract outlining the terms and conditions of the grant.

Responsibility of Recipient

The recipient of any grant from the Industrial Commission must use the funds awarded for the specific purpose described in the grant application and in accordance with the contract. The recipient cannot use any of the funds for the purposes stated under Exemptions on the first page of this application.

If you have any questions about the application, the Commission can be reached at 701-328-3722 or outdoorheritage@nd.gov.

Revised: November 4, 2019, April 12, 2023

Outdoor Heritage Fund
Grant Round 22
Application Summary Page
GR 22-10

Project Title: Howard Oppegard Landing Improvements
Applicant: American Foundation for Wildlife
Primary Contact: Kyle Vetter
Total Project Costs: \$85,650
OHF Request: \$50,550

Match Amount	Funding Source	Match Type
\$16,850	American Foundation For Wildlife	Cash
\$3,250	American Foundation For Wildlife	In-Kind
\$5,000	Barnes County Wildlife Club	In-Kind
\$10,000	ND Game and Fish Department	Non-Match
\$35,100.00	Total	

Percentage of Matching Funds: 41%

Project Duration: Two years

Major Directive: A

Additional Directive: D

Summary of Project: The Project involves the construction of a boat ramp, an earthen fishing pier, a concrete picnic table, and native pollinator grass planting on a donated parcel of land adjacent to Eckelson Lake in Barnes County.

Technical Committee Comments:

- Good project
- Recommended conditions for Planting plan from Barnes County Soil Conservation district should be provided to ensure that the species selected are compatible with the soils and the site. "For tree/shrub/grass plantings: provide a planting plan describing the site design, planting methods, number of trees/shrubs by species and stock size, grass species and future maintenance. A statement certifying that the applicant will adhere to USDA-NRCS tree/shrub/grass planting specifications along with the name of the governmental entity designing the planting may be substituted for a planting plan."

Technical questions from the OHF Advisory Board members:

American Foundation for Wildlife has not previously received funds.

***Total OHF funds awarded to date: \$0.00. Total OHF funds spent to date: \$0.00.**

American Foundation for Wildlife has not submitted any unsuccessful applications.

OHF Advisory Board Recommendation

Contingencies: **None**

Conflicts of Interest: **None**

Funding Vote: **8-1**

Funding Amount Vote: **\$50,550**

Outdoor Heritage Fund Grant Application



Instructions

After completing the form, applications and supporting documentation may be submitted by e-mail to ndicgrants@nd.gov. It is preferred that only electronic copies are submitted.

You are not limited to the spacing provided, except in those instances where there is a limit on the number of words. If you need additional space, please indicate that on the application form, answer the question on a separate page, and include with your submission.

The application and all attachments must be received by the application deadline. You may submit your application at any time prior to the application deadline. **Applicants are strongly encouraged to submit applications prior to the deadline for staff review in order ensure that proposals will be complete when submitted on deadline date.** Incomplete applications may not be considered for funding.

Please review the back of this form to determine project eligibility, definitions, budget criteria, and statutory requirements.

Project Name Howard Oppegard Landing Improvements

Name of Organization American Foundation For Wildlife

Federal Tax ID# 45-0422834

Contact Person/Title Kyle Vetter, President

Address 1131 Airport Road

City Bismarck

State North Dakota

Zip Code 58504

E-mail Address kylevetter1972@gmail.com

Web Site Address (If applicable)

Phone 701-222-0266 and 701-527-3268 (Kyle Vetter – Cellphone)

List names of co-applicants if this is a joint proposal

MAJOR Directive:

Choose only one response

- Directive A.** Providing access to private and public lands for sportsmen, including projects that create fish and wildlife habitat and provide access for sportsmen;
- Directive B.** Improving, maintaining and restoring water quality, soil conditions, plant diversity, animal systems and by supporting other practices of stewardship to enhance farming and ranching;
- Directive C.** Developing, enhancing, conserving and restoring wildlife and fish habitat on private and public lands; and
- Directive D.** Conserving natural areas and creating other areas for recreation through the establishment and development of parks and other recreation areas.

Additional Directive:

Choose all that apply

- Directive A.**
- Directive B.**
- Directive C.**
- Directive D.**

Type of organization:

- State Agency
- Political Subdivision
- Tribal Entity
- Tax-exempt, nonprofit corporation.

Abstract/Executive Summary.

Summarize the project, including its objectives, expected results, duration, total project costs and participants. (no more than 500 words)

In 2020 the American Foundation for Wildlife accepted a donation of a 3.5-acre parcel of land next to Eckelson Lake in Barnes County. This all started when this small parcel of land was privately purchased by Dick Monson in 2020. Mr. Monson recognized that anglers were using Highway 22 as the boat launching and ice fishing access to this predominately northern pike fishery. As an avid hunter and angler, he was greatly concerned about the safety of those individuals utilizing the lake for fishing and the motor vehicles driving by on the highway. So much so, that he and the existing landowner Howard Oppeward agreed to solve this issue. The land was acquired by Mr. Monson in the spring of 2020. After that time, work began to clean up this property and create public access for the future. The site had an existing gravel stockpile and the operator Kjelland Construction agreed to level the land,

grade a new road and cut a lake access into the 12-foot-high lake bank. A public access easement was then entered into with the North Dakota Game and Fish Department (NDGFD).



Kjelland Construction completing site developments in 2020.

In December of 2020, American Foundation for Wildlife graciously agreed to accept the property with the understanding that they would continue the public access and make additional improvements if possible.

Since that time, activity has progressively been completed through local partnerships with Barnes County Wildlife Club and Dakota Anglers. In addition, the North Dakota Game and Fish Department’s fisheries department has been very involved in the planning and development of this area. The NDGFD’s technical guidance has been extremely valuable, and they have agreed to continue to be involved thought this project.

For the past two years, the high bank cut access has been adequate for small boats and motorized vehicle access in the winter. The lake is developing into a walleye fishery with past walleye stockings showing excellent growth and desirable lengths. To allow additional boating access and winter access to this developing walleye fishery, additional developments will need to be completed. American Foundation for Wildlife is requesting funds to grade and slope at the current boat access area, to build a concrete ramp for launching larger boats, create an earthen fishing pier, purchase a concrete picnic table for day use, expand the current native pollinator grass and forb planting, and include a shrub planting.

Thank you for your consideration of this request to improve this area for anglers and the public to enjoy the Howard Oppegard Landing.

Project Duration: 2 years

Indicate the intended schedule for drawing down OHF funds.

2023 - \$30,000
2024 - \$23,300

Amount of Grant request: \$53,300

Total Project Costs: \$85,650

Note: in-kind and indirect costs can be used for matching funds.

Amount of Matching Funds: \$25,100

Additional Non-Matching Contributions: \$10,000 – ND Game and Fish Department

A minimum of 25% Match Funding is required. Indicate if the matching funds will be in-kind, indirect or cash. Please provide verification that these matching funds are available for your project. Note that effective as of July 1, 2015 no State General Fund dollars can be used for a match unless funding was legislatively appropriated for that purpose.

Amount of Match	Funding Source	Type of Match (Cash, In-kind or Indirect)
\$16,850	American Foundation For Wildlife	Cash
\$3,250	American Foundation For Wildlife	In-Kind
\$5,000	Barnes County Wildlife Club	In-Kind
\$10,000	ND Game and Fish Department – Boat Dock – Installation - Personnel	Non-Match

Certifications

- I certify that this application has been made with the support of the governing body and chief executive of my organization.

- I certify that if awarded grant funding none of the funding will be used for any of the exemptions noted in the back of this application.

Narrative

Organization Information – Briefly summarize your organization’s history, mission, current programs and activities.

Include an overview of your organizational structure, including board, staff and volunteer involvement. (no more than 300 words)

The American Foundation for Wildlife (AFW) is a North Dakota nonprofit conservation organization established in 1972. AFW is managed by an elected Board of Directors that is responsible for establishing and managing the vision, policies, and practices of the organization. The American Foundation for Wildlife is a licensed charitable gaming organization in the state of North Dakota. A unique private, nonprofit corporation, AFW works to make sure our state’s important natural resources heritage will always be a part of our future by balancing wildlife conservation and management with the interests and values of our landowners, citizens, and communities.

Purpose of Grant – Describe the proposed project identifying how the project will meet the specific directive(s) of the Outdoor Heritage Fund Program

Identify project goals, strategies and benefits and your timetable for implementation. Include information about the need for the project and whether there is urgency for funding. Indicate if this is a new project or if it is replacing funding that is no longer available to your organization. Identify any innovative features or processes of your project. Note: if your proposal provides funding to an individual, the names of the recipients must be reported to the Industrial Commission/Outdoor Heritage Fund. These names will be disclosed upon request.

For tree/shrub/grass plantings: provide a planting plan describing the site design, planting methods, number of trees/shrubs by species and stock size, grass species and future maintenance. A statement certifying that the applicant will adhere to USDA-NRCS tree/shrub/grass planting specifications along with the name of the governmental entity designing the planting may be substituted for a planting plan.

For projects including Section 319 funding: provide in detail the specific best management practices that will be implemented and the specific projects for which you are seeking funding.

For projects including fencing: A minimum cost share of 40% by the recipient is preferred. Include detailed information on the type of fencing to be installed, whether funding is requested for boundary fencing, new or replacement of existing fencing, and/or cross fencing.

The goal of this grant proposal is to provide recreational access and development of the Howard Oppegard Landing in Barnes County. This will be accomplished by partnering with the Dick Monson, Barnes County Wildlife Club, Dakota Anglers, North Dakota Game and Fish Department, and American Foundation for Wildlife. The proposal will enhance visitor access and enjoyment of this landing area for years to come.

Boat Ramp - The main component of the grant proposal is to install a concrete ramp for fishing boats at the existing high bank cut. This ramp will allow fisherman to safely launch larger watercraft. The North Dakota Game and Fish Department will provide a courtesy dock for anglers to secure their watercraft while loading and unloading at the ramp. The NDGFD will also be very involved in the ramp design and ensure that all necessary specifications are

followed to ensure a very long life of the ramp. The partners will be involved during all construction phases of this project by participating if possible during the development activities at the landing area.

Earthen Fishing Pier - The proposal requests the installation of an earthen fishing pier to the west of the boat ramp. This fishing pier will serve multiple functions. The first is to provide non-boating anglers with an access point to fish from shore. There will be an excavated walking path for individuals, youth, families, and all to access Eckelson Lake at this fishing pier. The fishing pier will also serve as a windbreak to lessen the wave activity at the boat ramp and reduce water erosion at the ramp site. All required water permits and approvals will be obtained prior to any construction.

Concrete Picnic Table – The Howard Oppegard Landing is adjacent to Highway 22 between the towns of Eckelson and Sandborn. This area will provide travelers the opportunity to pull off the highway and enjoy the view of the lake. The picnic table will provide all visitors with a place to sit down and have a lunch break.

Pollinator Species and Shrub Planting – The proposal is asking for an expansion of the existing pollinator planting that is currently adjacent to the Howard Oppegard Landing sign. The pollinator planting will have similar species planted (see list below), but would expand the planted area. The planting wouldn't happen until 2024, as site preparation will need to be completed this year and into early next spring. The shrub planting would be coordinated and designed through the Barnes County Soil Conservation District (SCD). Barnes County SCD would provide all technical guidance and potentially be planting all the shrubs. Attached is a list of the available shrubs for sale in 2023 by Barnes County SCD. The preferred shrub species for this project would include native plum, redosier dogwood, chokecherry, and currant.

BARNES COUNTY SOIL CONSERVATION DISTRICT			
SPECIES	No. Ordered	DESCRIPTION	Potential Hgt
SHRUBS:			
Almond, Russian		Hardy, pink flowers in early spring, suckers, lives 10-15 yrs	3 - 5 ft
Buffaloberry		Thorny, thicket forming, abundant small red fruit	6 - 14 ft
Caragana		Very hardy, small showy yellow flowers	6 - 14 ft
Cherry, Nanking		Fast growing, short lived, edible fruit food for jellies	7 ft
Cherry, Sand/Pin/various		Short lived, w/ dark, edible fruit, likes sandy soil	4 ft
ChokeBERRY, Black		Edible berries, substitute for for chokecherry (no black knot), red fall color	4-8 ft
Chokecherry, common		Edible fruit, suckers, susceptible to black knot	8 - 15 ft
Currant, Golden or Black		Edible fruit, excellent wildlife shrub	6 ft
Dogwood, Redosier		Red bark, white blossoms, white berries, tolerates wet areas	10 ft
Elderberry		Fast growing canes, white flowers, dark berries used for wine, jellies.	10 ft
False Indigo		Native, multi-stemmed shrub, dark purple plumes, tolerates wet areas	7 ft
Honeysuckle		Pink flowers, wildlife berries, aphid resistant strains	10 ft
Juneberry/Serviceberry		Slow growing, long-lived, edible berries, native	10 ft
Lilac, Common		Hardy, purple or white flowers, suckers. Villosa does not sucker	6 - 10 ft
Maple, Amur		Dense foliage, hardy, scarlet autumn color	15 ft
Plum, native		Thicket forming, suckers, edible fruit, native	10 ft
Rose, Hansen Hedge		Hardy, suckering, pink flowers followed by red rose hips	6 ft
Sumac (various)		Orange to red fall color, berry clusters for wildlife, suckers	15 ft
Willow, sandbar		Suckers profusely, likes moist areas, good wildlife cover	10 ft

Grasses		lbs. pls
Big Bluestem	<i>Andropogon gerardii</i>	60
Canada Wildrye	<i>Elymus canadensis</i>	60
Green Needlegrass	<i>Stipa viridula</i>	90
Indiangrass	<i>Sorghastrum nutans</i>	60
Little Bluestem	<i>Schizachyrium scoparium</i>	60
Prairie Cord Grass	<i>Spartina pectinata</i>	30
Sideoats Grama	<i>Bouteloua curtipendula</i>	45
Slender Wheatgrass	<i>Elymus trachycaulus</i>	45
Switchgrass	<i>Panicum virgatum</i>	30
Western Wheatgrass	<i>Pascopyrum smithii</i>	45
	Total Grasses:	525
Forbs		
Anise Hyssop/Fragrant Giant Hyssop	<i>Agastache foeniculum</i>	4.8
Black-eyed Susan	<i>Rudbeckia hirta</i>	36
Blanketflower	<i>Gaillardia aristata</i>	15
Blue Vervain	<i>Verbena hastata</i>	1.5
Canada Milkvetch	<i>Astragalus canadensis</i>	15
Common Milkweed	<i>Asclepias syriaca</i>	1.2
Evening Primrose	<i>Oenothera biennis</i>	3
Golden Alexander	<i>Zizia aurea</i>	1.5
Lewis Flax	<i>Linum lewisii</i>	12
Maximilian Sunflower	<i>Helianthus maximiliani</i>	45
New England Aster	<i>Symphyotrichum novae-angliae</i>	0.9
Plains Coreopsis	<i>Coreopsis tinctoria</i>	6
Prairie Coneflower	<i>Ratibida columnifera</i>	6
Purple Coneflower	<i>Echinacea purpurea</i>	12
Purple Prairie clover	<i>Dalea Purpurea</i>	12
Rocky Mountain Bee Plant	<i>Cleome serrulata</i>	3
Wild Bergamot	<i>Monarda fistulosa</i>	6
	Total Forbs:	180.9
	Mix Total:	705.9

Existing Pollinator Planting Seed Mixture



Howard Oppegard Landing – Photos from summer of 2022

Future development of this landing site would include construction of a vault toilet, development of shore fishing access through additional fishing piers (either earthen or dock style), parking lot developments, additional picnic tables, and/or tree plantings.

Is this project part of a Comprehensive Conservation Plan? Yes No
 If yes, provide a copy with the application.

Note: Projects involving buildings and infrastructure will only be considered if part of a Comprehensive Conservation Plan. Please refer to the “Definitions” section at the back of the form for more details.

Management of Project – Provide a description of how you will manage and oversee the project to ensure it is carried out on schedule and in a manner that best ensures its objectives will be met.

Include a brief background and work experience for those managing the project.

The American Foundation for Wildlife will oversee all activities associated with this grant, but because of our location in Bismarck we have established a partnership for local involvement for the grant proposed activities. The American Foundation for Wildlife has been in communication with the Barnes County Wildlife Club and North Dakota Game and Fish Department’s Fisheries Division in Jamestown on the future management of the landing area. The preferred plan is to duplicate an already successful partnership style management agreement that is in place at Moon Lake. Moon Lake is located south of Interstate 94 approximately 8 miles southeast of Sanborn, North Dakota. The Moon Lake Wildlife Management Area owned by North Dakota Game and Fish Department has a cooperative agreement with Barnes County Wildlife Club for maintenance. Currently the area would be very similar to the Howard Oppegard Landing if all proposal developments are approved. The cooperative agreement would be between American Foundation for Wildlife, Barnes County Wildlife Club, and North Dakota Game and Fish Department.



Moon Lake – Photos of location, boat ramp and access road to ramp

Evaluation – Describe your plan to document progress and results.

Please be specific on the methods you will utilize to measure success. Note that regular reporting, final evaluation and expenditure reports will be required for every grant awarded.

The American Foundation for Wildlife will measure success based on completion of each part of the proposed project. There will be photos taken during all developments and each completed part of the project to document the success. The ultimate evaluation of success will be the number of visitors who use the Howard Opegard Landing area.

Financial Information

Project Budget – Use the table below to provide an itemized list of project expenses and describe the matching funds being utilized for this project.

Indicate if the matching funds are in the form of cash, indirect costs or in-kind services. The budget should identify all other committed funding sources and the amount of funding from each source. **A minimum of 25% match funding is required.** An application will be scored higher the greater the amount of match funding provided. (See Scoring Form.)

Certain values have been identified for in-kind services as detailed under “Budget Information” at the back of this form. Refer to that section and utilize these values in identifying your matching funds.

NOTE: No indirect costs will be funded. Supporting documentation for project expenses, including bids, must be included or application will be considered incomplete.

Project Expense	OHF Request	Applicant's Match Share (Cash)	Applicant's and Other Project Sponsor's Match Share (In-Kind)	Total Each Project Expense
Concrete Boat Ramp, Hard Substrate Material and Contractor	\$30,000	\$10,000	\$3,500	\$43,500
Eathen Fishing Pier-Ramp Wind Protection and Contractor Excavating	\$18,000	\$6,000	\$3,500	\$27,500
Concrete Picnic Table	\$750	\$250	\$250	\$1,250
Pollinator and Shrub Planting	\$1,800	\$600	\$1,000	\$3,400
NDGFD – Boat Dock (non-match)			\$10,000	\$10,000
Total Costs	\$53,300	\$16,850	\$18,250	\$85,650

Note: Costs for seeding, fencing, pipelines, wells, and cover crops cannot exceed NRCS Field Office Tech Guide without justification. Projects involving perimeter fencing must follow NRCS eligibility standards.

Budget Narrative – Use the space below to provide additional detail regarding project expenses.

Concrete Boat Ramp, Material, Equipment and Equipment Operator – The current location will need additional excavation from a construction contractor, added material to site (including gravel and rock rip-rap for erosion control), estimated at \$16,000. The cost of local contractor's hourly rate is \$250 per hour. The boat ramp will be 15-20 feet wide by 100 foot long with cost of concrete the estimated cost at \$12 square foot. This costs of the concrete is estimated at \$24,000.

Earthen Fishing Pier and Boat Ramp Protection – The excess material removed from the exaction of the boat ramp site will be utilized for the fishing point into Eckelson Lake. This fishing point will need additional material and rip-rap to protect the point from water erosion. The cost of local contractor's hourly rate is \$250 per hour. Estimated costs is \$24,000.

Concrete Picnic Table – There is a local supplier of this type of picnic table. The cost for the table is \$1,000 per table.

Pollinator Species and Shrub Planting – There is an existing native pollinator planting near the current sign, but the plan is to expand this planting and border the native pollinator planting with a shrub planting. The pollinator planting cost will be \$2,400. All pollinator and shrub planting will be coordinated with the Barnes County Soil Conservation District. They will assist by providing technical advice for the project. Their technical advice will include the design of the species selected, seed bed preparation, weed control material, and layout.

Boat Dock – The ND Game and Fish Department will purchase a boat dock for this access area. The NDGFD will deliver the dock and oversee the activity associated with boat ramp construction. The estimated cost for this non-match activity is a minimum of \$10,000.

Sustainability – Indicate how the project will be funded or sustained in future years.

Include information on the sustainability of this project after OHF funds have been expended and whether the sustainability will be in the form of ongoing management or additional funding from a different source.

This grant proposal will fund activities with very long timelines. The installation of a boat ramp will last over 50 years when installed correctly. The number of individuals that would use this Opegard Landing area to Eckelson Lake will be very high when the walleye fishery fully develops. This project is very sustainable for the future. The partnership of local Dick Monson, Barnes County Wildlife Club, Dakota Anglers, North Dakota Game and Fish Department and AFW will ensure that the access area is maintained and improved as planned.

Partial Funding – Indicate how the project will be affected if less funding is available than that requested.

The highest priority of this grant is the funding of the concrete boat ramp. This would include the contractor's work and the material costs. The second priority would be the earthen fishing pier. The final priority would be the concrete picnic table and then pollinator/shrub planting.

Partnership Recognition - If you are a successful recipient of Outdoor Heritage Fund dollars, how would you recognize the Outdoor Heritage Fund partnership? * *There must be signage at the location of the project acknowledging OHF funding when appropriate.*

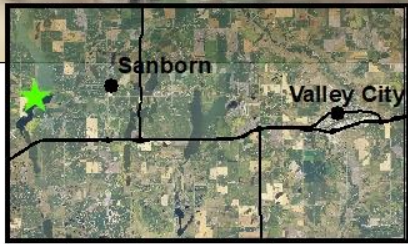
The property currently has a sign listing the name of the landing and partners. A new sign would replace this existing sign with Outdoor Heritage Fund listed as a partner and OHF logo placed on signpost. Any additional signage on the property would have Outdoor Heritage Fund logos included on the signs.

Awarding of Grants - Review the appropriate sample contract for your organization on the website at <http://www.nd.gov/ndic/outdoor-infopage.htm>.

Can you meet all the provisions of the sample contract? Yes No

If there are provisions in that contract that your organization is unable to meet, please indicate below what those provisions would be:

Howard Oppengard Proposed Project Map



Features					
	Concrete Picnic Table		Pollinator Planting		Boat Parking
	Shrub Planting		Boat Ramp		Fishing Pier

ABOUT OHF:

The purpose of the North Dakota Outdoor Heritage Fund is to provide funding to state agencies, tribal governments, political subdivisions, and nonprofit organizations, with higher priority given to projects that enhance **conservation** practices in this state by:

Directive A. Providing access to private and public lands for sportsmen, including projects that create fish and wildlife habitat and provide access for sportsmen;

Directive B. Improving, maintaining and restoring water quality, soil conditions, plant diversity, animal systems and by supporting other practices of stewardship to enhance farming and ranching;

Directive C. Developing, enhancing, conserving and restoring wildlife and fish habitat on private and public lands; and

Directive D. Conserving natural areas and creating other areas for recreation through the establishment and development of parks and other recreation areas.

EXEMPTIONS

Outdoor Heritage Fund grants may not be used to finance the following:

- Litigation;
- Lobbying activities;
- Any activity that would interfere, disrupt, or prevent activities associated with surface coal mining operations; sand, gravel, or scoria extraction activities; oil and gas operations; or other energy facility or infrastructure development;
- The acquisition of land or to encumber any land for a term longer than twenty years; or
- Projects outside this state or projects that are beyond the scope of defined activities that fulfill the purposes of Chapter 54-17.8 of the North Dakota Century Code.

OHF funds may not be used, except after a finding of exceptional circumstances by the Industrial Commission, to finance:

- A completed project or project commenced before the grant application is submitted;
- A feasibility or research study;
- Maintenance costs;
- A paving project for a road or parking lot;
- A swimming pool or aquatic park;
- Personal property that is not affixed to the land;
- Playground equipment, except that grant funds may be provided for up to 25% of the cost of the equipment not exceeding \$10,000 per project and all playground equipment grants may not exceed 5% of the total grants per year (see Definitions/Clarifications for how this will be calculated);
- Staffing or outside consultants except for costs for staffing or an outside consultant to design and implement an approved project based on the documented need of the applicant and the expenditures may not exceed 5% of the grant to a grantee if the grant exceeds \$250,000 and expenditures may not exceed 10% of the grant to a grantee if the grant is \$250,000 or less (see Definitions/Clarifications for how this will be calculated);

- A building except for a building that is included as part of a comprehensive conservation plan for a new or expanded recreational project (see Definitions/Clarifications for definition of comprehensive conservation plan and new or expanded recreational project); or
- A project in which the applicant is not directly involved in the execution and completion of the project.

The goal of the Industrial Commission is that at a minimum 15% of the funding received for a biennium will be given priority for recreation projects that meet Directive D.

The following projects are not eligible for funding, unless there is a finding of exceptional circumstances by the Industrial Commission include:

- Construction or refurbishment of indoor/outdoor ice rinks,
- Construction or refurbishment of indoor/outdoor athletic courts and sports fields,
- Other substantially similar facilities.
- Infrastructure that is not part of a comprehensive conservation plan.
- Projects not meeting a minimum funding request of \$2,500.

Budget Information

In-kind services used to match the request for Outdoor Heritage Fund dollars shall be valued as follows:

- Labor costs \$15.00 an hour
- Land costs Average rent costs for the county as shown in the most recent publication of the USDA, National Agricultural Statistics Services, North Dakota Field Office
- Permanent Equipment Any equipment purchased must be listed separately with documentation showing actual cost. (For example: playground equipment)
- Equipment usage Actual documentation
- Seed & Seedlings Actual documentation
- Transportation Mileage at federal rate
- Supplies & materials Actual documentation

More categories will be added as we better understand the types of applications that will be submitted. We will use as our basis for these standards other State and Federal programs that have established rates. For example, the North Dakota Nonpoint Source Pollution Management Program has established rates. If your project includes work that has an established rate under another State Program, please use those rates and note your source.

Definitions/Clarifications:

Building - Defined as "A structure with a roof either with walls or without walls and is attached to the ground in a permanent nature."

Comprehensive Conservation Plan - Defined as "A detailed plan that has been formally adopted by the governing board which includes goals and objectives--both short and long term, must show how this building will enhance the overall conservation goals of the project and the protection or preservation of wildlife and fish habitat or natural areas." This does not need to be a complex multi-page document. It could be included as a part of the application or be an attachment.

New and Expanded Recreational Project means that the proposed building cannot be a replacement of a current building. The proposed building must also be related to either a new or expanded

recreational project--either an expansion in land or an expansion of an existing building or in the opportunities for recreation at the project site.

Playground equipment calculation - Only the actual costs of the playground equipment (a bid or invoice showing the amount of the equipment costs must be provided) - cannot include freight or installation or surface materials or removal of old equipment, etc.

Staffing/Outside Consultants Costs - If you are requesting OHF funding for staffing or for an outside consultant, you must provide information in your application on the need for OHF funding to cover these costs. For example, if you are an entity that has engineering staff you must explain why you don't have sufficient staff to do the work or if specific expertise is needed or whatever the reason is for your entity to retain an outside consultant. If it is a request for reimbursement for staff time then a written explanation is required in the application of why OHF funding is needed to pay for the costs of that staff member(s)' time. **The budget form must reflect on a separate line item the specific amount that is being requested for staffing and/or the hiring of an outside consultant.** This separate line item will then be used to make the calculation of 5% or 10% as outlined in the law. Note that the calculation will be made on the grant less the costs for the consultant or staff.

Maintenance – Activities that preserve or keep infrastructure in a given existing condition, including repairs. Repair means to restore to sound condition after damage, to renew or refresh; except repairs due to damage caused by Acts of God.

Scoring of Grants

Oral Presentation. Please note that you will be given an opportunity to make a ten-minute Oral Presentation at a meeting of the Outdoor Heritage Fund Advisory Board. These presentations are strongly encouraged.

Open Record. Please note that your application and any attachments will be open records as defined by law and will be posted on the Industrial Commission/Outdoor Heritage Fund website.

All applications will be scored by the Outdoor Heritage Fund Advisory Board after your ten-minute oral presentation. The ranking form that will be used by the Board is available on the website at <http://www.nd.gov/ndic/outdoor-infopage.htm> .

Awarding of Grants

All decisions on requests will be reported to applicants no later than 30 days after Industrial Commission consideration. The Commission can set a limit on duration of an offer on each application or if there isn't a specific date indicated in the application for implementation of the project, then the applicant has until the next Outdoor Heritage Fund Advisory Board regular meeting to sign the contract and get the project underway or the commitment for funding will be terminated and the applicant may resubmit for funding. Applicants whose proposals have been approved will receive a contract outlining the terms and conditions of the grant.

Responsibility of Recipient

The recipient of any grant from the Industrial Commission must use the funds awarded for the specific purpose described in the grant application and in accordance with the contract. The

recipient cannot use any of the funds for the purposes stated under Exemptions on the first page of this application.

If you have any questions about the application, the Commission can be reached at 701-328-3722 or outdoorheritage@nd.gov.

Revised: November 4, 2019, April 12, 2023

Outdoor Heritage Fund
Grant Round 22
Application Summary Page
GR 22-11

Project Title: Epping Springbrook Dam Algae Control
Applicant: Williams County Parks
Primary Contact: Jeremy Ludlum
Total Project Costs: \$175,895
OHF Request: \$131,921.25

Match Amount	Funding Source	Match Type
\$43,973.75	Williams County Parks General Fund	Cash

Percentage of Matching Funds: 25%

Project Duration: Six months

Major Directive: D

Additional Directive: A, B & C

Summary of Project: The Project involves the installation of three algae control buoys to mitigate harmful algal blooms at Epping/Springbrook Dam in Williams County.

Technical Committee Comments:

- Some unknowns with this new technology for treating blue-green algae, but recreation across North Dakota is impacted by it, so this project is worth trying
- Pleased to see the applicant's willingness to try an innovative solution
- Pleased to see applicant's watershed-wide approach to management and education

Technical questions from the OHF Advisory Board members:

- How does the technology work?
 - Sonic waves keep sunlight from reaching bottom, preventing harmful algae growth
- Are they tethered or mobile?
 - Tethered during use, stored onsite during winter
- GPS tracking?
 - Yes, and with back-up batteries, can demonstrate they will only be used in accordance with this project
- Safety lighting?
 - Yes, strobes at night

Williams County Parks has not previously received funds.

***Total OHF funds awarded to date: \$0.00. Total OHF funds spent to date: \$0.00.**

Williams County Parks has not submitted any unsuccessful applications.

OHF Advisory Board Recommendation

Contingencies: **Require maintenance agreement for minimum of 5 years**

Conflicts of Interest: **None**

Funding Vote: **9-0**

Funding Amount Vote: **\$131,921**

Outdoor Heritage Fund Grant Application



Instructions

After completing the form, applications and supporting documentation may be submitted by e-mail to ndicgrants@nd.gov. It is preferred that only electronic copies are submitted.

You are not limited to the spacing provided, except in those instances where there is a limit on the number of words. If you need additional space, please indicate that on the application form, answer the question on a separate page, and include with your submission.

The application and all attachments must be received by the application deadline. You may submit your application at any time prior to the application deadline. **Applicants are strongly encouraged to submit applications prior to the deadline for staff review in order ensure that proposals will be complete when submitted on deadline date.** Incomplete applications may not be considered for funding.

Please review the back of this form to determine project eligibility, definitions, budget criteria, and statutory requirements.

Project Name: Epping Springbrook Dam Algae Control

Name of Organization: Williams County Parks (WCP)

Federal Tax ID#: 45-6002250

Contact Person/Title: Jeremy Ludlum/Parks Director

Address: 206 East Broadway or P.O. Box 2047

City: Williston

State: North Dakota

Zip Code: 58801 or 58802

E-mail Address: jeremyl@co.williams.nd.us

Web Site Address (If applicable): www.williamsnd.com/departments/parks

Phone: (701)-580-1628 (cell)

List names of co-applicants if this is a joint proposal: N/A

MAJOR Directive:

Choose only one response

Directive A. Providing access to private and public lands for sportsmen, including projects that create fish and wildlife habitat and provide access for sportsmen;

Directive B. Improving, maintaining and restoring water quality, soil conditions, plant diversity, animal systems and by supporting other practices of stewardship to enhance farming and ranching;

Directive C. Developing, enhancing, conserving and restoring wildlife and fish habitat on private and public lands; and

Directive D. Conserving natural areas and creating other areas for recreation through the establishment and development of parks and other recreation areas.

Additional Directive:

Choose all that apply

Directive A.

Directive B.

Directive C.

Directive D.

Type of organization:

State Agency

Political Subdivision

Tribal Entity

Tax-exempt, nonprofit corporation.

Abstract/Executive Summary.

Summarize the project, including its objectives, expected results, duration, total project costs and participants. (no more than 500 words):

To mitigate annual Harmful Algal Blooms (HABs) at Epping/Springbrook Dam (ESD), Williams County Parks would like to purchase three MPC-Buoys. ESD is a popular recreation area for families with children and dogs. For at least the past three summers, ESD has had HABs, which can cause sickness to people and animals. MPC-Buoys utilize ultrasound technology to reduce algae production by blocking sunlight, which causes algae to sink to the bottom and die off without releasing toxins. We expect HABs to occur less frequently and less intensely in the near-term, with a long-term expectation that the HABs will be eliminated completely. It will take 4 to 6 weeks to receive the buoys from the time we are awarded the grant and plan to begin using them at the end of summer 2023. This will give us the opportunity to be fully trained and equipped to effectively use the buoys. ESD is approximately 130 acres in area and therefore will require three buoys. The total price is \$175,895.00 There is a \$12,000 annual maintenance fee, which WCP has committed to paying.

Project Duration:

This will be an ongoing project that WCP will operate and fund after the initial purchase.

Indicate the intended schedule for drawing down OHF funds:

Upon grant approval WCP will order and purchase the product immediately.

Amount of Grant request: \$131,921.25

Total Project Costs: \$175,895.00

Note: in-kind and indirect costs can be used for matching funds.

Amount of Matching Funds: \$43,973.75

A minimum of 25% Match Funding is required. Indicate if the matching funds will be in-kind, indirect or cash. Please provide verification that these matching funds are available for your project. Note that effective as of July 1, 2015 no State General Fund dollars can be used for a match unless funding was legislatively appropriated for that purpose.

Amount of Match	Funding Source	Type of Match (Cash, In-kind or Indirect)
\$43,973.75	Williams County Parks General Fund	Cash
\$		
\$		
\$		
\$		
\$		

Certifications

I certify that this application has been made with the support of the governing body and chief executive of my organization.

I certify that if awarded grant funding none of the funding will be used for any of the exemptions noted in the back of this application.

- This application may fall under the following exemptions:
 - o Personal Property that is not affixed to the land
 - o Infrastructure that is not part of a comprehensive conservation plan

However we feel this is an exceptional circumstance and given the opportunity to present, we feel the Industrial Commission will agree.

Narrative

Organization Information – Briefly summarize your organization’s history, mission, current programs and activities.

Include an overview of your organizational structure, including board, staff and volunteer involvement. (no more than 300 words):

The WCP Board consists of five Williams County Commissioners and two at-large members. Prior to 2020, WCP operated with seasonal employees, camp hosts, and volunteers. In January 2020, WCP hired its first full-time employee, a Parks Director. In January 2023, WCP hired its second full-time employee, a Maintenance Supervisor. Today, WCP has 2 full-time employees, eight seasonal employees, three camp hosts, and a team of volunteers.

Our mission is to preserve, protect, and enhance a high-quality system of parks and trails to connect current and future generations to the outdoors through diverse year-round recreational opportunities, consistent with responsible land use conservation and stewardship.

WCP operates six parks, including five campgrounds. Minimal improvements or upgrades were made prior to 2020. The WCP Board understands the importance of quality of life and is committed to improving the parks. In 2022, a comprehensive parks master plan was completed, with \$35 million allocated to implement the plan over a six-year period.

The MPC-Buoys are only one aspect of our plan to address water quality at Epping/Springbrook Dam (ESD). A major cause of HAB's is long-term nutrient runoff from agriculture and animal waste. ESD is surrounded by agricultural land within a large watershed. WCP has partnered with the Williams County Soil Conservation District and the ND DEQ-Division of Water Quality to develop a Watershed Management Program (WMP) for ESD, which includes two years of sampling and analysis. We are developing an informational flyer to provide to every landowner in the watershed later this summer. I have educated myself and contacted entities (Soil Conservation District, USDA, Ducks Unlimited) that provide funding, resources, and education on soil conservation to support the WMP.

Purpose of Grant – Describe the proposed project identifying how the project will meet the specific directive(s) of the Outdoor Heritage Fund Program

Identify project goals, strategies and benefits and your timetable for implementation. Include information about the need for the project and whether there is urgency for funding. Indicate if this is a new project or if it is replacing funding that is no longer available to your organization. Identify any innovative features or processes of your project. Note: if your proposal provides funding to an individual, the names of the recipients must be reported to the Industrial Commission/Outdoor Heritage Fund. These names will be disclosed upon request.

For tree/shrub/grass plantings: provide a planting plan describing the site design, planting methods, number of trees/shrubs by species and stock size, grass species and future maintenance. A statement certifying that the applicant will adhere to USDA-NRCS tree/shrub/grass planting specifications along with the name of the governmental entity designing the planting may be substituted for a planting plan.

For projects including Section 319 funding: provide in detail the specific best management practices that will be implemented and the specific projects for which you are seeking funding.

For projects including fencing: A minimum cost share of 40% by the recipient is preferred. Include detailed information on the type of fencing to be installed, whether funding is requested for boundary fencing, new or replacement of existing fencing, and/or cross fencing.

The project goal is to eliminate HABs at Epping Springbrook Dam. This addresses Directive D of the OHF Program. Urgency for funding because the HABs inhibit lake usages when the weather gets hot in July and August preventing taxpayers from using a public resource. Over time, this could become a larger public health concern. The Buoys are part of a larger watershed management plan, as we recognize they will not be a silver bullet and a comprehensive approach is crucial for success and reducing or eliminating the HABs.

We understand that the Industrial Commission does not typically fund purchases of equipment. We also understand that this could be considered personal property not affixed to the land or infrastructure that is not part of a comprehensive conservation plan. However, we feel that this is an exceptional circumstance. Epping-Springbrook Dam has had Harmful Algal Bloom for at least the last three years, prior to that it was not being closely monitored. We are developing a comprehensive conservation plan, that already included water sampling, but that will be a large undertaking that will take time. There are over 1000 parcels of land in the watershed with over 100 landowners. Multiple generations of farmers and ranchers have worked the land in the Stoney Creek watershed. This has cause generations of nutrient runoff into Epping Springbrook Dam. The water quality is deteriorating. Now is the time to act. This is an innovative approach towards saving our lake.

This entire project is innovative. There are zero of these in North Dakota. One specific innovative element of this project is the Interactive Algae Control. Every 30 minutes water quality data is downloaded, based on the changes in water conditions the system has an algorithm that optimizes the ultrasound frequencies. This is all automated and WCP will have access to real time data.

Is this project part of a Comprehensive Conservation Plan? Yes No

If yes, provide a copy with the application.

Note: Projects involving buildings and infrastructure will only be considered if part of a Comprehensive Conservation Plan. Please refer to the "Definitions" section at the back of the form for more details.

Management of Project – Provide a description of how you will manage and oversee the project to ensure it is carried out on schedule and in a manner that best ensures its objectives will be met.

Include a brief background and work experience for those managing the project.

The project will be managed by the WCP Director, a graduate of the University of Wisconsin-La Crosse with a bachelor's degree in recreation management and a professional in the parks and recreation field for over 20 years. The annual maintenance program WCP will fund will be a huge resource for the management of this program. We will also lean on the resources offered by the Williams County Soil Conservation District and the ND DEQ.

Evaluation – Describe your plan to document progress and results.

Please be specific on the methods you will utilize to measure success. Note that regular reporting, final evaluation and expenditure reports will be required for every grant awarded.

Part of the annual maintenance plan includes monitoring water conditions. The MPC-Buoys provide a complete overview of the water quality by collecting levels of Chlorophyll (green algae), Phycocyanin (blue-green algae), pH, Turbidity, dissolved oxygen, and temperature every ten minutes.

WCP will continue to participate in the sampling and analysis program with the Williams County Soil Conservation District and the ND DEQ as mentioned prior.

WCP will comply with all OHF required reporting requirements.

Financial Information

Project Budget – Use the table below to provide an itemized list of project expenses and describe the matching funds being utilized for this project.

Indicate if the matching funds are in the form of cash, indirect costs or in-kind services. The budget should identify all other committed funding sources and the amount of funding from each source. **A minimum of 25% match funding is required.** An application will be scored higher the greater the amount of match funding provided. (See Scoring Form.)

Certain values have been identified for in-kind services as detailed under “Budget Information” at the back of this form. Refer to that section and utilize these values in identifying your matching funds.

NOTE: No indirect costs will be funded. Supporting documentation for project expenses, including bids, must be included or application will be considered incomplete.

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
Total	\$131,921.25	\$43,973.75	\$0	\$0	\$	\$175,895.00
	\$	\$	\$	\$	\$	\$
	\$	\$	\$	\$	\$	\$
	\$	\$	\$	\$	\$	\$
	\$	\$	\$	\$	\$	\$
	\$	\$	\$	\$	\$	\$
Total Costs	\$131,921.25	\$43,973.75	\$	\$	\$	\$175,895.00

Note: Costs for seeding, fencing, pipelines, wells, and cover crops cannot exceed NRCS Field Office Tech Guide without justification. Projects involving perimeter fencing must follow NRCS eligibility standards.

Budget Narrative – Use the space below to provide additional detail regarding project expenses.

Quote from LG Sonic is included with this application.

Sustainability – Indicate how the project will be funded or sustained in future years.

Include information on the sustainability of this project after OHF funds have been expended and whether the sustainability will be in the form of ongoing management or additional funding from a different source.

Williams County Parks is committed to providing the manpower to manage the project and financing the annual maintenance fee.

Partial Funding – Indicate how the project will be affected if less funding is available than that requested.

Depending on the amount of funding it could delay the purchase of the equipment.

Partnership Recognition - If you are a successful recipient of Outdoor Heritage Fund dollars, how would you recognize the Outdoor Heritage Fund partnership? * *There must be signage at the location of the project acknowledging OHF funding when appropriate.*

This technology is not being used anywhere in North Dakota. This would be an exciting project, Williams County Parks would promote it through social media, radio, and print media. On every occasion we would recognize the OHF and the Energy Commission.

WCP will have signage at ESD explaining the purpose of the MPC-Buoys. This signage will identify the OHF/Energy Commission as the entity that funded the buoys and made it possible.

Awarding of Grants - Review the appropriate sample contract for your organization on the website at <http://www.nd.gov/ndic/outdoor-infopage.htm>.

Can you meet all the provisions of the sample contract? Yes No

If there are provisions in that contract that your organization is unable to meet, please indicate below what those provisions would be:

ABOUT OHF:

The purpose of the North Dakota Outdoor Heritage Fund is to provide funding to state agencies, tribal governments, political subdivisions, and nonprofit organizations, with higher priority given to projects that enhance **conservation** practices in this state by:

Directive A. Providing access to private and public lands for sportsmen, including projects that create fish and wildlife habitat and provide access for sportsmen;

Directive B. Improving, maintaining and restoring water quality, soil conditions, plant diversity, animal systems and by supporting other practices of stewardship to enhance farming and ranching;

Directive C. Developing, enhancing, conserving and restoring wildlife and fish habitat on private and public lands; and

Directive D. Conserving natural areas and creating other areas for recreation through the establishment and development of parks and other recreation areas.

EXEMPTIONS

Outdoor Heritage Fund grants may not be used to finance the following:

- Litigation;
- Lobbying activities;
- Any activity that would interfere, disrupt, or prevent activities associated with surface coal mining operations; sand, gravel, or scoria extraction activities; oil and gas operations; or other energy facility or infrastructure development;
- The acquisition of land or to encumber any land for a term longer than twenty years; or
- Projects outside this state or projects that are beyond the scope of defined activities that fulfill the purposes of Chapter 54-17.8 of the North Dakota Century Code.

OHF funds may not be used, except after a finding of exceptional circumstances by the Industrial Commission, to finance:

- A completed project or project commenced before the grant application is submitted;
- A feasibility or research study;
- Maintenance costs;
- A paving project for a road or parking lot;
- A swimming pool or aquatic park;
- Personal property that is not affixed to the land;
- Playground equipment, except that grant funds may be provided for up to 25% of the cost of the equipment not exceeding \$10,000 per project and all playground equipment grants may not exceed 5% of the total grants per year (see Definitions/Clarifications for how this will be calculated);
- Staffing or outside consultants except for costs for staffing or an outside consultant to design and implement an approved project based on the documented need of the applicant and the expenditures may not exceed 5% of the grant to a grantee if the grant exceeds \$250,000 and expenditures may not exceed 10% of the grant to a grantee if the grant is \$250,000 or less (see Definitions/Clarifications for how this will be calculated);
- A building except for a building that is included as part of a comprehensive conservation plan for a new or expanded recreational project (see Definitions/Clarifications for definition of comprehensive conservation plan and new or expanded recreational project); or
- A project in which the applicant is not directly involved in the execution and completion of the project.

The goal of the Industrial Commission is that at a minimum 15% of the funding received for a biennium will be given priority for recreation projects that meet Directive D.

The following projects are not eligible for funding, unless there is a finding of exceptional circumstances by the Industrial Commission include:

- Construction or refurbishment of indoor/outdoor ice rinks,
- Construction or refurbishment of indoor/outdoor athletic courts and sports fields,
- Other substantially similar facilities.

- Infrastructure that is not part of a comprehensive conservation plan.
- Projects not meeting a minimum funding request of \$2,500.

Budget Information

In-kind services used to match the request for Outdoor Heritage Fund dollars shall be valued as follows:

- Labor costs \$15.00 an hour
- Land costs Average rent costs for the county as shown in the most recent publication of the USDA, National Agricultural Statistics Services, North Dakota Field Office
- Permanent Equipment Any equipment purchased must be listed separately with documentation showing actual cost. (For example: playground equipment)
- Equipment usage Actual documentation
- Seed & Seedlings Actual documentation
- Transportation Mileage at federal rate
- Supplies & materials Actual documentation

More categories will be added as we better understand the types of applications that will be submitted. We will use as our basis for these standards other State and Federal programs that have established rates. For example, the North Dakota Nonpoint Source Pollution Management Program has established rates. If your project includes work that has an established rate under another State Program, please use those rates and note your source.

Definitions/Clarifications:

Building - Defined as "A structure with a roof either with walls or without walls and is attached to the ground in a permanent nature."

Comprehensive Conservation Plan - Defined as "A detailed plan that has been formally adopted by the governing board which includes goals and objectives--both short and long term, must show how this building will enhance the overall conservation goals of the project and the protection or preservation of wildlife and fish habitat or natural areas." This does not need to be a complex multi-page document. It could be included as a part of the application or be an attachment.

New and Expanded Recreational Project means that the proposed building cannot be a replacement of a current building. The proposed building must also be related to either a new or expanded recreational project--either an expansion in land or an expansion of an existing building or in the opportunities for recreation at the project site.

Playground equipment calculation - Only the actual costs of the playground equipment (a bid or invoice showing the amount of the equipment costs must be provided) - cannot include freight or installation or surface materials or removal of old equipment, etc.

Staffing/Outside Consultants Costs - If you are requesting OHF funding for staffing or for an outside consultant, you must provide information in your application on the need for OHF funding to cover these costs. For example, if you are an entity that has engineering staff you must explain why you don't have sufficient staff to do the work or if specific expertise is needed or whatever the reason is for your entity to retain an outside consultant. If it is a request for reimbursement for staff time then a written explanation is required in the application of why OHF funding is needed to pay for the costs of that staff member(s)' time. **The budget form must reflect on a separate line item the specific amount that is being requested for staffing and/or the hiring of an outside consultant.** This separate line item will then be used to make the calculation of 5% or 10% as outlined in the law. Note that the calculation will be made on the grant less the costs for the consultant or staff.

Maintenance – Activities that preserve or keep infrastructure in a given existing condition, including repairs. Repair means to restore to sound condition after damage, to renew or refresh; except repairs due to damage caused by Acts of God.

Scoring of Grants

Oral Presentation. Please note that you will be given an opportunity to make a ten-minute Oral Presentation at a meeting of the Outdoor Heritage Fund Advisory Board. These presentations are strongly encouraged.

Open Record. Please note that your application and any attachments will be open records as defined by law and will be posted on the Industrial Commission/Outdoor Heritage Fund website.

All applications will be scored by the Outdoor Heritage Fund Advisory Board after your ten-minute oral presentation. The ranking form that will be used by the Board is available on the website at <http://www.nd.gov/ndic/outdoor-infopage.htm> .

Awarding of Grants

All decisions on requests will be reported to applicants no later than 30 days after Industrial Commission consideration. The Commission can set a limit on duration of an offer on each application or if there isn't a specific date indicated in the application for implementation of the project, then the applicant has until the next Outdoor Heritage Fund Advisory Board regular meeting to sign the contract and get the project underway or the commitment for funding will be terminated and the applicant may resubmit for funding. Applicants whose proposals have been approved will receive a contract outlining the terms and conditions of the grant.

Responsibility of Recipient

The recipient of any grant from the Industrial Commission must use the funds awarded for the specific purpose described in the grant application and in accordance with the contract. The recipient cannot use any of the funds for the purposes stated under Exemptions on the first page of this application.

If you have any questions about the application, the Commission can be reached at 701-328-3722 or outdoorheritage@nd.gov.

Revised: November 4, 2019, April 12, 2023

Epping Springbrook Dam Harmful Algal Bloom





Quote

Quote Number: 25064788
Our Reference: Greg Eiffert
Quote Date: Nov 30, 2022 02:47 PM
Valid Until: Apr 21, 2023
Your Reference: Epping Springbrook Dam
Payment Term: Prepaid

Invoice address:

The Parks Department and the County Park Board
.
Williston
North Dakota
United States

Delivery address:

Product Code	Product Name	Qty	List Price	Total
10100	MPC-Buoy Pro	2	\$ 50,100.00	\$ 100,200.00
10020	Anchor system Complete anchor system incl. anchor, D-shackles, marine rope, sinker, galvanized, chains and swivels	3	\$ 3,640.00	\$ 10,920.00
10200	MPC-Buoy Lite	1	\$ 43,500.00	\$ 43,500.00
3426	Transport Transport	1	\$ 14,400.00	\$ 14,400.00
10900	Installation and Set up LG Sonic	1	\$ 5,900.00	\$ 5,900.00
87316	Sim Card SIM Card: yearly fee per MPC-buoy	3	\$ 325.00	\$ 975.00
Sub Total				\$ 175,895.00
Tax				\$ 0.00
Grand Total				\$ 175,895.00

Terms and conditions

Payment

- Credit card (VISA / MasterCard / American Express): Till 10.000 USD + 4% Creditcard Fee
- Wire transfer
- Check payment

Please mention your quote number in your payment details.

Orders are standard being shipped with an Invoice and Packing list. If you require additional export documents please indicate this with your order.

Please transfer payment including the bank charges for successful handling of your order.
All the units are ready to work on AC power supply. If your device will work on DC supply, please let us know so we can prepare it in advance.

Company details

201 Lackawanna Ave. Suite 222
Scranton
Pennsylvania
18503
United States
Tel: +1 833 547 6642
E-mail: g.eiffert@lgsonic.com

Terms and conditions at: www.lgsonic.com/terms



Monitor, Predict, Control Algae with the MPC-Buoy

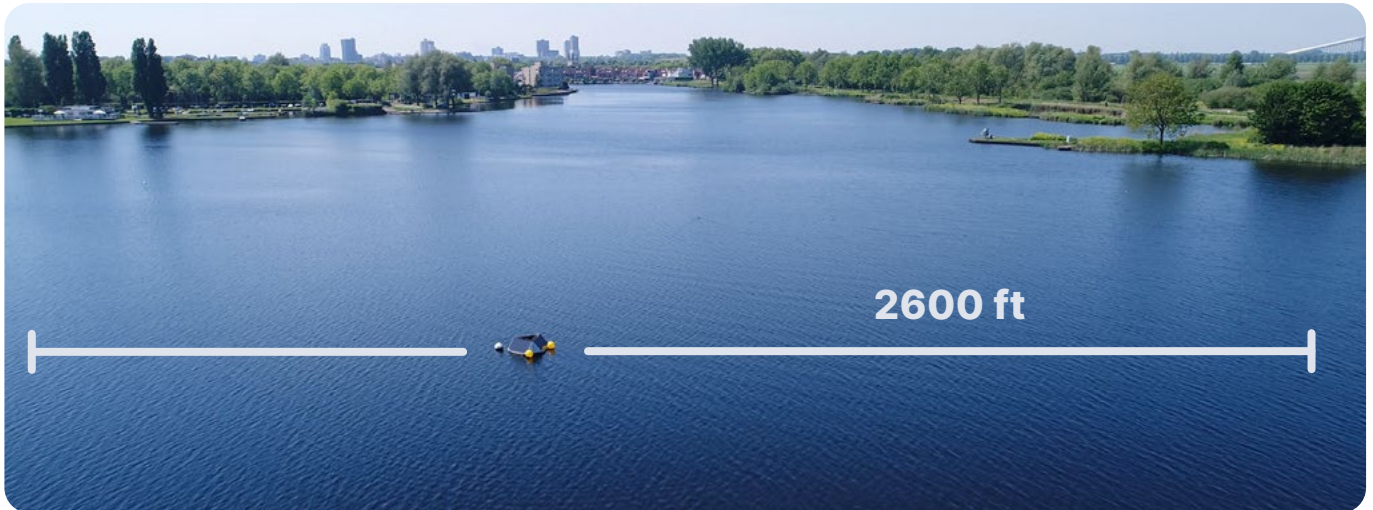
- ✓ Eliminate up to 90% of the algae
- ✓ Reduce TSS, pH, and chemical usage
- ✓ Safe for fish, plants, and other aquatic life

LGSONIC

Complete algae control solution

Meet the MPC-Buoy

The MPC-Buoy is a floating, solar-powered system that combines real-time water quality monitoring and ultrasound to effectively control algae (blooms) in lakes and reservoirs.



Each MPC-Buoy device can control algae in areas up to 2600 ft in diameter.



Algae problem

A combination of high temperatures, stagnant water, and nutrient overload can result in excessive algae growth. These organisms deplete oxygen levels in water, release toxins, and cause bad taste and odors. The solution is to deploy one or more MPC-Buoys that emit targeted ultrasound into the water.



Algae solution

- ✓ Eliminate up to 90% of the algae
- ✓ Prevent the growth of new algae
- ✓ Reduce TSS, pH, and chemical usage
- ✓ Safe for fish, plants, and other aquatic life

Designed for large water bodies

The MPC-Buoy is specifically designed to control algae and improve water quality in large water bodies.

Drinking water reservoirs



Reduce chemical consumption, odor and taste issues.

Cooling ponds



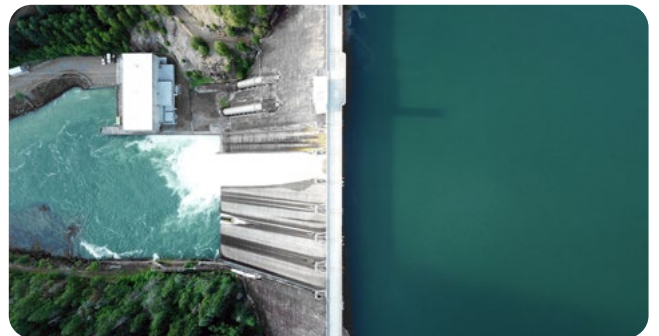
Increase the water quality and efficiency of your cooling water.

Wastewater ponds



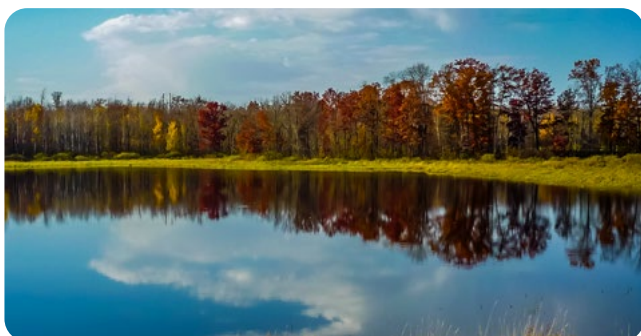
Control algal blooms to lower pH, TSS, and BOD levels.

Hydroelectric dams



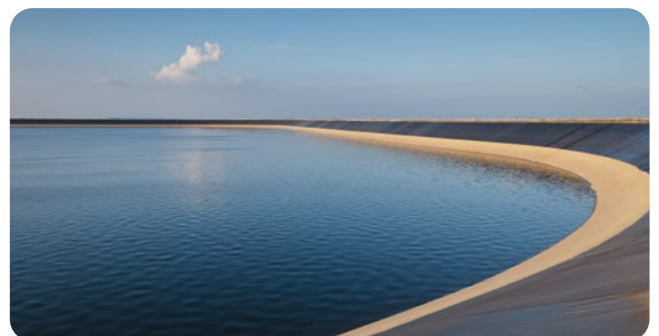
Lower chemical consumption and improve water quality.

Lakes



Reduce odor problems and prevent dangerous toxins.

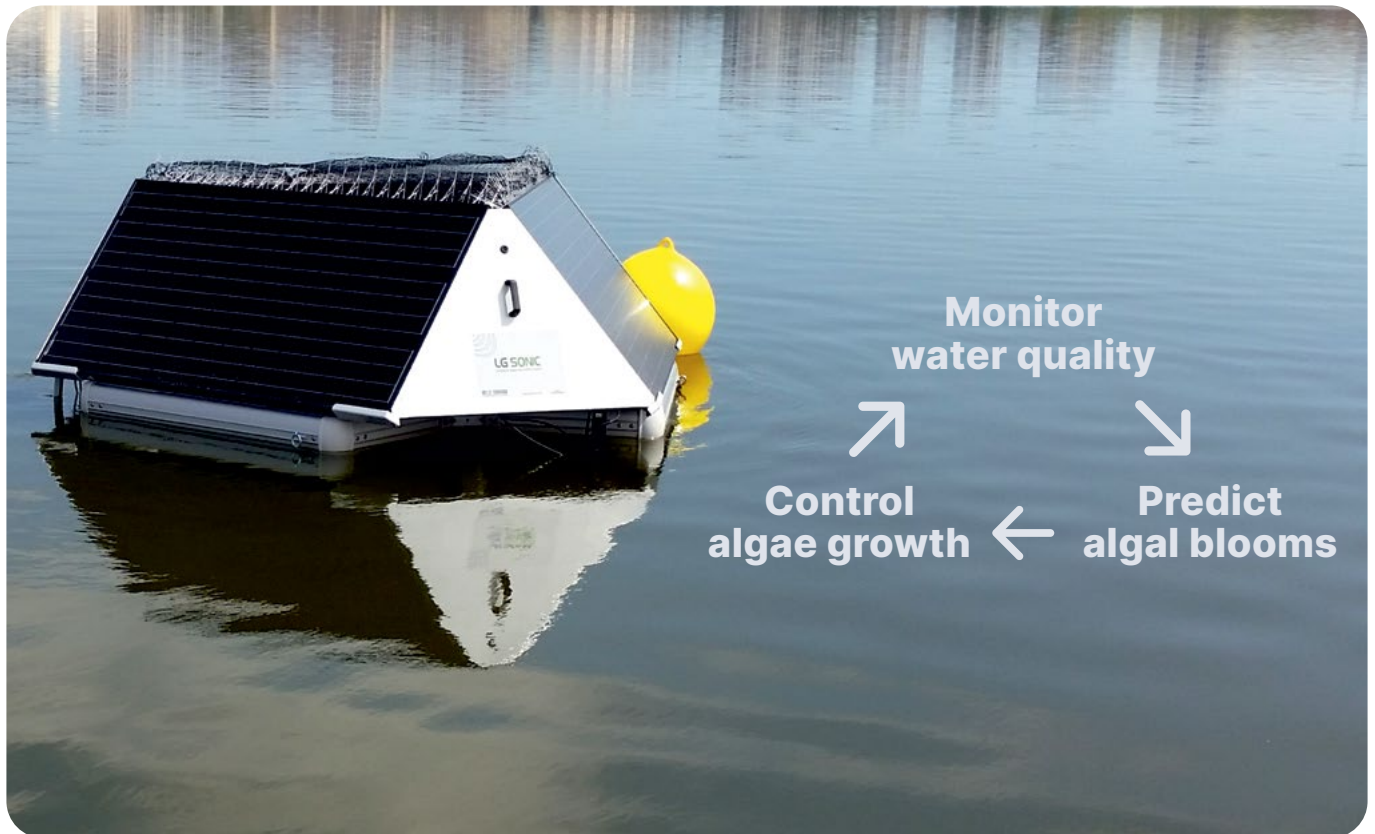
Irrigation reservoirs



Prevent clogging of filters and pipes of drip irrigation systems.

Monitor, predict, and control algae with ultrasonic technology

The MPC-Buoy uses low-power ultrasound to stop algal growth without harming the environment.



1. Monitor water quality

The MPC-Buoy provides a complete overview of your water quality by collecting the following parameters* every 10 minutes:

- Chlorophyll α (green algae)
- Phycocyanin (blue-green algae)
- pH
- Turbidity
- Dissolved oxygen
- Temperature

2. Predict algae blooms

Our database contains more than 10 years of information collected from thousands of LG Sonic devices operating around the world. It includes datapoints on different types of water bodies, algae species, seasons, etc. Our database is continually refreshed with new information, always optimizing predictive algorithms for the benefit of all our customers.

3. Control algae growth

Algae can become resistant to treatment methods, including ultrasound. To avoid this, we'll determine the most effective ultrasonic program for your unique situation. The program parameters will be specific for wave form, frequency, pause, and amplitude. The key to long-term results is adjusting settings before the algae mutate.

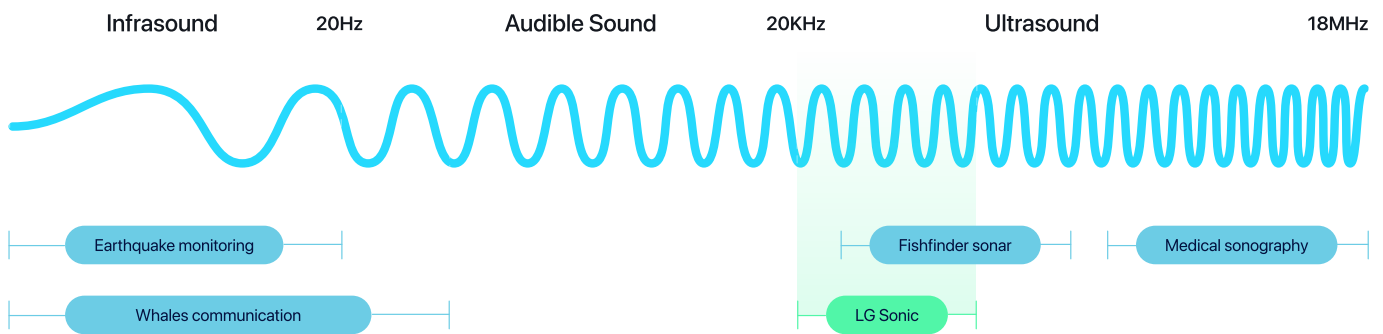
* Additional sensors can be purchased separately

How ultrasonic algae control works

Eco-friendly ultrasonic treatment

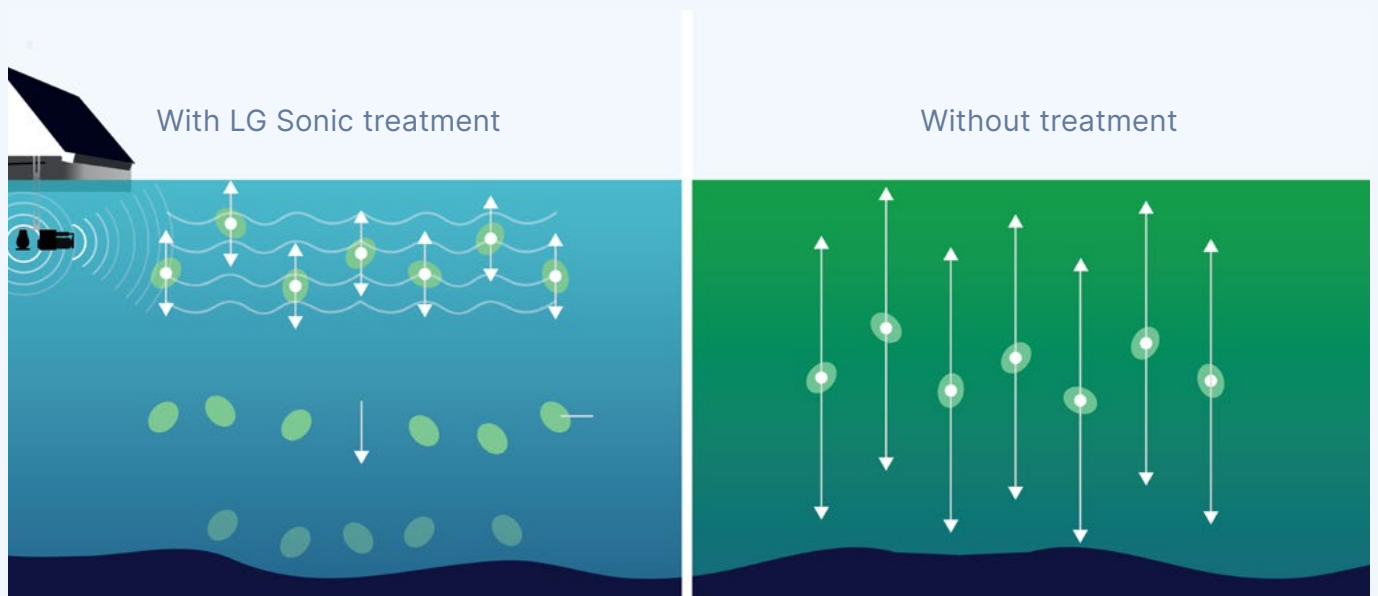
Algae blooms reduce light penetration, deplete oxygen, and release dangerous toxins, harming fish, plants, and other aquatic organisms. By controlling algal growth, LG Sonic's ultrasonic technology has the power to restore entire ecosystems.

After one year of treatment, algae levels will significantly reduce as water clarity increases, encouraging plant growth and therefore, increasing oxygen levels. Our ultrasonic treatment reduces algae blooms by up to 95%, compared to no treatment.



How ultrasound targets the algae

- 1 Algae move to the water surface for photosynthesis. The ultrasound creates a sound layer at the top of a water body.
- 2 The ultrasound affects algae's vertical movement by fixing them in the water column.
- 3 Without sunlight and nutrients, the algae sink to the bottom, where they decompose without releasing toxins.
- 4 In time, bacteria will degrade the algae.



MPC-Buoy components

Solar-powered

- 3× 200 Wp high quality solar panel that provide power all year-round in any country
- 1× 24 Volt, 40 AMP lithium battery
- Switches to energy-saving program during periods of low sun irradiation

Smart communication system

- 4G, Satellite, LAN
- Real-time water quality data with the MPC-View software
- Integrated alarm functions



4 ultrasonic transmitters

- Treatment range: 2600 ft in diameter
- Integrated Aquawiper™: automatic cleansing system for the transmitters
- Chameleon Technology™ adjusts the ultrasonic program to specific water conditions

Anchored floating construction

- Aluminium powder coated frame
- UV and corrosion resistant construction
- Unsinkable floats

Complete quality sensor package

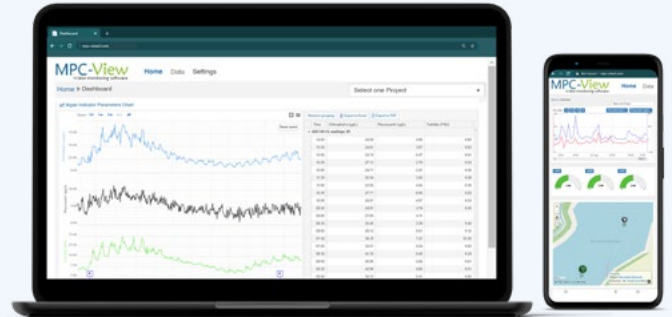
- In-situ water quality sensors to provide real-time data
- Monitors DO, turbidity, pH, chlorophyll α , phycocyanin, and temperature
- Automatic antifouling wiper ensures optimal readings

Get real-time water quality insights

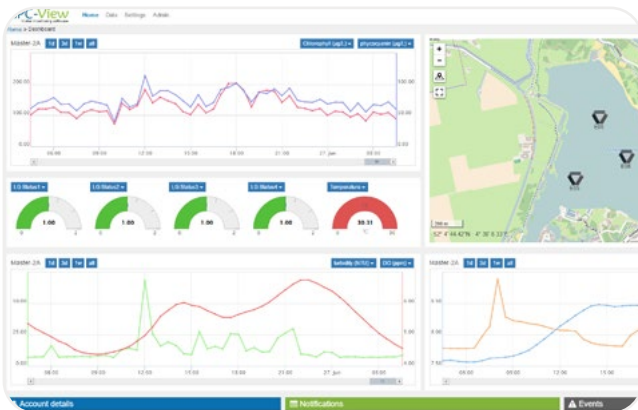
Meet the MPC-View

MPC-View is an advanced web-based software. It provides a complete water quality overview of one or more water bodies.

- ✔ Real-time insights into your water quality
- ✔ Data transfer through 4G or satellite
- ✔ Ultrasonic programs change based on the water quality data received



MPC-View software features



- ✔ The software receives, summarizes, and publishes data into charts, tables, and spreadsheets on your personal webpage.
- ✔ Allows you to follow the algae treatment progress and the status of the units.



- ✔ Based on the data, ecologists, biologists and technicians from LG Sonic modify the ultrasonic program for effective treatment.
- ✔ Set alarms for changing water conditions and maintenance activities.

Remote sensing is also integrated into MPC-View. This allows you to view the historic data of a specific water body, and further optimize the treatment.

Technical specifications



<p>3x aluminum framed polyethylene buoy</p> <ul style="list-style-type: none"> • Material: Rotationally-moulded UV-stabilized HDPE polyethylene • Filling: Closed-cell polyurethane foam • Buoy frame: Anodized aluminum • Weight: 33 lbs • Size: 47 × 23.5 × 8 in • Buoyancy capacity 600 lbs 	<p>Solar panels (3x)</p> <ul style="list-style-type: none"> • Solar cell: Monocrystalline cell • Rated Power (Pmax): 200 Wp Weight: 35.3 lbs • Connectors IP67 • Size: 62.2 × 32 × 1.4 in
<p>Telemetry</p> <ul style="list-style-type: none"> • GSM/GPRS • CDMA (optional) • Radio (optional) • GPS (optional) • Iridium Satellite (optional) 	<p>Data acquisition system</p> <p>4 x analog channel (user-configurable for either 4-20mA)</p> <ul style="list-style-type: none"> • 1 x RS485 port for instruments • 1 x high frequency pulse counting channel • 1 SDI-12 input • 3X RS232
<p>Battery</p> <ul style="list-style-type: none"> • 1× 24 volt lithium lifepo4 • Capacity: 40 Ah • Weight: 33 lbs 	<p>Solar Charge Controller</p> <p>Overcharge and Deep discharge protection Ip68 Protection</p>

Water quality sensor package

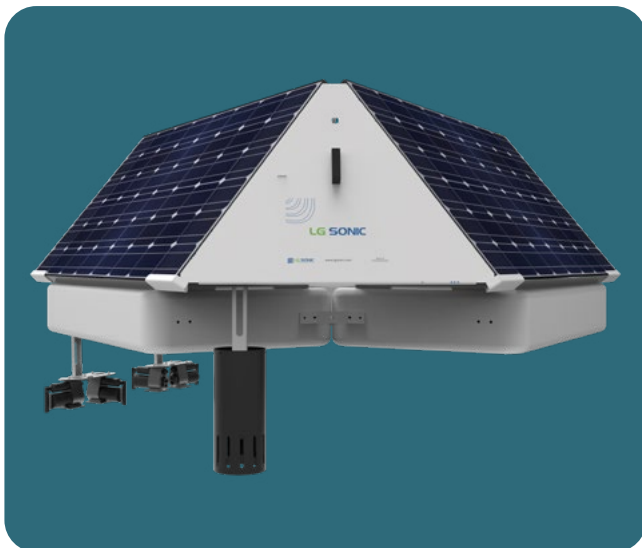
<p>Fluorescence, including anti-fouling wiper: chlorophyll a, phycocyanin, turbidity</p> <ul style="list-style-type: none"> • 470nm – Chlorophyll a • 610nm – Phycocyanin • 685nm Turbidity 	<p>Dissolved Oxygen</p> <ul style="list-style-type: none"> • Optical measure by luminescence • Measure ranges: • 0.00 to 20.00 mg/L • 0.00 to 20.00 ppm • 0-200% 	<p>pH</p> <ul style="list-style-type: none"> • Combined electrode • special glass, Ag/AgCl ref. • Gelled electrolyte (KCl) • Range 0 – 14 pH • Resolution 0,01 pH • Accuracy +/- 0,1 pH
<p>Temperature</p> <ul style="list-style-type: none"> • Technology CTN • Range 32°F to 122°F • Resolution 0,02°F • Accuracy ± 0,9°F • Response time < 5 s 		<p>It is possible to add additional sensors to the water quality sensor package.</p>

What other products do you need?

Vertical profiling system

LG Sonic Vertical Profiler can be pre-set to take samples from a wide range of depths within a water body and measure key water parameters in real-time. Data is transmitted through 4G, radio or satellite to the MPC-View online software.

- Easy maintenance: can be done from the boat, without bringing it back to shore
- Possible to measure up to 330 ft in depth
- 50% more affordable than other Vertical Profilers on the market



PO₄ sensor

By measuring PO₄ in a water body, you're able to predict harmful algae blooms and you gain a better understanding of the different PO₄ sources in your water.

- Reliable measurements at different depths
- 2-POINT calibration with each measurement
- High durability of reagents
- User-friendly and highly customizable
- More affordable than other PO₄ sensors
- Operates completely autonomously
- The sensor can be supplied on a stable buoy

Weather station

Our Weather Station is a low-maintenance unit that enables more accurate algae bloom predictions by integrating local weather data into your MPC-Buoy and MPC-View software.

- Real-time weather data
- Highly customizable
- Low maintenance



Our customers

We work together with top-level water and energy utilities.



American Water is the largest and most geographically diverse U.S. public water and wastewater utility.

To control harmful algae and eliminate foul odor and taste issues, American Water installed MPC-Buoy systems in their reservoir located in New Jersey. Amongst other positive results, the utility achieved 100% chemical reduction in the reservoir



In California, the MPC-Buoy technology is controlling algae in an open water reservoir where treated reclaimed water is stored to be later used for irrigation.

Since the start of the ultrasonic treatment, overall algae levels have decreased. TSS, pH, and dissolved oxygen levels have also improved, allowing Vallecitos to provide higher water quality to their customers.



For years, power generating company NIPSCO tried lowering TSS levels using algaecide, but it never gave consistent results.

Since the installation of five MPC-Buoy systems in the spring of 2019, TSS levels remained at lower levels than 3 ppm. Additionally, the company could keep pH and TSS in check, complying with EPA's NPDES permit limits.



After installing the MPC-Buoy in their wastewater pond, American Crystal Sugar Company has reduced chlorophyll-a levels by up to 85%.

As a result, TSS values lowered, enabling them to comply with the NPDES limits. American Crystal Sugar is the first company in the sugar beets industry to start using ultrasonic technology for improving water quality.

About LG Sonic

We're global leaders in sustainable algae management. Our patented ultrasound integrated into our technologies can be remotely controlled by our team of experts.

For over 10 years, we've invested in research and development. Today, we deliver technological solutions that restore aquatic ecosystems without the use of chemicals or other pollutants.

100+

Clients

55+

Countries

12+

Industries served



LG Sonic US

In 2018, we opened our US office and expanded our business in North America. Ever since, we've been able to better service the needs of our customers. We are running algae treatment projects across the states, including California, New York, Florida, New Jersey, Pennsylvania, Colorado, and Georgia.

Scranton, PA 18503
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The LGSONIC logo, featuring the letters 'LG' in green and 'SONIC' in dark blue.

Award-Winning Innovation



LGSONIC

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Scranton, PA 18503

+1 833 547 6642

www.lgsonic.com

info@lgsonic.com

Outdoor Heritage Fund
Grant Round 22
Application Summary Page
GR 22-12

Project Title: TMBCI Belcourt Lake Rejuvenation Phase II
Applicant: Turtle Mountain Band of Chippewa
Primary Contact: Jeff Desjarlais, Jr.
Total Project Costs: \$147,741
OHF Request: \$105,741

Match Amount	Funding Source	Match Type
\$17,000	Turtle Mountain Band of Chippewa	Cash
\$15,000	Turtle Mountain Band of Chippewa	Cash
\$10,000	Turtle Mountain Band of Chippewa	In-Kind
\$42,000.00	Total	

Percentage of Matching Funds: 28%

Project Duration: One year

Major Directive: D

Additional Directive:

Summary of Project: The Project involves the installation of two handicapped-accessible fishing piers, a restroom facility, and two picnic arbors at Belcourt Lake; the project would renovate a historic boy scout camp site to provide additional public access to the lake.

Technical Committee Comments:

- Great project, and applicant has been great to work with on previous projects

Technical questions from the OHF Advisory Board members:

Funded Projects

Contract	Total Project Cost	Title	Award Amount	Amount Expended	Project Timeframe
4-56	\$70,000	TMBCI Sky Chief Park Fishing Pier Project	\$60,000	\$60,000	Completed
12-136	\$71,250	Sky Chief Park Restroom Facilities Project	\$53,438	\$50,554.90	Completed
13-143	\$99,097	Sky Chief Park Fishing Dock Project	\$74,000	\$74,000	Completed
15-157	\$68,567	Belcourt Lake Park Rejuvenation Project	\$48,567	\$0	Six months
Totals	\$308,914.00		\$184,554.90	\$184,554.90	

Unsuccessful Applications

Round	Request	Total Project Cost	Title	Vote
1-BBB	\$508,600	\$700,290	Turtle Mountain Chippewa Outdoor Heritage Fund	0-12
2-19	\$60,000	\$90,000	TMBCI Sky Chief Park Educational Stewardship Lodge	4-7
3-26	\$40,000	\$50,000	TMBCI Sky Chief Park Playground Project	3-8
5-27	\$120,000	\$150,000	TMBCI Historic Preservation Stewardship Lodge	1-10
6-19	\$36,000	\$46,000	TMBCI Belcourt Lake Park Community Rest Rooms Project	1-10
7-18	\$50,000	\$70,000	Turtle Mountain Chippewa Fishing Dock Project	2-9
9-17	\$36,000	\$46,000	TMBCI Belcourt Lake Park Restroom Project	N/A
Totals	\$850,600.00	\$1,152,290.00		

OHF Advisory Board Recommendation

Contingencies: **None**

Conflicts of Interest: **None**

Funding Vote: **7-2**

Funding Amount Vote: **\$105,741**

Outdoor Heritage Fund Grant Application



Instructions

After completing the form, applications and supporting documentation may be submitted by e-mail to ndicgrants@nd.gov. It is preferred that only electronic copies are submitted.

You are not limited to the spacing provided, except in those instances where there is a limit on the number of words. If you need additional space, please indicate that on the application form, answer the question on a separate page, and include with your submission.

The application and all attachments must be received by the application deadline. You may submit your application at any time prior to the application deadline. **Applicants are strongly encouraged to submit applications prior to the deadline for staff review in order ensure that proposals will be complete when submitted on deadline date.** Incomplete applications may not be considered for funding.

Please review the back of this form to determine project eligibility, definitions, budget criteria, and statutory requirements.

Project Name: TMBCI Belcourt Lake Rejuvenation, Phase II – “Boy Scout Camp”

Name of Organization: Turtle Mountain Band of Chippewa

Federal Tax ID# EIN #450223071

Contact Person/Title Jeff Desjarlais, Jr, TMBCI Natural Resources Director

Address PO Box 900, Highway 281 W

City Belcourt

State North Dakota

Zip Code 58316

E-mail Address desjarlaisjr.jeffrey@yahoo.com

Web Site Address (If applicable): www.tmchippewa.com

Phone 701-477-2640

List names of co-applicants if this is a joint proposal

MAJOR Directive:

Choose only one response

- Directive A.** Providing access to private and public lands for sportsmen, including projects that create fish and wildlife habitat and provide access for sportsmen;
- Directive B.** Improving, maintaining and restoring water quality, soil conditions, plant diversity, animal systems and by supporting other practices of stewardship to enhance farming and ranching;
- Directive C.** Developing, enhancing, conserving and restoring wildlife and fish habitat on private and public lands; and
- Directive D.** Conserving natural areas and creating other areas for recreation through the establishment and development of parks and other recreation areas.

Additional Directive:

Choose all that apply

- Directive A.**
- Directive B.**
- Directive C.**
- Directive D.**

Type of organization:

- State Agency
- Political Subdivision
- Tribal Entity
- Tax-exempt, nonprofit corporation.

Abstract/Executive Summary.

Summarize the project, including its objectives, expected results, duration, total project costs and participants. (no more than 500 words)

The Turtle Mountain Band of Chippewa proposes to renovate the Belcourt Lake “Boy Scout Camp” site so that it is more accessible and usable for members of the tribe and visitors to the TM Reservation. The site is in need of upgrade due to age and limited access to the site. The Park was once a hub for fishing, swimming, picnicking and other recreational activities. The total amount requested from the ND Outdoor Heritage Fund is \$105,741 and the tribe will contribute \$42,000 in cash and in-kind tribal resources for a total project budget of \$147,741. The amenities to be purchased and erected include two (2) handicapped-accessible fishing piers, a rest room facility, and two (2) picnic arbors. The tribal Natural Resources Department, with support from the tribal Senior & Youth program, will be responsible for all purchasing, construction, and maintenance of the Boy Scout Camp Park amenities.

Goal: To renovate the Fish Lake “Boy Scout Camp” with essential amenities to better serve members of the tribe and visitors to the reservation.

Objectives:

1. Prepare the Boy Scout camp for future development by grading and leveling the property.
2. Construct two (2) picnic arbors with the assistance of tribal Elder/Youth program.
3. Purchase and install (2) fishing piers constructed meeting high quality standards.
4. Purchase and install one (1) self-contained restroom facility.
5. Landscape the camp area and plant new native trees and shrubs.
6. Publicize the Belcourt Lake ‘Boy Scout Camp’ site in tribal promotional campaigns.
7. Properly maintain the park site for seasonal usage (fall, winter, spring, summer).

Project Duration: One year from start of construction to completion.

Indicate the intended schedule for drawing down OHF funds.

Turtle Mountain Band of Chippewa intends to draw down funds upon completion of project.

Amount of Grant request: \$ 105,741

Total Project Costs: \$ 147,741

Note: in-kind and indirect costs can be used for matching funds.

Amount of Matching Funds: \$ 42,000

A minimum of 25% Match Funding is required. Indicate if the matching funds will be in-kind, indirect or cash. Please provide verification that these matching funds are available for your project. Note that effective as of July 1, 2015 no State General Fund dollars can be used for a match unless funding was legislatively appropriated for that purpose.

Amount of Match	Funding Source	Type of Match (Cash, In-kind or Indirect)
\$17,000	Turtle Mountain Band of Chippewa	Cash for picnic arbors
\$15,000	Turtle Mountain Band of Chippewa	Cash for site work expenses
\$10,000	Turtle Mountain Band of Chippewa	In-kind for landscaping
\$		
\$		

\$42,000		
----------	--	--

Certifications

x I certify that this application has been made with the support of the governing body and chief executive of my organization.

x I certify that if awarded grant funding none of the funding will be used for any of the exemptions noted in the back of this application.

Narrative

Organization Information – Briefly summarize your organization’s history, mission, current programs and activities.

Include an overview of your organizational structure, including board, staff and volunteer involvement. (no more than 300 words)

The TMBCI Tribal Government oversees the Department of Natural Resources (NR) who manages the wildlife and fish, bison, parks and recreation, agricultural, and other natural and cultural resources on Turtle Mountain Tribal lands. The NR Department maintains a full-time staff and partners with local training programs such as Summer Youth, Adult Workforce Training, and Experience Works (tribal elders age 55 and over) to assist the NR throughout the year.

Mission Statement: The Turtle Mountain Band of Chippewa is committed to preserving and protecting the natural and cultural resources of the Turtle Mountain Indian Reservation for the benefit of present and future generations of tribal members and for those who visit our Reservation.

As a tribal nation, it is an obligation and duty to protect our natural resources. It is inherited within our traditional beliefs that have been passed down for generations. It is also critical that we pass down to our youth the importance of preserving our natural resources. This is best practiced through “holistic teachings” and the integration of educational and cultural programming, recreational and wellness activities, and outdoor experiential learning.

Purpose of Grant – Describe the proposed project identifying how the project will meet the specific directive(s) of the Outdoor Heritage Fund Program

Identify project goals, strategies and benefits and your timetable for implementation. Include information about the need for the project and whether there is urgency for funding. Indicate if this is a new project or if it is replacing funding that is no longer available to your organization. Identify any innovative features or processes of your project. Note: if your proposal provides funding to an individual, the names of the recipients must be reported to the Industrial Commission/Outdoor Heritage Fund. These names will be disclosed upon request.

For tree/shrub/grass plantings: provide a planting plan describing the site design, planting methods, number of trees/shrubs by species and stock size, grass species and future maintenance. A statement

certifying that the applicant will adhere to USDA-NRCS tree/shrub/grass planting specifications along with the name of the governmental entity designing the planting may be substituted for a planting plan.

For projects including Section 319 funding: provide in detail the specific best management practices that will be implemented and the specific projects for which you are seeking funding.

For projects including fencing: A minimum cost share of 40% by the recipient is preferred. Include detailed information on the type of fencing to be installed, whether funding is requested for boundary fencing, new or replacement of existing fencing, and/or cross fencing.

The purpose of the TMBCI grant application is to continue renovating the Belcourt Lake watershed with this application focusing on Phase II that includes a site locally known as the 'Boy Scout Camp'. This will include 1) site work within park perimeter 2) purchasing and installing two handicapped-accessible fishing piers 3) purchasing one rest room units with sections for men and women and 4) constructing two picnic arbors and 5) landscaping the property.

The Turtle Mountain Band of Chippewa Tribal Government recently passed a resolution to support the restoration and development of the Belcourt (Fish) Lake, named the "Belcourt Lake Rejuvenation" Project. Belcourt Lake is the tribe's largest Lake and is located 3 miles north of Belcourt, adjacent to a newly paved BIA Road and paved Bike/Walk Path.

The Belcourt Lake is accessible to tribal members and will be ideally suited for Park development which will include facility and infrastructure improvements, fishing docks/piers, shoreline restoration, community restrooms, playground equipped with commercially safe equipment, and youth Pow Wow Arbor.

The Belcourt Lake has traditionally been a hub for recreational activities and once hosted a beachfront park with a fishing pier, roundhouse community arbor, and a playground. All amenities have since been removed due to age and dilapidation, and lack of community sponsorship due to limited resources. The tribal Natural Resources Department has been an advocate for renewing interest in reviving the Belcourt Lake front property, which is owned and managed by the Tribe.

The Belcourt Lake includes opportunities for fishing, walking and nature trails, swimming and water sports, individual and group picnic facilities, and wildlife viewing opportunities -- as these may be developed carefully within the context of an integrated stewardship and management plan.

The Turtle Mountain Community College, through their Heavy Equipment Operator degree program, has agreed to assist the tribe by providing site development work at the Boy Scout Camp site. The college will utilize their equipment and instructional program to provide valuable work training experience for their students enrolled in their program. The site is in dire need of leveling and tree and shrub removal as well as watershed embankment work. The college and NR Department mutually agreed that the tribe would pay for maintenance and fuel.

The handicapped fishing piers will be constructed by the local tribal manufacturing firm – Metalworks Industries. The firm has built fishing piers for the Natural Resources Department in the past and they have been a popular addition to our lakes. Metalworks has also fabricated metal bench braces, garbage bins, and other necessary amenities for the Natural Resources Department. One fishing pier will be situated on the south side of the Belcourt Boy Scout while the other will be located on the north

side. The Fishing Piers will be constructed using USA made materials as that is policy of the tribe and a directive given to tribal enterprises.

The rest room unit will be purchased and installed by Boom Concrete, Inc. who are based in South Dakota. The Boom Clovermist Double Vault Toilet is self-contained and is sectioned for men and women. The tribe recently purchased two units that will housed within the tribal park vicinities. The company will set-up and install the rest room for additional fees.

The picnic arbors will be constructed by the Natural Resources Department with some finished wood from the Sky Chief Park wood mill. The tribal elder and youth program will supply the manpower using the equipment available to the park. The 16 ft by 24 ft arbors will be faced with metal siding and roofing and all wood will be stained for longevity.

Working collaboratively with the tribal tourism Director, the NR Director will promote the new Belcourt Lake 'Boy Scout Camp' site in all available media campaigns and outlets. The tribal Tourism Department is an active member with several state and national Tourism organizations that promote tourism activities in Indian Country. The Turtle Mountain Band of Chippewa is a big draw due to its cultural significance and natural landscape and bountiful waterways.

Timeline:	Month 1-3	Survey Boy Scout Camp site TMCC Heavy Machinery Site work Pre-order Rest Room Unit Mill wood for Picnic Arbor Pre-order Fishing Piers Prepare quarterly progress report
	Months 4-6	Install Rest Room Unit Construction of Picnic Arbors Construction of Fishing Piers TMCC Heavy Machinery site work Prepare quarterly progress report
	Months 7-9	TMCC Heavy Machinery site work Construction of Fishing Piers Install Picnic Arbors Prepare quarterly progress report
	Months 10-12	Installation of Fishing Piers Landscaping and tree planting Initiate promotional campaign Prepare final summation progress report

Major benefits of the proposed Belcourt Lake Boy Scout Camp rejuvenation project:

1. Attract more local and off-reservation visitors to the Belcourt Lake area.
2. Provide fishing and recreational opportunities for the handicapped.
3. Fishing Piers railing will provide additional safety to fishing patrons.
4. Will enhance the local tribal tourism industry.
5. Provide healthy environment that promotes social, mental and physical well-being.

6. Provide shade to protect park patrons from heat and rain.

Is this project part of a Comprehensive Conservation Plan? Yes No

If yes, provide a copy with the application.

Note: Projects involving buildings and infrastructure will only be considered if part of a Comprehensive Conservation Plan. Please refer to the "Definitions" section at the back of the form for more details.

Management of Project – Provide a description of how you will manage and oversee the project to ensure it is carried out on schedule and in a manner that best ensures its objectives will be met.

Include a brief background and work experience for those managing the project.

The Sky Chief Park complex is managed by the tribal Natural Resources Department and is headed by Mr. Jeff Desjarlais, Jr (JJ). Mr. Desjarlais is spearheading the Belcourt Lake Rejuvenation project in collaboration with several key partners/stakeholders who have been involved since the development phase of the project. These agencies include:

1) TMBCI Tribal Government (www.tmchippewa.com) – provides a steady source of funding toward the tribal Natural Resources Department and oversees a diverse array of federal, state, and tribal programs on behalf of the tribe. A professional Financial Audit is conducted yearly.

2) Turtle Mountain Community College (www.tm.edu.com) – local tribal college that provides higher educational services as well as job preparation training. TMCC is was established in 1972 and is accredited by North Central Association (NCA). A new facility was constructed in 2001 that borders the Belcourt Lake and therefore is a committed partner in taking stewardship of the lake and surrounding natural resources.

3) Bureau of Indian Affairs (BIA) -- has trust responsibilities and provides funding for our Natural Resources including a Youth/Elder mentoring employment program.

4) ND Parks & Recreation - provides funding and technical support in the areas of parks and recreation. There are set-aside funds for Native led projects within the state of North Dakota.

The NR Department meet bi-weekly to discuss developmental efforts & implementation strategies in regard to the Sky Chief Park complex. During the meetings, conference calls and video chats are set up with a host of agencies that have contributed to the needs of the tribe's natural resources.

To assure progress success, the NR Department is guided by several plans in relation to stewarding the tribe' natural resources including:

TMBCI Sky Chief Park Management Plan – currently under review and revision the plan guides the tribal 1,313 acre park. The park contains a relatively natural landscape that includes two lakes, a diversity of natural habitats and cultural features and provide opportunities for a range of nature based outdoor recreational activities. The long term vision of the Park is "to preserve the Sky Chief Park's natural and cultural heritage values."

TMBCI Fish Management Plan 2018-2028 -a comprehensive plan developed with the support of US. Fish & Wildlife and conducted by fish management specialist –Samuel Hultberg and Josh Wert. The

plan is an essential guide in monitoring the numerous tribal lakes and waterways located within the Turtle Mountain Band of Chippewa Reservation.

Belcourt Heritage Park Plan – a newly developed Park that will promote and help sustain Chippewa traditional beliefs, practices, and traditions. A newly constructed Cultural Community Center and Pow Wow Arbor will be constructed this summer to host an ever-increasing number (over 5,000) of visitors to our traditional Little Shell and TM Days Celebrations each year.

Belcourt Veterans Park Plan – a park hosted by the large contingent of tribal veterans who served in the armed forces. The site was recently given an upgrade with a new Playground and soon to be constructed Water Splash Pad for our youth.

TMBCI Tourism Plan – to guide local tribal tourism industry and to promote amenity upgrade improvements.

Evaluation – Describe your plan to document progress and results.

Please be specific on the methods you will utilize to measure success. Note that regular reporting, final evaluation and expenditure reports will be required for every grant awarded.

The Tribal Natural Resources Director (JJ) will assure that the tasks and activities of the project are accomplished in an efficient and timely manner. The Tribal Government has assigned Mr. Ron Trottier, District II Councilman, to be liaison with the NR team and to assure the needs of the tribe are addressed.

A quarterly and yearly progress report will be prepared by the NR Director who will in turn disseminate it to the tribal council, TMCC, and BIA for review and discussion. These reports will include the level of progress made toward project objectives, timelines, and measurable outcomes. They will also formulate the basis for reporting to the North Dakota Outdoor Heritage Fund.

Financial Information

Project Budget – Use the table below to provide an itemized list of project expenses and describe the matching funds being utilized for this project.

Indicate if the matching funds are in the form of cash, indirect costs or in-kind services. The budget should identify all other committed funding sources and the amount of funding from each source. **A minimum of 25% match funding is required.** An application will be scored higher the greater the amount of match funding provided. (See Scoring Form.)

Certain values have been identified for in-kind services as detailed under “Budget Information” at the back of this form. Refer to that section and utilize these values in identifying your matching funds.

NOTE: No indirect costs will be funded. Supporting documentation for project expenses, including bids, must be included or application will be considered incomplete.

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
Fishing Piers	\$73,096	\$	\$	\$	\$	\$73,096
Rest Room Unit	\$32,645	\$	\$	\$	\$	\$32,645
Picnic Arbor		\$17,000	\$	\$	\$	\$17,000

contributions of approximately \$20,000.

- Sky Chief Park Fishing Piers – funded three (3) handicapped accessible fishing docks that were placed at Wheaton, Jarvis and Gordon lakes. Funded by ND Outdoor Heritage fund for \$74,000 with tribal match of \$25,000.
- AmeriCorps Program – to hire young adults between ages 18-24 to assist in Sky Chief Park development and operation. First year funding level at \$75,000
- Portable Saw Mill Equipment and facility– to purchase portable saw mill equipment that will be used to make park structures such as cabins, picnic tables, signage, etc. A 32' x 60' foot metal building is currently being constructed to house the portable wood mill operation. Thus far, over \$500,000 has been committed to the project with tribal and BIA funds.
- Tribal Senior Program – to hire seniors ages 55 and over to assist with park maintenance including mowing grass, litter disposal, shoreline brushing, etc. Funded by BIA at \$80,000.
 - Tribal Youth Program – to hire youth ages 14-18 to assist to work alongside seniors which is funded by BIA at \$65,000.

Partial Funding – Indicate how the project will be affected if less funding is available than that requested.

Any shortcomings in funding will be addressed by meeting with the Tribal Government to determine what tribal resources are available to meet the financial needs of the project. The tribe has been very committed to the Natural Resources Department in recognition of the vast amount of land and water that is it is responsible for. It is a beautiful habitat that has nourished the TM Chippewa for generations and provided a wealth of recreational activities and programming.

It is essential the tribal government afford Native youth every opportunity to participate in natural resource educational and social programming to assure long term sustainability. Tribal members do not have to pay park entrance fees and almost all events initiated at the Belcourt lake complex is free to the public.

Partnership Recognition - If you are a successful recipient of Outdoor Heritage Fund dollars, how would you recognize the Outdoor Heritage Fund partnership? * *There must be signage at the location of the project acknowledging OHF funding when appropriate.*

The Turtle Mountain Band of Chippewa has access to all local media such as the Turtle Mountain Times & Turtle Mountain Star newspapers, tribal radio KEYA-FM radio, and social media such as facebook and youtube. The tribe will take advantage of these opportunities and will assure that the ND Outdoor Heritage fund will receive recognition and promotional coverage within these media streams. A plaque recognizing all financial partners will be mounted at the entrance to refurbished 'Boy Scout Camp' site.

Awarding of Grants - Review the appropriate sample contract for your organization on the website at <http://www.nd.gov/ndic/outdoor-infopage.htm>.

Can you meet all the provisions of the sample contract? x Yes No

If there are provisions in that contract that your organization is unable to meet, please indicate below what those provisions would be:

ABOUT OHF:

The purpose of the North Dakota Outdoor Heritage Fund is to provide funding to state agencies, tribal governments, political subdivisions, and nonprofit organizations, with higher priority given to projects that enhance **conservation** practices in this state by:

Directive A. Providing access to private and public lands for sportsmen, including projects that create fish and wildlife habitat and provide access for sportsmen;

Directive B. Improving, maintaining and restoring water quality, soil conditions, plant diversity, animal systems and by supporting other practices of stewardship to enhance farming and ranching;

Directive C. Developing, enhancing, conserving and restoring wildlife and fish habitat on private and public lands; and

Directive D. Conserving natural areas and creating other areas for recreation through the establishment and development of parks and other recreation areas.

EXEMPTIONS

Outdoor Heritage Fund grants may not be used to finance the following:

- Litigation;
- Lobbying activities;
- Any activity that would interfere, disrupt, or prevent activities associated with surface coal mining operations; sand, gravel, or scoria extraction activities; oil and gas operations; or other energy facility or infrastructure development;
- The acquisition of land or to encumber any land for a term longer than twenty years; or
- Projects outside this state or projects that are beyond the scope of defined activities that fulfill the purposes of Chapter 54-17.8 of the North Dakota Century Code.

OHF funds may not be used, except after a finding of exceptional circumstances by the Industrial Commission, to finance:

- A completed project or project commenced before the grant application is submitted;
- A feasibility or research study;
- Maintenance costs;
- A paving project for a road or parking lot;
- A swimming pool or aquatic park;
- Personal property that is not affixed to the land;

- Playground equipment, except that grant funds may be provided for up to 25% of the cost of the equipment not exceeding \$10,000 per project and all playground equipment grants may not exceed 5% of the total grants per year (see Definitions/Clarifications for how this will be calculated);
- Staffing or outside consultants except for costs for staffing or an outside consultant to design and implement an approved project based on the documented need of the applicant and the expenditures may not exceed 5% of the grant to a grantee if the grant exceeds \$250,000 and expenditures may not exceed 10% of the grant to a grantee if the grant is \$250,000 or less (see Definitions/Clarifications for how this will be calculated);
- A building except for a building that is included as part of a comprehensive conservation plan for a new or expanded recreational project (see Definitions/Clarifications for definition of comprehensive conservation plan and new or expanded recreational project); or
- A project in which the applicant is not directly involved in the execution and completion of the project.

The goal of the Industrial Commission is that at a minimum 15% of the funding received for a biennium will be given priority for recreation projects that meet Directive D.

The following projects are not eligible for funding, unless there is a finding of exceptional circumstances by the Industrial Commission include:

- Construction or refurbishment of indoor/outdoor ice rinks,
- Construction or refurbishment of indoor/outdoor athletic courts and sports fields,
- Other substantially similar facilities.
- Infrastructure that is not part of a comprehensive conservation plan.
- Projects not meeting a minimum funding request of \$2,500.

Budget Information

In-kind services used to match the request for Outdoor Heritage Fund dollars shall be valued as follows:

- Labor costs \$15.00 an hour
- Land costs Average rent costs for the county as shown in the most recent publication of the USDA, National Agricultural Statistics Services, North Dakota Field Office
- Permanent Equipment Any equipment purchased must be listed separately with documentation showing actual cost. (For example: playground equipment)
- Equipment usage Actual documentation
- Seed & Seedlings Actual documentation
- Transportation Mileage at federal rate
- Supplies & materials Actual documentation

More categories will be added as we better understand the types of applications that will be submitted. We will use as our basis for these standards other State and Federal programs that have established rates. For example, the North Dakota Nonpoint Source Pollution Management Program has established rates. If your project includes work that has an established rate under another State Program, please use those rates and note your source.

Definitions/Clarifications:

Building - Defined as “A structure with a roof either with walls or without walls and is attached to the ground in a permanent nature.”

Comprehensive Conservation Plan - Defined as “A detailed plan that has been formally adopted by the governing board which includes goals and objectives--both short and long term, must show how this building will enhance the overall conservation goals of the project and the protection or preservation of wildlife and fish habitat or natural areas.” This does not need to be a complex multi-page document. It could be included as a part of the application or be an attachment.

New and Expanded Recreational Project means that the proposed building cannot be a replacement of a current building. The proposed building must also be related to either a new or expanded recreational project--either an expansion in land or an expansion of an existing building or in the opportunities for recreation at the project site.

Playground equipment calculation - Only the actual costs of the playground equipment (a bid or invoice showing the amount of the equipment costs must be provided) - cannot include freight or installation or surface materials or removal of old equipment, etc.

Staffing/Outside Consultants Costs - If you are requesting OHF funding for staffing or for an outside consultant, you must provide information in your application on the need for OHF funding to cover these costs. For example, if you are an entity that has engineering staff you must explain why you don't have sufficient staff to do the work or if specific expertise is needed or whatever the reason is for your entity to retain an outside consultant. If it is a request for reimbursement for staff time then a written explanation is required in the application of why OHF funding is needed to pay for the costs of that staff member(s)' time. **The budget form must reflect on a separate line item the specific amount that is being requested for staffing and/or the hiring of an outside consultant.** This separate line item will then be used to make the calculation of 5% or 10% as outlined in the law. Note that the calculation will be made on the grant less the costs for the consultant or staff.

Maintenance – Activities that preserve or keep infrastructure in a given existing condition, including repairs. Repair means to restore to sound condition after damage, to renew or refresh; except repairs due to damage caused by Acts of God.

Scoring of Grants

Oral Presentation. Please note that you will be given an opportunity to make a ten-minute Oral Presentation at a meeting of the Outdoor Heritage Fund Advisory Board. These presentations are strongly encouraged.

Open Record. Please note that your application and any attachments will be open records as defined by law and will be posted on the Industrial Commission/Outdoor Heritage Fund website.

All applications will be scored by the Outdoor Heritage Fund Advisory Board after your ten-minute oral presentation. The ranking form that will be used by the Board is available on the website at <http://www.nd.gov/ndic/outdoor-infopage.htm> .

Awarding of Grants

All decisions on requests will be reported to applicants no later than 30 days after Industrial Commission consideration. The Commission can set a limit on duration of an offer on each application or if there isn't a specific date indicated in the application for implementation of the project, then the applicant has until the next Outdoor Heritage Fund Advisory Board regular

meeting to sign the contract and get the project underway or the commitment for funding will be terminated and the applicant may resubmit for funding. Applicants whose proposals have been approved will receive a contract outlining the terms and conditions of the grant.

Responsibility of Recipient

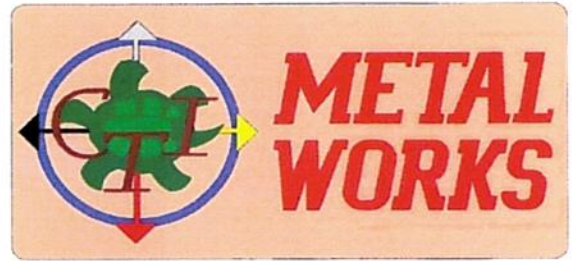
The recipient of any grant from the Industrial Commission must use the funds awarded for the specific purpose described in the grant application and in accordance with the contract. The recipient cannot use any of the funds for the purposes stated under Exemptions on the first page of this application.

If you have any questions about the application, the Commission can be reached at 701-328-3722 or outdoorheritage@nd.gov.

Revised: November 4, 2019, April 12, 2023

CTI METAL WORKS

PO BOX 900 HWY 5 WEST
4162 US HWY 281
BELCOURT ND 58316



QUOTE

BILL TO

Turtle Mountain Tribe
Department of Natural Resources
PO Box 900
Belcourt, ND 58316

SHIP TO

Quote Date: 5/19/2023
Valid For: 30 days

DESCRIPTION	QTY	UNIT PRICE	TOTAL
828 Dock- 8' X 28' Portable Fish Dock Walkway	2		73096.20
Raw Material			
Miscellaneous Hardware			
Dock Set Up			
8' X 28' Total			
Color: Aqua Green			

SUBTOTAL	73096.20
DISCOUNT	0.00
SUBTOTAL LESS DISCOUNT	73096.20
TAX RATE	0.00%
TOTAL TAX	0.00
SHIPPING/HANDLING	0.00
Quote Total	\$ 73,096.20

Thank you for your business!

Terms & Instructions

Payment terms: 50% Down Payment. Please provide balance of payment within 30 days of complete.



Approved By

5-19-23

Project Manager

Job Title

Date

BOOM

Concrete, Inc.

Boom Concrete, Inc.
220 Girard Avenue
PO Box 437
Newell, SD 57760

Toll Free: 800-464-2600
Telephone: 605-456-2600
Fax: 605-456-6060
Website: www.boomcon.com
Email: lfox@boomcon.com

Boom Clovermist Vault Toilets

Toilet Style



Clovermist Double
\$22,000.00



Clovermist Double:
With Chase \$25,500.00

Roof Color

Other color options available upon request



Autumn Brown/Teakwood



Federal Standard Brown



Teakwood/Teakwood



Cedarwood/Teakwood



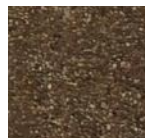
Deep Charcoal/Deep Char-



Sandstone /Teakwood

Wall Texture

Please see page 3 for our Standard Exterior options for the Clovermist Toilet models.



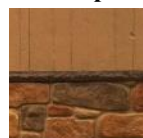
Exposed Aggregate



Board Batt w/LapSiding
Federal Stanard



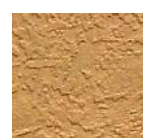
Non Stained Colonial
Dry Stack



Barnwood /Stained
Colonial
Dry Stack



Colonial
Dry
Stack-
Stained



Stucco
Sand-
stone



Barnwood-
Sandstone



Replace this...
with a BOOM!




BOOM

Concrete, Inc.

Boom Concrete, Inc.
220 Girard Avenue
PO Box 437
Newell, SD 57760

Toll Free: 800-464-2600
Telephone: 605-456-2600
Fax: 605-456-6060
Website: www.boomcon.com
Email: lfox@boomcon.com

Boom Clovermist Additional Options

Click to Select	Toilet Options/ Prices	Toilet Option Pictures
<input type="checkbox"/>	Chain Door Strap \$ 138.00	
<input type="checkbox"/>	Plastic Urinal \$ 75.00 /each	
<input type="checkbox"/>	Waste Receptacle \$ 270.00	
<input checked="" type="checkbox"/>	Other Option Exterior wall texture—Barnwood	N/A
<input checked="" type="checkbox"/>	Other Option 3% Tero Fee (if applies)	950.85
<input checked="" type="checkbox"/>	Transportation \$ <u>4,375.00</u>	Delivery to Belcourt ND
<input checked="" type="checkbox"/>	Full Installation \$ <u>3,000.00</u>	Digging & backfilling for the vault

Click to Select	Toilet Options/ Prices	Toilet Option Pictures
<input type="checkbox"/>	Raptor Vent Screen/Rain Cap \$250.00	
<input checked="" type="checkbox"/>	Double Plastic Vault Liner \$ 1,500.00	
<input checked="" type="checkbox"/>	Solar Light Kit \$750.00	
<input checked="" type="checkbox"/>	Gojo Purell Hand Sanitizer Dispenser \$ 70.00	
<input type="checkbox"/>	Solar Vent Fan \$886.00	

Total Price Per Unit = \$32,645.85

LOCATION OF TOILET:
Various areas around Belcourt ND

Boom Concrete Sales Associate:

Signature _____ Date _____

Customer:

Signature _____ Date _____

BOOM

Concrete, Inc.

Boom Concrete, Inc.
220 Girard Avenue
PO Box 437
Newell, SD 57760

Toll Free: 800-464-2600
Telephone: 605-456-2600
Fax: 605-456-6060
Website: www.boomcon.com
Email: lfox@boomcon.com

Boom Clovermist Double Vault Toilets

Other texture and color options available upon request

Exterior wall textures and colors can be custom made to match specifications



All Double models come with Barnwood Exterior unless otherwise specified.





TURTLE MOUNTAIN BAND OF CHIPPEWA INDIANS

4180 Hwy 281
P.O. BOX 900
BELCOURT, ND 58316

(701) 477-2640
www.tmchippewa.com

May 23, 2023

Outdoor Heritage Fund
Attn: ND Industrial Commission

The TMBCI Natural Resource Department will build 2 picnic arbors as phase 2 of the Belcourt Lake Rejuvenation project.

2- 16x24 Picnic Arbors with concrete.

Budget:

Construction Materials-	\$7,000.00
Concrete-	<u>\$10,000.00</u>
	<u>\$17,000.00</u>

A handwritten signature in black ink, appearing to read 'Jeff Desjarlais, Jr.'.

Jeff Desjarlais, Jr. TMBCI Natural Resources Director



TURTLE MOUNTAIN BAND OF CHIPPEWA INDIANS

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May 23, 2023

Outdoor Heritage Fund
Attn: ND Industrial Commission

Letter of Commitment

On behalf of the Turtle Mountain Band of Chippewa, I would like to express my full support for the Natural Resources proposed project – renovation of Belcourt Lake’s ‘Boy Scout Camp’ site. The site was once a popular fishing and camping area and is now in need of site development work that includes adding amenities to best serve our tribal population as well as influx of visitors who come from all over the country.

I speak for many tribal members when I advocate that this project will serve a very beneficial need for our tribal members. My family and I spent many hours taking advantage of the many recreational opportunities afforded by Belcourt Lake. Because of our growing population and tribal development activities around our lakes and streams, it is critical time to invest resource into enhancing activities that promote healthy living. Our tribe, as typical with many other tribal nations, have suffered from sedentary lifestyles. It burdens our health care system and the costs for health care on the reservation is abnormally high compared to non-native communities.

The Turtle Mountain Band of Chippewa is committed to providing the necessary match funds of 25% that will include both cash and in-kind tribal resources. Please look favorable on our tribal OHF application and we sincerely appreciate the past support of that you have given in the past. I look forward to working cooperatively with Mr. JJ Desjarlais in implementing activities to restore the Belcourt Lake “Boy Scout Camp” site. I assure that the Sky Chief Park will continue to be publicly accessible to tribal members as well as visitors to the Turtle Mountain Chippewa Reservation.

Sincerely,

Ron Trottier

Ron Trottier, District II Representative
Turtle Mountain Band of Chippewa

cc: TMBCI Tribal Council members
Jeff Desjarlais, Jr. TMBCI Natural Resources Director
Lyndon Desjarlais, BIA Agency Superintendent

**Turtle Mountain Band of Chippewa
2018-2028 Management Plan**

**Samuel Hultberg and Josh Wert
U.S. Fish & Wildlife Service
Missouri River FWCO
3425 Miriam Ave.
Bismarck, ND 58501
701-355-8576**

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I. **Introduction**

The Turtle Mountain Band of Chippewa Natural Resources Division (TMNRD) has taken an active role in the monitoring of fish communities from lakes found within the boundaries of the Turtle Mountain Reservation. Fish community data used for estimating population abundance occur annually. The data collected will determine management decisions at each lake.

Though the TMNRD is responsible for coordinating overall efforts for managing reservation and other jurisdictional lakes, the department recognizes that many agencies, organizations, and individuals have a role in assisting with management practices. The federal government has an ongoing relationship with federally recognized Native American Tribes and plays a key role in developing management plans and assisting with data collection. Treaties, statutes, executive orders, judicial decisions, define the relationship between the federal government and each tribe, and agreements not found within state and local governments. With collaboration between the federal and tribal conservation offices, conservation efforts can effectively conserve fish, wildlife, plants, and their habitats.

Aquatic resources are fundamental building blocks of all ecosystems. They provide essential ecological processes in which terrestrial ecosystems depend on. Inconsistent management has been a problem associated with the aquatic resources on the Turtle Mountain Reservation. Annual data collection is necessary to ensure aquatic resources are healthy. Like many North American fisheries, threats to aquatic resources include loss of habitat, degradation of water quality, exotic species introduction, poor land use and watershed planning, and introductions of pesticides and other pollutants.

Long-term sustainability of these fisheries will depend on the ability to recognize, evaluate, correct, and monitor these problems.

II. **History**

The Turtle Mountain Reservation is in the Turtle Mountain geographical area of north central North Dakota of Rolette County. The land found within the Turtle Mountains formed by erosion and glacial deposition. Glacial ice once covered the entire area and once that ice began to recede, large debris deposited to form the Turtle Mountains. Within these deposits, the glacier carved many shallow lakes and wetlands that sculpted the rolling hills and ravines in which streams flowed.

These carved out glacial lakes produce some unique recreational opportunities within the state of North Dakota. Among the many lakes that are found within the Turtle Mountains, the lakes that are most commonly fished on the reservation are the natural lakes of Jarvis and Wheaton and the two impounded reservoirs of Gordon and Belcourt (Fish). Stocking, by the U.S. Fish and Wildlife Service, has been ongoing to help support a recreational fishery. There are also many smaller lakes in the area known to support natural populations of fish including yellow perch and northern pike.

In 2002, the Turtle Mountain Tribal Council passed into legislation, the first ever comprehensive Game and Fish Code. This code serves to regulate hunting and fishing activities within tribal jurisdiction. These regulations allow the tribe to assume greater control over the planning and implementation of game and fisheries activities, which include the development of management strategies for its aquatic resources.

III. Definition of Terms

- **N** – All the individuals of the same species within a defined geographic location at a given time.
- **CPUE – Catch per Unit Effort** – The number or weight of organisms captured with a defined unit of sampling or fishing effort.
- **Population Abundance** – Biomass or numbers of individuals in a population, a portion of the population (such as a year-class), or a sample.
- **WPUE – Weight per Unit Effort** – An indirect measure of the weight of a target species. Changes in the weight per unit effort infers a change to the target species' true weight.
- **Mean Length** – The average length of the target species.
- **Mean Weight** – The average weight of the target species.
- **Wr – Relative Weight** – An index of condition calculated by dividing the weight of a fish by a length-specific standard weight for that species.
- **Avg. Wr** – The average relative weight of the target species.
- **PSD – Proportional Stock Density** – The percentage of a sample of “stock-length” fish that also are greater than or equal to “quality length.” Stock and quality lengths are species-specific.
- **RSD – Relative Stock Density** – The percentage of “stock-length” fish that also are in a defined length interval of larger fish. Stock lengths and larger length-classes (“quality,” “preferred,” “memorable,” and “trophy”) are species-specific.

IV. Belcourt (Fish) Lake

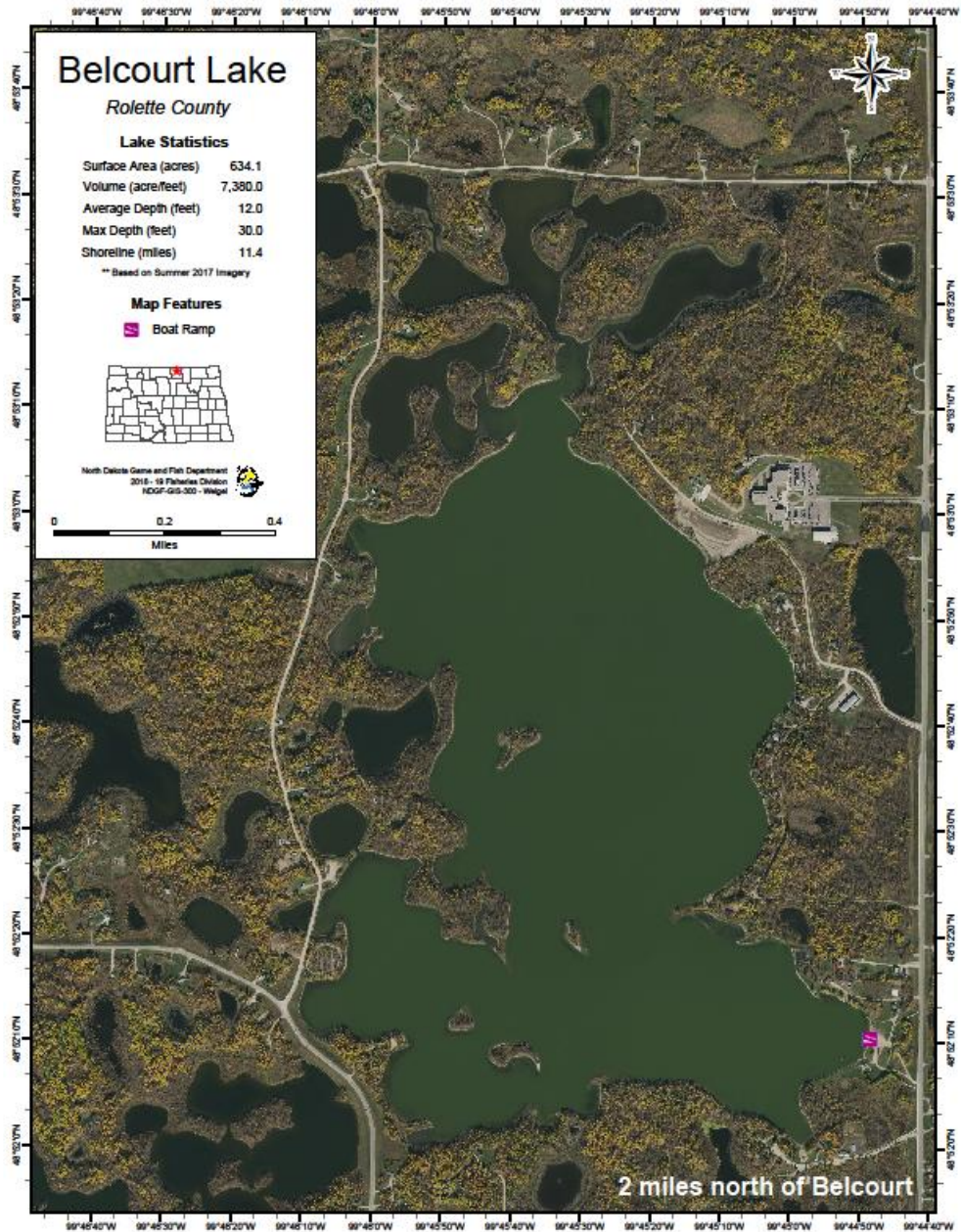


Figure 1: Belcourt Lake found 2 miles north of Belcourt, ND. Picture taken for the ND Game and Fish Website.

A. Inventory

1. **Legal Description:** Township 162 N, Range 70 W, Sections 5, 6, 7, and 8.
2. **Location to nearest town:** Approximately 1.5 miles north of Belcourt, ND.
3. **Ownership:** Considered federal waters by virtue of its location within the exterior boundaries of the Turtle Mountain Band of Chippewa Reservation. Management of the lake lies primarily with the Turtle Mountain Band of Chippewa with trust oversight by the Bureau of Indian Affairs (USDO).

4. **Type:** Reservoir
5. **Size:** 633.9 Surface Acres
6. **Elevation:** Average elevation is 2010 feet amsl
7. **Maximum Depth:** 30 feet **Average Depth:** 12 feet
8. **Volume:** 7380 acre-feet of water at max height (2,404,773,000 gallons)
9. **Shoreline miles:** 4.10 miles
10. **Priority Score:** Tier 3
11. **Lake Assessment:** None as of 2018
12. **Watershed Size:** Not determined
13. **Location of normal outlet:** Southeast corner of lake at spillway
14. **Littoral area:** 0-16 feet from shoreline

B. Development

1. Belcourt Lake has two boat ramps for recreational use. Slater’s Beach (SE corner) has a single poured concrete slab ramp that is accessible with higher water levels. Red Bear point (W shore) also has a ramp that is useable during low water levels. The Bureau of Indian Affairs places a dock adjacent to the boat ramp and Slater’s Beach. Lighting is also available at Slater’s Beach that consists of a street light that illuminates with the onset of dusk. No fish cleaning facilities exist.

C. Fishery

1. General Description

- a. Belcourt Lake is a reservoir created by the impoundment of Ox Creek. The dam structure consists of an earthen embankment with a concrete primary spillway. Primary control of the spillway is by a series of floodgates that regulate flow. Original creation of Belcourt Lake was for a municipal water source for the reservation. Modern use is for recreation and flood control. Dam and spillway maintenance was conducted in 2018 (**More information needed**).

2. Species List

Table 1: Fish species found in Belcourt Lake.

Common	Uncommon	Undesired
walleye - S	bluegill - NR	black bullhead
northern pike - NR	black crappie	
yellow perch - NR	fathead minnow - NR	
S- denotes stocked		
NR – denotes natural reproduction		

3. Population Status and Trends

- a. **Walleye** – Walleye introductions began in 1930 with intermittent stocking since then. Since 2000, walleye stocking occurred every year (except 2012 and 2013). During these years, walleye stock rates ranged from 31 to 63 fingerlings per acre. High nutrient loading has an impact on walleye natural reproduction. There does not appear to be any natural reproduction of walleye occurring in Belcourt Lake.

Dissolved oxygen levels, in the winter of 2017, were extremely low causing a significant walleye winterkill. Data collected in the summer of 2018 had zero walleye captures. Walleye stocking occurred early in the summer of 2018 in an effort of reintroduction. It will take a few years for the population to bounce back barring reoccurring winterkill.

- b. **Northern pike** – Northern pike introductions began in 1952 with intermittent stocking since then. Currently, natural reproduction sustains northern pike populations. Northern pike catch rates have varied from three to six fish/net-night (Table 2) during adult population sampling in 2017 and 2018. Based on proportional stock densities, there are more northern pike in the preferred to memorable range (56%) on average in 2017 and 2018. There is also a large percentage in the quality to preferred range (29.5%) in 2017 and 2018.

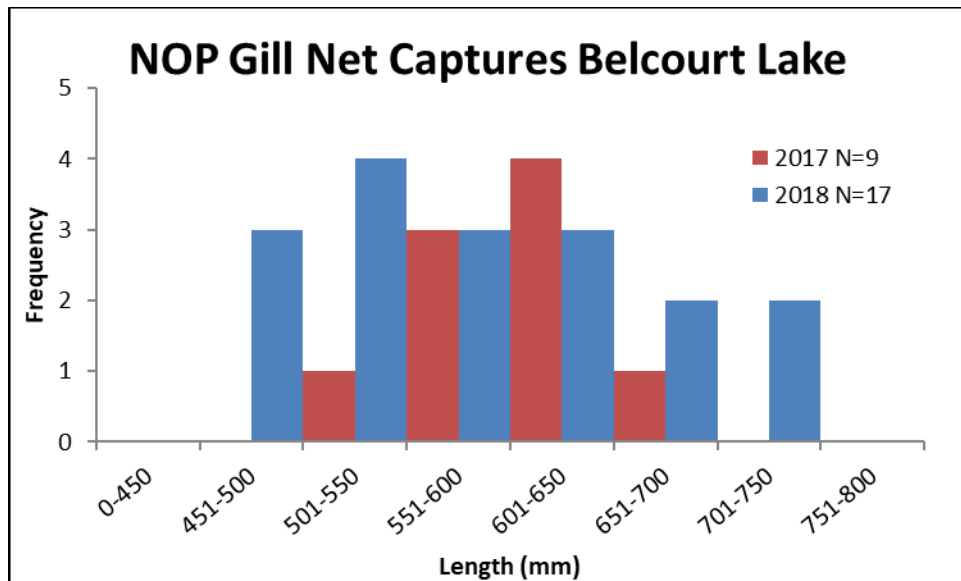


Figure 1: Length frequency histogram of northern pike found in Belcourt Lake from 2017 to 2018.

- c. **Yellow perch** – Yellow perch introductions began in 1942 with intermittent stocking since then. Currently, natural reproduction sustains yellow perch populations. Yellow perch catch rates have remained constant in 2017 and 2018 with captures varying from 13 to 15 fish/net-night (Table 2). Based on proportional stock densities, there are more yellow perch in the stock to quality range (68.5%) on average in 2017 and 2018. There are also some larger quality to preferred fish (25%) on average in 2017 and 2018. Yellow perch growth rates appear to slow down when they reach lengths between 170 and 200 mm. Therefore, yellow perch management is as a forage fish with very few high quality yellow perch in the population.

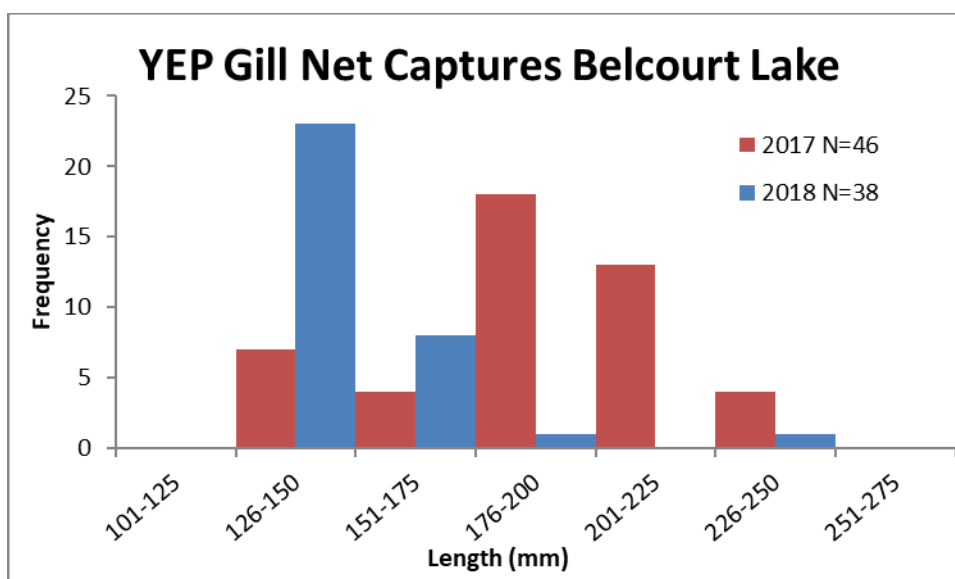


Figure 2: Length frequency histogram of yellow perch found in Belcourt Lake from 2017 to 2018.

- d. **Bluegill** – Bluegill introductions began in 1945 with zero fish stocked in the past 7 years. One adult bluegill capture occurred in 2017 with zero captures in 2018. Currently the bluegill population is at a low abundance, which might have to do with a partial winterkill in winter of 2017 and with the high abundance of black bullheads in the system.

Table 2: Population trend – 6’ x 125’ x 3/4” – 2” gill nets in Belcourt Lake in 2017 and 2018.

Target Species		2017	2018	Mean
Walleye	N	26	0	13
	CPUE (#/net-night)	8.7	0	4.35
	WPUE	8764	0	4382
	Mean Length (mm)	483	0	241.5
	Mean Weight (g)	1198	0	599
	Avg Wr	93.06	0	46.53
	PSD	12	0	6
	RSD S-Q	0	0	0
	RSD Q-P	12	0	6
	RSD P-M	46	0	23
	RSD M-T	42	0	21
		2017	2018	Mean
Northern pike	N	9	17	13
	CPUE (#/net-night)	3	5.7	4.35
	WPUE	4196.7	6954	5575.35
	Mean Length (mm)	609	592	600.5
	Mean Weight (g)	1398	1304	1351
	Avg Wr	93.06	96.3	94.68
	PSD	0	10	5
	RSD S-Q	0	29	14.5
	RSD Q-P	0	59	29.5
	RSD P-M	100	12	56
	RSD M-T	0	0	0
		2017	2018	Mean
Yellow perch	N	46	38	42
	CPUE (#/net-night)	15	12.7	13.85
	WPUE	1494	568	1031
	Mean Length (mm)	192	152	172
	Mean Weight (g)	97.4	97.4	97.4
	Avg Wr	94	109	101.5
	PSD	47	3	25
	RSD S-Q	50	87	68.5
	RSD Q-P	47	3	25
	RSD P-M	2	0	1

4. History of Angler Use

- a. The most desired species, by anglers, include walleye, northern pike, yellow perch, and bluegill. These are the species that are most sought after during all seasons. Based on population assessments, natural reproduction appears to be limited with walleye. Populations of these fish have remained constant with annual stocking and management measures. With a high nutrient load, Belcourt Lake is susceptible to periodic winterkill.

D. History of Management Actions

1. Eradications

- a. The most undesirable species found in Belcourt Lake is the black bullhead. Steps taken to remove this species has been shallow netting measures undertaken by the EPA Department. Local anglers also aid in removal through individual measures. Black bullheads compete for the same resources that desired game species use. Black bullhead removal conducted throughout the sampling season.

2. Dam Reconstruction

- a. Summer of 2018 – (More information needed)

3. Stocking

- a. The N.D. Game and Fish and the U.S. Fish and Wildlife Service provide stocking information. Walleye, bluegill, northern pike, yellow perch, black crapping, smallmouth bass, channel catfish, largemouth bass, and rainbow trout stockings have occurred historically.

4. Special Regulations –

- a. More information needed

E. Management Problems

1. Physical/Chemical

- a. Belcourt Lake suffers from a high nutrient load in the watershed that connects Wheaton Lake, Gordon Lake, and Belcourt Lake. Phosphorous and nitrogen are two common nutrients that are found naturally in sediment released by decomposing plant matter. In balanced levels, these nutrients can help aquatic ecosystems thrive. Chronic nutrient loading can lead to water quality issues that affect Belcourt Lake. Excess nutrient loads can cause undesired algae blooms that can cause fish kills.

The Turtle Mountain Band of Chippewa have collect water quality measurements since 2001. They requested the assistance of Houston Engineering, Inc. to identify the impacts of high nutrient loading in the Belcourt Lake watershed. Sources of this phosphorous loading includes Surface water runoff, atmospheric deposition, septic system loading, and discharge from upstream lakes.

The information collected will be useful in developing water quality goals, establish nutrient loading capacities, and provide a basis to improve management of the Belcourt Lake watershed.

2. Development

- a. Facilities – Talk with the Turtle Mountain Department of Natural Resources and N.D. Game and Fish about piers, boat ramps, docks, lights, fish cleaning stations, etc.

- b. Enhancement – None
- 3. Fishery
 - a. With Belcourt Lake being highly susceptible to winterkill, populations will need monitoring to ensure they are sustainable.
 - b. Yellow perch continue to be small and it is unlikely that Belcourt Lake will produce quality-sized perch.
 - c. Black bullheads have been a continuous problem.
- 4. Sociological
 - a. Anglers have an unrealistic expectation of the quality of perch and walleye Belcourt Lake can produce.

F. Management Goals and Objectives

- 1. Goal
 - a. To maintain Belcourt Lake as a rustic, secluded, multi-purpose, recreational lake that provides the local community with a quality outdoor experience.
- 2. Objectives
 - a. To meet the management goal by maintaining a diverse quality sport fishery for walleye, yellow perch, northern pike, and bluegill.

Table 3: Accepted stock density index ranges for balanced fish populations. Target values by sampling effort and species should equal or exceed ranges.

Species	Capture Rate	Wr	PSD
walleye	10 fish/net-night	90	30-60
northern pike	5 fish/net-night	90	30-60
bluegill	10 fish/net-night	90	20-60
yellow perch	10 fish/net-night	90	30-60

- b. Improve habitat for desired species.
- c. Upgrade the capacity of the Turtle Mountain Department of Natural Resources to allow for improved monitoring and maintenance actions.
- d. To decrease the number of black bullhead currently in the system.
- e. Develop basic facilities and amenities to increase use of Belcourt Lake during summer months.

G. Proposed Management Actions

1. Physical/Chemical

- a. Reduce the current nutrient load in Belcourt Lake. Vegetative buffer zones can be effective at capturing excess nutrients on a waterbody. These buffers can extend 3-5 feet around the shoreline and around drainage areas.
- b. Another option would be to introduce an aeration system that increases dissolved oxygen. This would increase the activity of aerobic bacteria that would deter the growth of unwanted algae blooms.
- c. Stabilize water levels throughout the year. With the installation of box culverts below the spillway, excess spring runoff should be controllable. With stabilized water levels, the shoreline of Belcourt will not slump and erode into the lake.
- d. Bank stabilization will need implementing to prevent further erosion of the shoreline.
- e. To help control the black bullhead population, fishing tournaments that specifically target black bullheads would be a good option. This would be a great outreach opportunity to increase public awareness of the bullhead problem.

2. Development

- a. Discuss development opportunities with the Department of Natural Resources

3. Fishery

- a. Stocking of walleye (even years) and bluegill (odd years) will occur on an alternate year basis. Stocking rates will be dependent on the current population trends. There are no plans for introducing new species.

4. Sociological

- a. Regulations – Talk to the department about current regulations on fish limits.
- b. Information/Education – Information kiosks and signs posted at each boat ramp will inform the public on current regulations and management problems.
- c. Interagency Communication – Coordinate with the Turtle Mountain Department of Natural Resources on sampling dates and data collected.

H. Evaluation of Management Actions

1. Evaluation Design

- a. Summer population surveys will need to occur annually. These surveys will provide important information on population dynamics, size structure, relative abundance, condition, and reproductive success. The data collected will influence management decisions.

- b. Water quality measurements are crucial and taken periodically during late summer and mid-winter.

I. Other Management Options Considered

- 1. **Ideas?**

J. Projected Time Frame

January-February	Conduct winter water quality sampling
June	Conduct summer population sampling
July-August	Conduct summer water quality sampling

K. Literature Cited

- Carlander, K., Whitney, R., Speaker, E., and Madden, K. Evaluation of Walleye Fry Stocking in Clear Lake, Iowa, by Alternate-Year Planting. Transactions of the American Fisheries Society, Vol. 89, 3, pp 249-254 (1960).
- Murphy, B. and Willis, D. *Fisheries Techniques Second Edition*. (1996)
- Nielsen, L. and Johnson, D. *Fisheries Techniques*. (1989)
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V. Gordon Lake

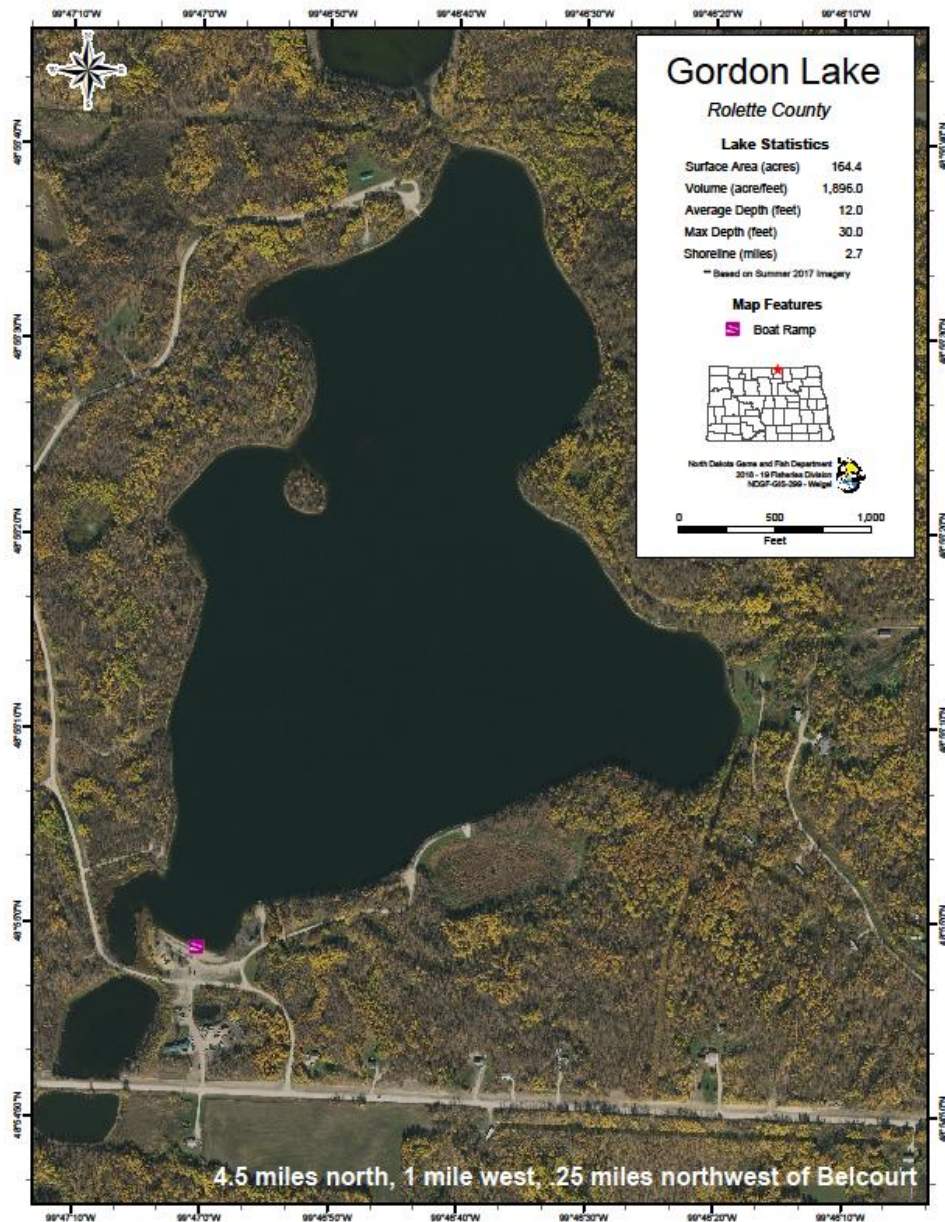


Figure 2: Gordon Lake located 4.5 miles north and 1 mile west of Belcourt, ND. Picture taken from the ND Game and Fish website.

A. Inventory

1. **Legal Description:** Township 163N, Range 70W, sections 30 and 19.
2. **Location to nearest town:** 4.5 miles north, 1 mile west, .25 miles northwest of Belcourt
3. **Ownership:** Considered federal waters by virtue of its location within the exterior boundaries of the Turtle Mountain Band of Chippewa Reservation. Management of the lake lies primarily with the Turtle Mountain Band of Chippewa with trust oversight by the Bureau of Indian Affairs (USDOJ).

4. **Type:** Gordon Lake is a reservoir created by the impoundment of an unnamed creek. The dam structure consists of an earthen embankment with an earthen primary spillway. This spillway is uncontrolled and is for emergency overflows only. Original creation of Gordon Lake was for recreation completed during the Civilian Conservation Corps era. Modern use if for recreation and flood control.
5. **Size:** 158 surface acres
6. **Elevation:** 2090 feet amsl
7. **Maximum Depth:** 25-35 feet **Average Depth:** 12 feet
8. **Volume:** 1896 acre-feet
9. **Shoreline miles:** 0.90 miles
10. **Priority Score:** Tier 4
11. **Lake Assessment:** None as of 2018
12. **Watershed Size:** Has not been formally determined
13. **Location of normal outlet:** The primary outlet is located at the southern end of the lake (NW4, NE4, Section 30 T163N R70W) at its principal spillway.
14. **Littoral area:** 0-15 feet from shore

B. Development

1. Gordon Lake has a boat ramp for recreational use on the north part of the lake. There is a single poured concrete slab ramp with a dock placed adjacent to the ramp by the Bureau of Indian Affairs. Lighting is available near the boat ramp with the onset of dusk. Gordon Lake also has limited, rustic camping areas along the western and northern shores. There is no fish cleaning facility on the lake. Near the boat ramp, there is also a picnic shelter.

C. Fishery

1. General Description
 - a. Gordon Lake is a reservoir created by the impoundment of an unnamed creek. The dam structure consists of an earthen embankment with an earthen primary spillway. This spillway is uncontrolled and is for emergency overflows only. Original creation of Gordon Lake was for recreation and completed during the Civilian Conservation Corps era. Modern use is for recreation and flood control.
2. Species List

Table 4: Fish species found in Gordon Lake.

Common	Uncommon
walleye - S	bluegill - NR
northern pike - NR	fathead minnow - NR
yellow perch - NR	

S - denotes stocked
NR – denotes naturally reproduction

3. Population Status and Trends

- a. **Walleye** – Walleye introductions began in 1910 with intermittent stocking since then. Since 2003, walleye stocking occurred each year (except 2011, 2012, and 2013) at rates ranging from 32 to 99 fingerlings per acre. There does not appear to be natural reproduction occurring in Gordon Lake.

Relative weights of walleye have remained steady (Wr 's = 84.9 to 91) in the past decade. Walleye catch rates have varied from eight to 18 fish/net-night in the past decade. Based on proportional stock densities, there are more walleye in the preferred to memorable (42.7%) range on average in the past decade. There is also a high percentage of fish (on average) in the standard to quality (27.7%) range (Table 4). The population appears to be healthy, with many year classes present.

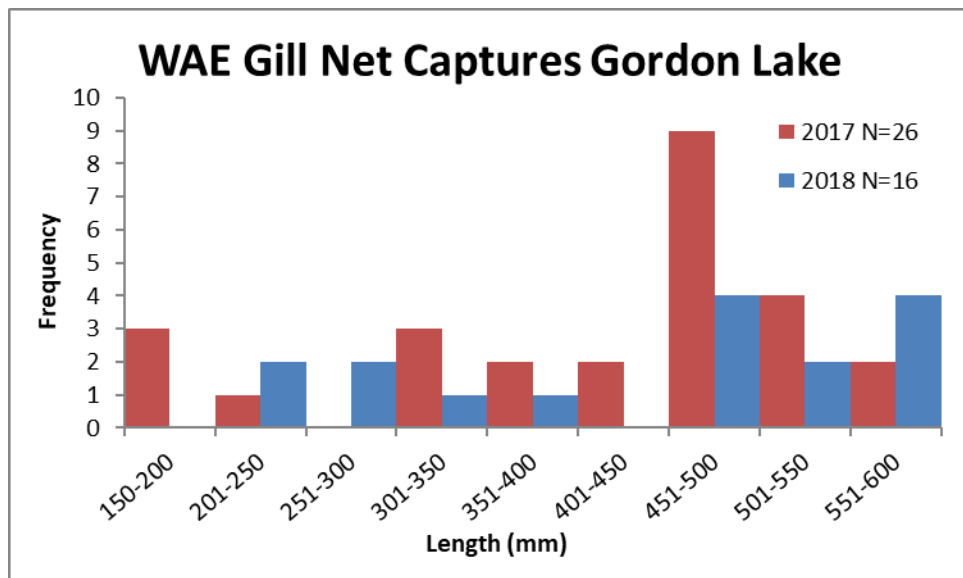


Figure 3: Length frequency histogram of walleye found in Gordon Lake from 2017 to 2018.

- b. **Northern pike** – Northern pike introductions began in 1940 with intermittent stocking since then. Northern pike stockings have not occurred 1998. Currently, natural reproduction sustains northern pike populations. Northern pike catch rates have varied from four to 10 fish/net-night in the past decade. Based on proportional stock densities, there are more fish found in the standard to quality (50.3%) range on average (Table 4) from the past decade

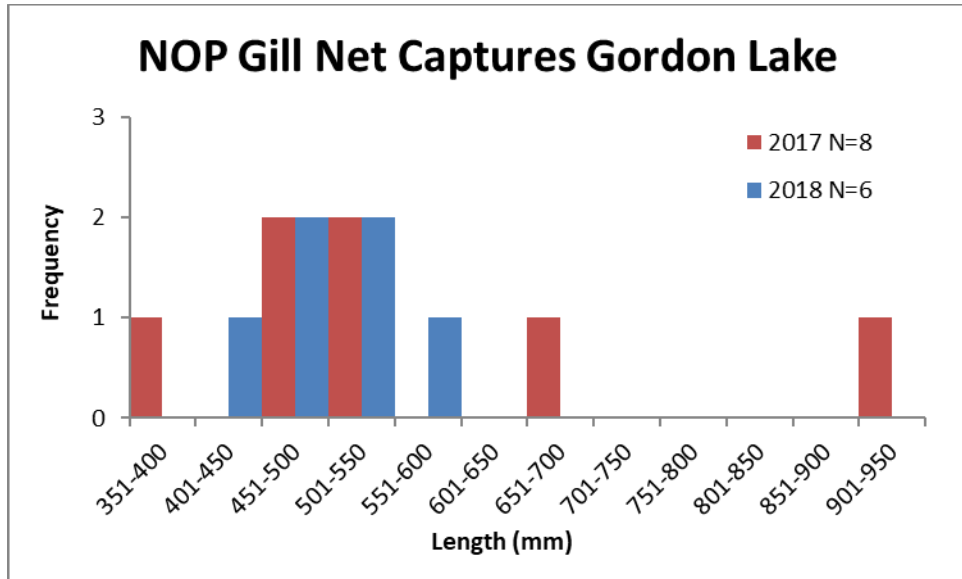


Figure 4: Length frequency histogram of northern pike found in Gordon Lake from 2017 to 2018.

- c. **Yellow perch** – Yellow perch introductions began in 1929 with intermittent stocking since then. Yellow perch stocking has not occurred since 1998. Currently, natural reproduction sustains yellow perch populations. Yellow perch catch rates have varied from six to 23 fish/net-night in the past decade. Based on proportional stock densities, yellow perch populations are comprised mainly of standard to quality (73%) sized fish (Table 4). Growth rates of yellow perch appear to slow between 130 and 200 millimeters with quality to preferred (30.7%) fish captured on average. Yellow perch management is as a forage fish for walleye and northern pike.

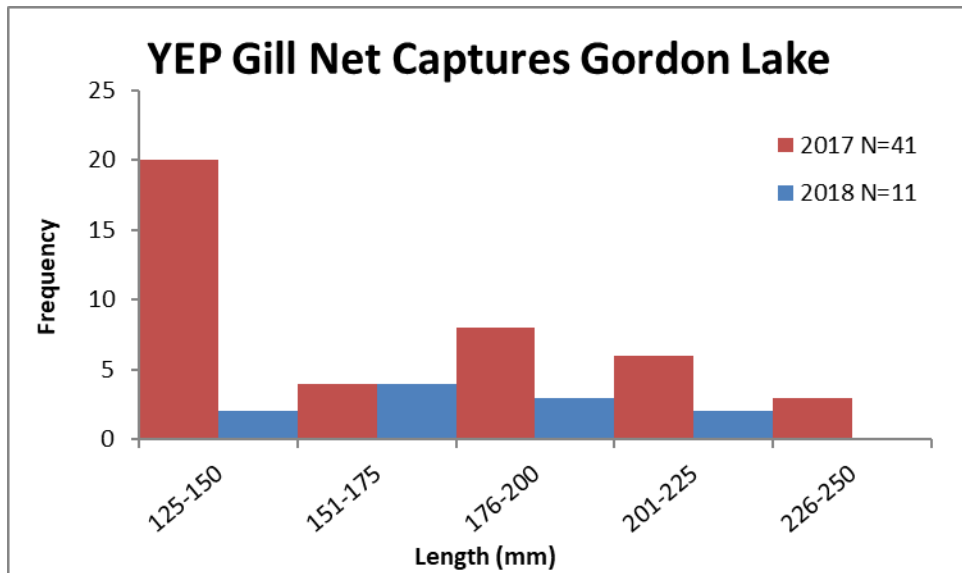


Figure 5: Length frequency histogram of yellow perch found in Gordon Lake from 2017 to 2018.

- d. **Bluegill** – Bluegill introductions began in 1929 with intermittent stocking since then. Since 2003, bluegill stock rates ranged from 50 to 297 fingerlings per acre. Currently, natural reproduction is maintaining bluegill populations. Gill nets are inefficient at capturing bluegill, with all bluegill captures occurring in trap nets. Trap net captures are primarily composed of small bluegill, which offer a forage for walleye and northern pike.

Table 5: Population trend – 6' x 125' x ¾"-2" gill nets in Gordon Lake from 2011 to 2018.

Target Species		2011	2017	2018	Mean
Walleye	N	36	26	16	26
	CPUE (#/net-night)	18	13	8	13
	WPUE	13363.5	16275.5	10104	13247.7
	Mean Length (mm)	409	480	488.8	459.3
	Mean Weight (g)	742	1252	1263	1085.7
	Avg Wr	87	91	84.9	87.6
	PSD	39	23	13	25
	RSD S-Q	39	19	25	27.7
	RSD Q-P	39	23	13	25
	RSD P-M	22	50	56	42.7
	RSD M-T	0	8	6	4.7
		2011	2017	2018	Mean
Northern pike	N	14	8	20	14
	CPUE (#/net-night)	7	4	10	17
	WPUE	4141	5095.5	8604.5	5947
	Mean Length (mm)	451	541	542	511.3
	Mean Weight (g)	592	1273	905.7	923.6
	Avg Wr	97.3	95.8	92.1	95.1
	PSD	14	25	55	31.3
	RSD S-Q	43	63	45	50.3
	RSD Q-P	14	25	55	31.3
	RSD P-M	0	12	0	4
		2011	2017	2018	Mean
Yellow perch	N	45	41	12	32.7
	CPUE (#/net-night)	22.5	20.5	6	16.3
	WPUE	1865.5	1563.5	418.5	1282.5
	Mean Length (mm)	179	172	188.8	179.9
	Mean Weight (g)	83	77	69.9	76.6
	Avg Wr	100	101.8	81.7	94.5
	PSD	13	46	33	30.7
	RSD S-Q	84	68	67	73
	RSD Q-P	13	46	33	30.7
	RSD P-M	2	0	0	0.7

4. History of Angler Use

- a. The most desired species, by anglers, include northern pike, yellow perch, bluegill, and walleye. These are the species that are most sought after during all seasons. Based on population assessments, natural reproduction has been occurring with bluegill, northern pike, and yellow perch. Populations of these fish have remained constant each year.

D. History of Management Actions

1. Eradications

- a. There has been no local expression in regards to undesirable species found in Gordon Lake.

2. Stocking

- a. The N.D. Game and Fish and the U.S. Fish and Wildlife Service provide stocking information. Walleye, northern pike, and yellow perch stockings have occurred historically.

3. Special Regulations

- a. More information needed.

E. Management Problems

1. Physical/Chemical

- a. Gordon Lake suffers from a high nutrient load similar to Belcourt Lake. Phosphorous and nitrogen are two common nutrients that are found naturally in sediment released by decomposing plant matter. In balanced levels, these nutrients can help aquatic ecosystems thrive. Chronic nutrient loading can lead to water quality issues that will eventually affect Gordon Lake. Excess nutrient loads can cause undesired algae blooms that can cause fish kills.

The Turtle Mountain Band of Chippewa have collect water quality measurements since 2001. They requested the assistance of Houston Engineering, Inc. to identify the impacts of high nutrient loading in the Belcourt Lake watershed. Sources of this phosphorous loading includes Surface water runoff, atmospheric deposition, septic system loading, and discharge from upstream lakes.

The information collected will be useful in developing water quality goals, establish nutrient loading capacities, and provide a basis to improve management of the Belcourt Lake watershed.

2. Development

- a. Facilities - Talk with the Turtle Mountain Department of Natural Resources and N.D. Game and Fish about piers, boat ramps, docks, lights, fish cleaning stations etc.

- b. Enhancement - None

3. Fishery
 - a. Walleye populations appear to remain constant over the last two years with a stable population.
 - b. Yellow perch continue to be small despite lowered abundance in 2018. It is unlikely that Gordon Lake will produce quality-sized perch.

F. Management Goals and Objectives

1. Goal
 - a. To maintain Gordon Lake as a rustic, secluded multi-purpose, recreational lake that provides the local community with a quality outdoor experience.
2. Objectives
 - a. To meet the management goal by maintaining a diverse quality sport fishery for walleye, yellow perch, northern pike, and bluegill.

Table 6: Accepted stock density index ranges for balanced fish populations. Target values by sampling effort and species should equal or exceed ranges.

<u>Species</u>	<u>Capture Rate</u>	<u>Wr</u>	<u>PSD</u>
walleye	10 fish/net-night	90	30-60
northern pike	5 fish/net-night	90	30-60
bluegill	10 fish/net-night	90	20-60
yellow perch	10 fish/net-night	90	30-60

- b. Improve habitat for desired species.
- c. Upgrade the capacity of the Turtle Mountain Department of Natural Resources to allow for improved monitoring and maintenance actions.
- d. Develop basic facilities and amenities to increase use of Gordon Lake during summer months.

G. Proposed Management Actions

1. Physical/Chemical
 - a. Reduce the current nutrient load in Gordon Lake. Vegetative buffer zones can be effective at capturing excess nutrients on a waterbody. These buffers can extend 3-5 feet around the shoreline and around drainage areas.
 - b. Another option would be to introduce an aeration system that increases dissolved oxygen. This would increase the activity of aerobic bacteria that would deter the growth of unwanted algae blooms.
 - c. Bank stabilization will need implementing to prevent further erosion of the shoreline.

2. Development
 - a. Discuss development opportunities with the Department of Natural Resources
3. Fishery
 - a. Stocking of walleye (odd years) will occur on an alternate year basis. Stocking rates will be dependent on the current population trends. There are no new introductions planned.
4. Sociological
 - a. Regulations – Talk to the department about current regulations on fish limits.
 - b. Information/Education – Information kiosks and signs posted at each boat ramp will inform the public on current regulations and management problems.
 - c. Interagency Communication – Coordinate with the Turtle Mountain Department of Natural Resources on sampling dates and data collected.

H. Evaluation of Management Actions

1. Evaluation Design
 - a. Summer population surveys will need to occur annually. These surveys will provide important information on population dynamics, size structure, relative abundance, condition, and reproductive success. The data collected will influence management decisions.
 - b. Water quality measurements are crucial and taken periodically during late summer and mid-winter.

I. Other Management Options Considered

1. Ideas?

J. Projected Time Frame

January-February	Conduct winter water quality sampling
June	Conduct summer population sampling
July-August	Conduct summer water quality sampling

K. Literature Cited

Carlander, K., Whitney, R., Speaker, E., and Madden, K. Evaluation of Walleye Fry Stocking in Clear Lake, Iowa, by Alternate-Year Planting. Transactions of the American Fisheries Society, Vol. 89, 3, pp 249-254 (1960).

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VI. Wheaton Lake

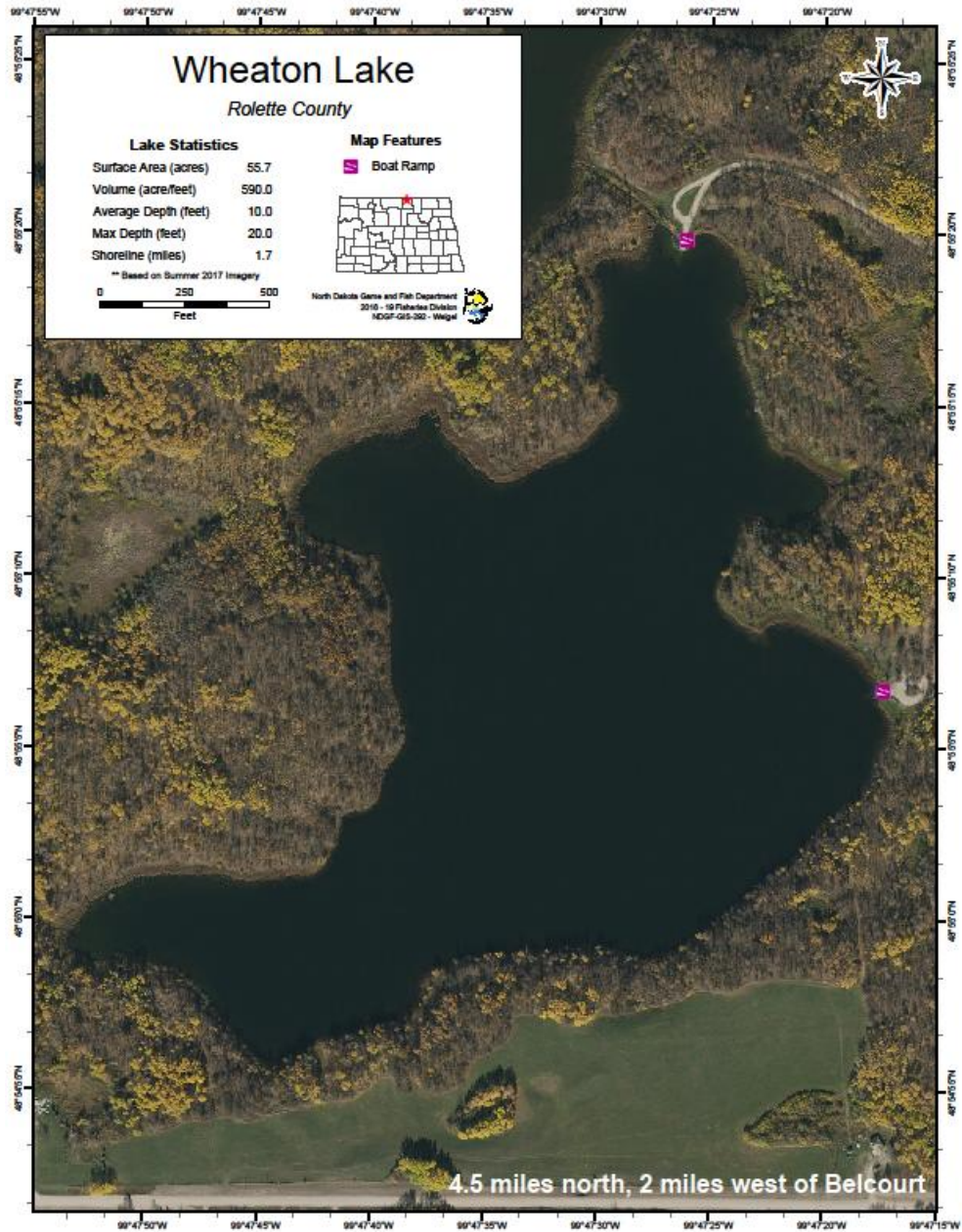


Figure 3: Wheaton Lake located 4.5 miles north and 2 miles west of Belcourt, ND. Picture taken from the ND Game and Fish website.

A. Inventory

1. **Legal Description:** Township 163 N, Range 71 W, Sections 24 and 25.
2. **Location to nearest town:** 4.5 miles north, 2 miles west of Belcourt
3. **Ownership:** Considered federal waters by virtue of its location within trust lands of the Turtle Mountain Chippewa Reservation. Management of the lake lies primarily with the Turtle Mountain Band of Chippewa with trust oversight by the Bureau of Indian Affairs (USDOJ).
4. **Type:** Naturally occurring glacial lake

5. **Size:** 59 surface acres
6. **Elevation:** Average elevation is 2109 feet amsl
7. **Maximum Depth:** 20-25 feet **Average Depth:** 10 feet
8. **Volume:** 590 acre-feet
9. **Shoreline miles:** 0.56 miles
10. **Priority Score:** Tier 3
11. **Lake Assessment:** None as of 2018
12. **Watershed Size:** Not determined
13. **Location of normal outlet:** The natural outlet is at the southwest corner of the lake flowing west.
14. **Littoral area:** 0-15 feet from shoreline

B. Development

1. Wheaton Lake has two boat ramps for recreational use. There are single poured concrete slab ramps that are accessible at the eastern and northern recreational beach areas. The Bureau of Indian Affairs places a dock adjacent to the boat ramp annually. Currently there are no piers, kiosks, toilet facilities, lighting, or fish cleaning facilities at Wheat Lake.

C. Fishery

1. General Description

- a. Wheaton Lake is a naturally occurring glacial lake formed by a dead-ice moraine. As glacial ice stopped advancing in the Turtle Mountains, large amounts of sediment accumulated on top of the ice. This insulation of sediment prevented the underlying ice from melting for several thousand years. This slow melting resulted in irregularities at the surface, causing the sediment on top of the ice to slump into lower areas. When this sediment slumped, the ice beneath the sediment began to melt more rapidly and transformed the area into a hole or a depression. These depressions created what are now the many lakes found in the Turtle Mountain area and the surrounding landscape.

2. Species List

Table 7: Fish species found in Wheaton Lake.

Common
northern pike - NR
yellow perch – NR
bluegill - NR
S- denotes stocked
NR – denotes natural reproduction

3. Population Status and Trend

a. **Northern Pike** – Northern pike introductions began in 1967 with zero fish stocked since 2012. Currently, natural reproduction maintains northern pike populations. Based on sampling from 2017 and 2018, northern pike catch rates have varied from six to 14 fish per net/night. Based on proportional stock densities, there are more northern pike in the quality to preferred range (64%) in 2017 (Table 6) than the quality to preferred range (54%) in 2018. Northern pike appear to have had a good spawn in 2017 with there being more standard to quality range (43%) fish captured in 2018 than standard to quality range (0%) fish captured in 2017.

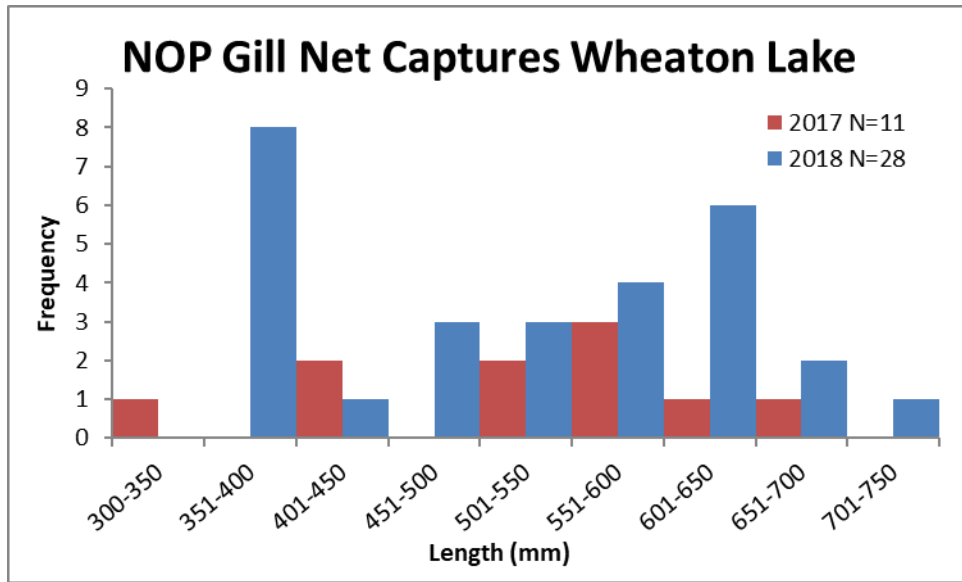


Figure 6: Length frequency histogram of northern pike found in Wheaton Lake from 2017 to 2018.

- b. **Bluegill** – Bluegill stocking never occurred in Wheaton Lake. Gill nets are inefficient at capturing bluegill with all bluegill captures occurring in trap nets. Trap net catches are composed primarily of small bluegill, which offer a forage for northern pike. Natural reproduction is occurring with bluegill.
- c. **Yellow perch** – Yellow perch introductions began in 1997 with one other stocking event occurring in 1998. Fish stock rates ranged from 85 to 135 fingerlings per acre. Currently, natural reproduction sustains yellow perch populations. Yellow perch catch rates have varied from 34 to 35 fish/net-night in 2017 and 2018. Based on proportional stock densities, a high percentage of yellow perch are in the stock to quality (62%) range on average (Table 6). Growth rates of yellow perch appear to slow down between 130 and 200 millimeters. Yellow perch populations do not meet the accepted proportional stock index ranges. Management of yellow perch is for a forage fish with few preferred fish in the population.

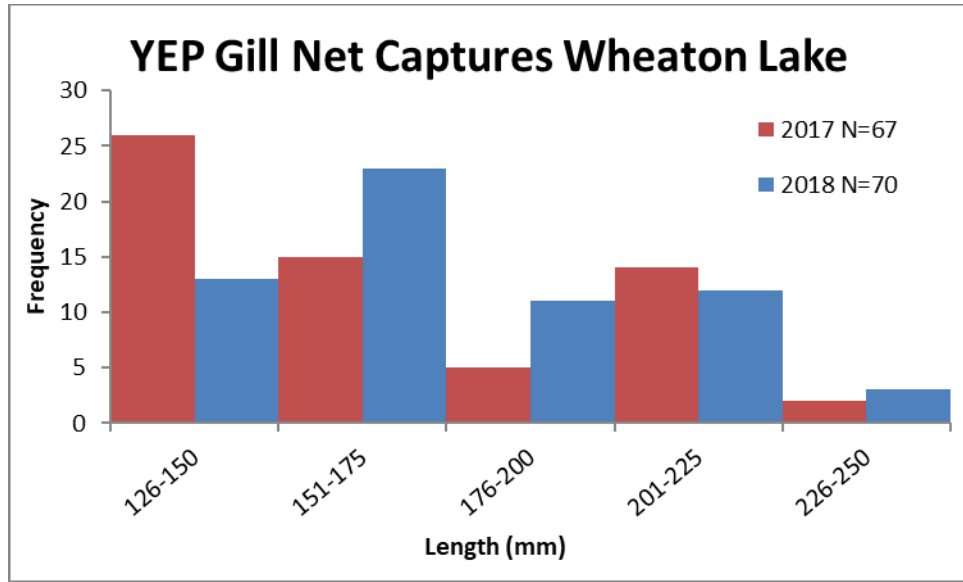


Figure 7: Length frequency history for yellow perch captures in Wheaton Lake from 2017 to 2018.

Table 8: Population trend – 6’ x 125’ x ¾” – 2” gill nets in Wheaton Lake from 2017 to 2018.

Target Species		2017	2018	Mean
Northern pike	N	11	28	19.5
	CPUE (#/net-night)	5.5	14	9.75
	WPUE	3967	12959	8463
	Mean Length (mm)	533	528.2	530.6
	Mean Weight (g)	991.8	996.9	994.35
	Avg Wr	100	96.7	98.35
	PSD	64	54	59
	RSD S-Q	0	43	21.5
	RSD Q-P	18	54	36
	RSD P-M	64	3	33.5
			2017	2018
Yellow perch	N	67	70	68.5
	CPUE (#/net-night)	33.5	35	34.25
	WPUE	2265.5	2349.5	2307.5
	Mean Length (mm)	171.9	176.6	174.25
	Mean Weight (g)	71.9	77	74.45
	Avg Wr	99.3	98.7	99
	PSD	30	26	28
	RSD S-Q	63	61	62
	RSD Q-P	30	26	28
	RSD P-M	1	0	1

4. History of Angler Use

- a. The most desired species, by anglers, include northern pike, yellow perch, and bluegill. These are the species that are most sought after during all seasons. Based on population assessments, natural reproduction has been occurring with each species. Populations of these fish have remained constant each year.

D. History of Management Actions

1. Eradications

- a. There has been no local expression in regards to undesirable species found in Wheaton Lake.

2. Stocking

- a. The N.D. Game and Fish and the U.S. Fish and Wildlife Service provide stocking information. Walleye, northern pike, and yellow perch stockings have occurred historically.

3. Special Regulations

- a. More information needed

E. Management Problems

1. Physical/Chemical

- a. Wheaton Lake is in the same watershed as Gordon and Belcourt Lake. High nutrient loading could be a problem in the future.

2. Development

- a. Facilities – Talk with the Turtle Mountain Department of Natural Resources and the N.D. Game and Fish about piers, boat ramps, docks, lights, fishing cleaning stations, etc.

- b. Enhancement – None

3. Fishery

- a. Northern pike captures have increased in 2018 with smaller fish captured. Natural reproduction is occurring.
- b. Yellow perch numbers are high with their size remaining small. It is unlikely that Wheaton Lake will produce quality-size perch.

F. Management Goals and Objectives

1. Goal

- a. To maintain Wheaton Lake as a rustic, secluded, multi-purpose, recreational lake that provides the local community with a quality outdoor experience.

2. Objectives

- a. To meet management goals by maintaining a diverse quality sport fishery for northern pike, yellow perch, and bluegill.

Table 9: Accepted stock density index ranges for balanced fish populations. Target values by sampling effort and species should equal or exceed ranges.

<u>Species</u>	<u>Capture Rate</u>	<u>Wr</u>	<u>PSD</u>
northern pike	5 fish/net-night	90	30-60
bluegill	10 fish/net-night	90	20-60
yellow perch	10 fish/net-night	90	30-60

- b. Improve habitat for desired species
- c. Upgrade the capacity of the Turtle Mountain Department of Natural Resources to allow for improved monitoring and maintenance actions.
- d. Develop basic facilities and amenities to increase use of Wheaton Lake during summer months.

G. Proposed Management Actions

1. Physical/Chemical

- a. The Department will seek to maintain water levels at Wheaton Lake to maximize fish habitat and populations. Wheaton Lake will need to undergo similar management practices to Belcourt and Gordon Lake to prevent high nutrient loads and unwanted algae blooms.
- b. Reduce the current nutrient load in Wheaton Lake. Vegetative buffer zones can be effective at capturing excess nutrients on a waterbody. These buffers can extend 3-5 feet around the shoreline and around drainage areas.

2. Development

- a. Discuss development opportunities with the Department of Natural Resources

3. Fishery

- a. Stocking will not occur at Wheaton Lake in the near future. Northern pike and yellow perch populations are sustainable. There are no plans for introducing new species.

4. Sociological

- a. Regulations – Talk to the department about current regulations on fish limits.
- b. Information/Education – Information kiosks and signs posted at each boat ramp will inform the public on current regulations and management problems.
- c. Interagency Communication – Coordinate with the Turtle Mountain Department of Natural Resources on sampling dates and data collected.

H. Evaluation of Management Actions

1. Evaluation Design

- a. Summer population surveys will need to occur annually. These surveys will provide important information on population dynamics, size structure, relative abundance, condition, and reproductive success. The data collected will influence management decisions.
- b. Water quality measurement are crucial and taken periodically during late summer and mid-winter.

I. Other Management Options Considered

1. Ideas?

J. Projected Time Frame

January- February	Conduct winter water quality sampling
June	Conduct summer population sampling
July-August	Conduct summer water quality sampling

K. Literature Cited

- Bluemle, J. 2002. Buried Glaciers and Dead-ice Moraine. North Dakota Geological Survey.
- Murphy, B. and Willis, D. *Fisheries Techniques Second Edition*. (1996)
- Nielsen, L. and Johnson, D. *Fisheries Techniques*. (1989)
- Osborne, L. and Kovacic, D. Riparian vegetated buffer strips in water-quality restoration and stream management. *Freshwater Biology*, 29, pp 243-258 (1993).

VII. Jarvis Lake

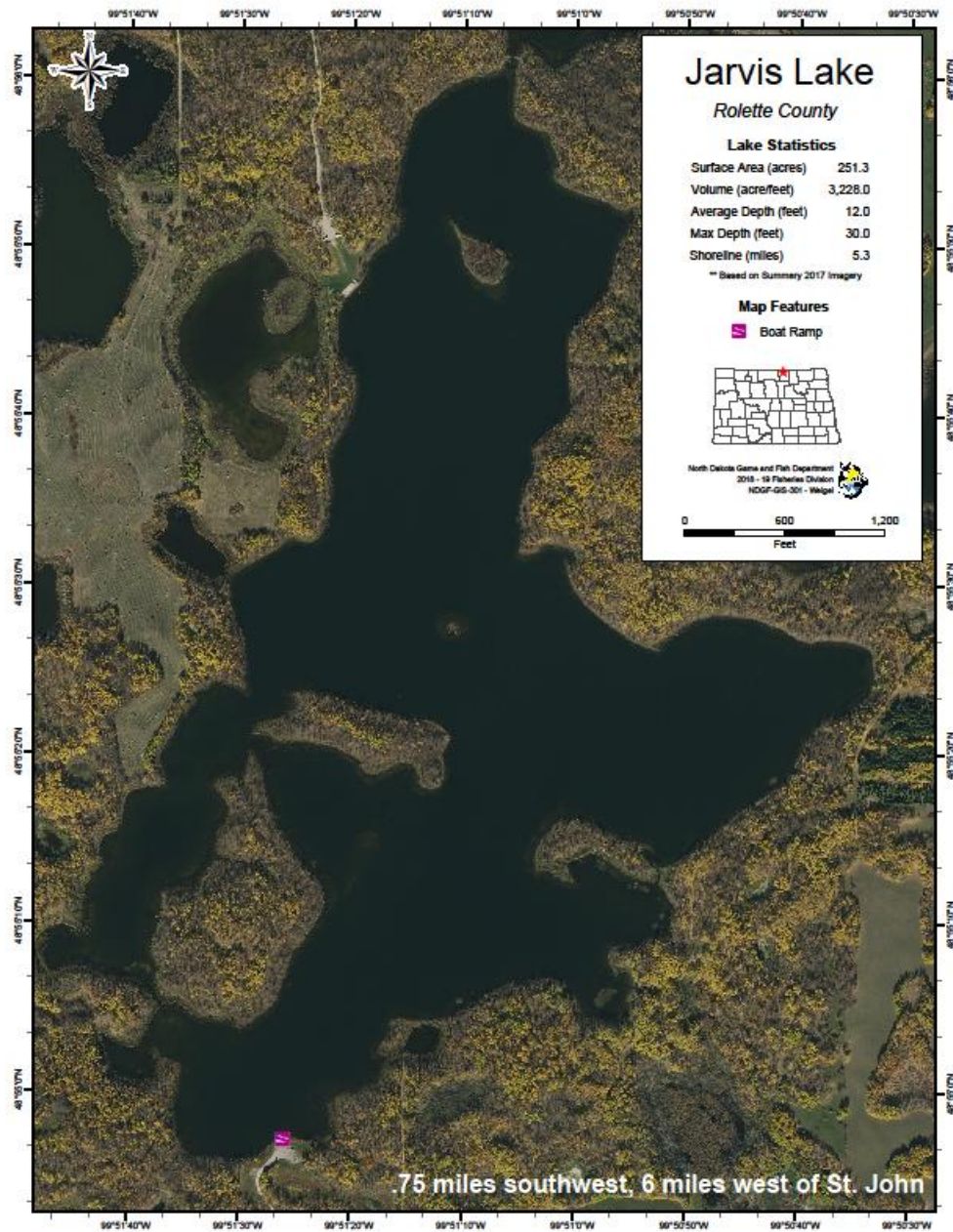


Figure 4: Jarvis Lake located $\frac{3}{4}$ mile southwest and 6 miles west of St. John. Picture taken from the ND Game and Fish website.

A. Inventory

1. **Legal Description:** Township 163 N, Range 71 W, Sections 21, 22, 27, and 28.
2. **Location to nearest town:** Approximately .75 miles southwest, and 6 miles west of St. John, ND.

3. **Ownership:** Considered federal waters by virtue of its location within the exterior boundaries of the Turtle Mountain Band of Chippewa Reservation. Management of the lake lies primarily with the Turtle Mountain Band of Chippewa with trust oversight by the Bureau of Indian Affairs (USDOJ).
4. **Type:** Naturally occurring glacial lake
5. **Size:** 251.3 Surface Acres
6. **Elevation:** Average elevation is 2135 feet amsl
7. **Maximum Depth:** 30 feet **Average Depth:** 12 feet
8. **Volume:** 3,228.0 acre/feet
9. **Shoreline miles:** 5.3 miles
10. **Priority Score:** Tier 3
11. **Lake Assessment:** None as of 2018
12. **Watershed Size:** Not determined
13. **Location of normal outlet:** The natural outlet is at the southwest corner of the lake flowing west.
14. **Littoral area:** 0-15 feet from shoreline

B. Development

1. Jarvis Lake has one primitive boat ramp for recreational use in the SW corner. The Bureau of Indian Affairs places a dock adjacent to the boat ramp annually. Currently there are not any piers, kiosks, toilet facilities, lighting, or fish cleaning facilities at Jarvis Lake.

C. Fishery

1. General Description

- a. Jarvis Lake is a naturally occurring glacial lake formed by a dead-ice moraine. As glacial ice stopped advancing in the Turtle Mountains, large amounts of sediment accumulated on top of the ice. This insulation of sediment prevented the underlying ice from melting for several thousand years. This slow melting resulted in irregularities at the surface, causing the sediment on top of the ice to slump into lower areas. When this sediment slumped, the ice beneath the sediment began to melt more rapidly and transformed the area into a hole or a depression. These depressions created what are now the many lakes found in the Turtle Mountain area and the surrounding landscape.

2. Species List

Table 10: Fish Species found in Jarvis Lake.

Common	Uncommon
walleye - S	Fathead minnow - NR
northern pike - NR	
yellow perch - NR	
bluegill - NR	
S- denotes stocked	
NR - denotes natural reproduction	

3. Population Status and Trend

- a. **Walleye** – Walleye introductions began in 1910 with intermittent stocking since then. Since 2003, walleye stocking occurred each year (except 2011, 2012, and 2013) at rates ranging from 40 to 60 fingerlings per acre. There does not appear to be natural reproduction in Jarvis Lake.

Relative weights of walleye have remained steady ($Wr's = 89.4$ to 89.8) in the past two years. Walleye catch rates have varied from seven to eight fish/net-night in the past two years of sampling. Based on proportional stock densities for 2018, walleye adult populations are comprised mostly of larger quality fish (46%) and preferred to memorable fish (31%) in 2018 (Table 8). The population appears to be healthy with many year classes present.

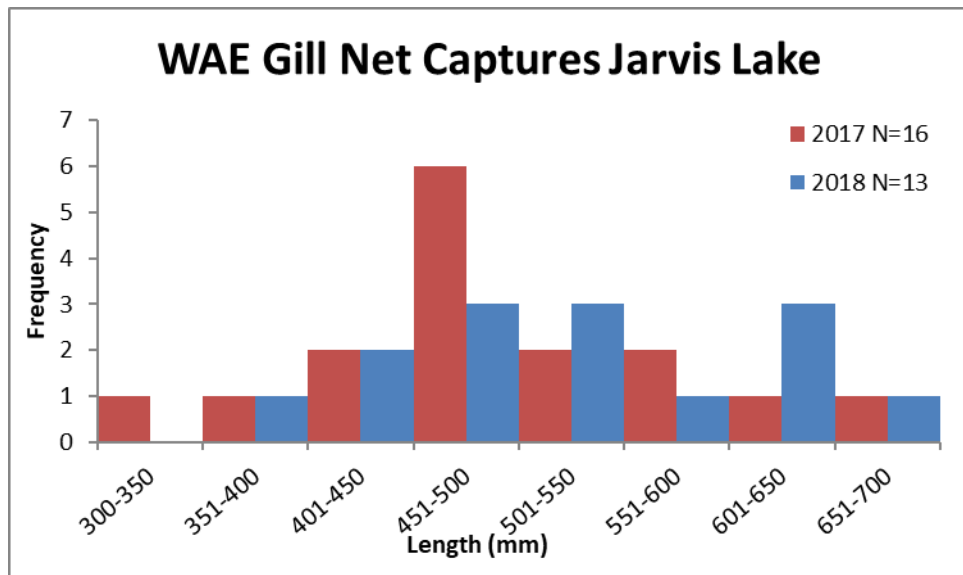


Figure 7: Length frequency histogram of walleye captured in Jarvis Lake from 2017-2018.

- b. **Northern Pike** – Northern pike introduction began in 1966 with intermittent stocking since then. Currently northern pike populations are reproducing naturally. Northern pike catch rates have varied from three to 12 fish/net-night in the past two years. Based on proportional stock densities, there are more northern pike in the stock to quality range (35%) in 2018 (Table 8) than in 2017 (0%). Northern pike seem to have had a good spawn in 2017 with there being less quality to preferred (26%) fish captured in 2018.

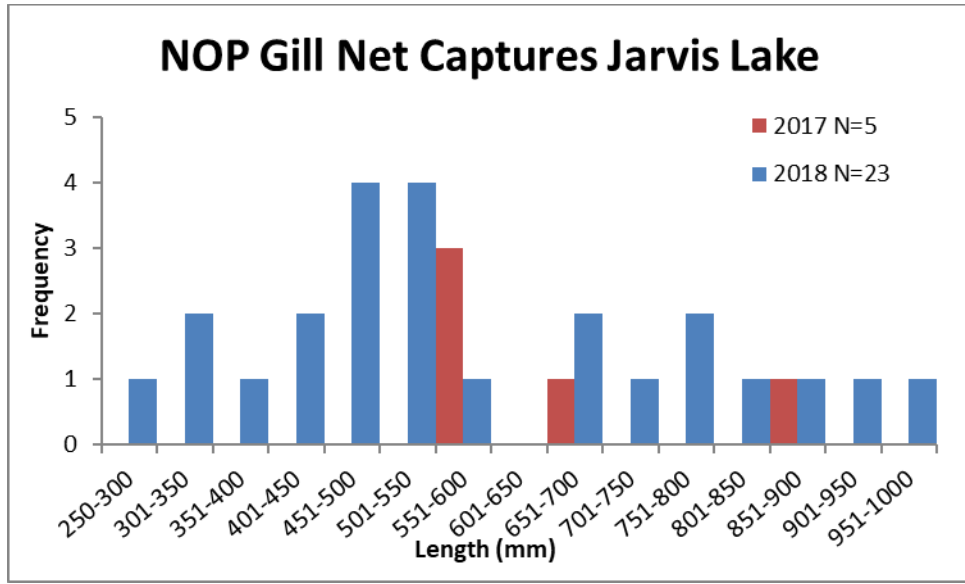


Figure 8: Length frequency histogram of northern pike captures in Jarvis Lake from 2017 to 2018.

- c. **Bluegill** – Bluegill introductions began in 1931 with intermittent stocking since then. Since 2003, bluegill stock rates ranged from 30 to 154 fingerlings per acre. Gill nets are inefficient at capturing bluegill with most captures coming from trap nets. Trap net catches are composed primarily of small bluegill, which offer forage for northern pike and walleye.

Bluegill catch rates varied from four to seven fish/net-night in the past two years. Based on proportional stock densities, all sampled fish were in the stock to quality range in 2017. In 2018, 62% sampled (Table 8) were in that range. There were also a large percentage of quality to preferred (38%) fish captured in 2018. Natural reproduction is occurring with bluegill.

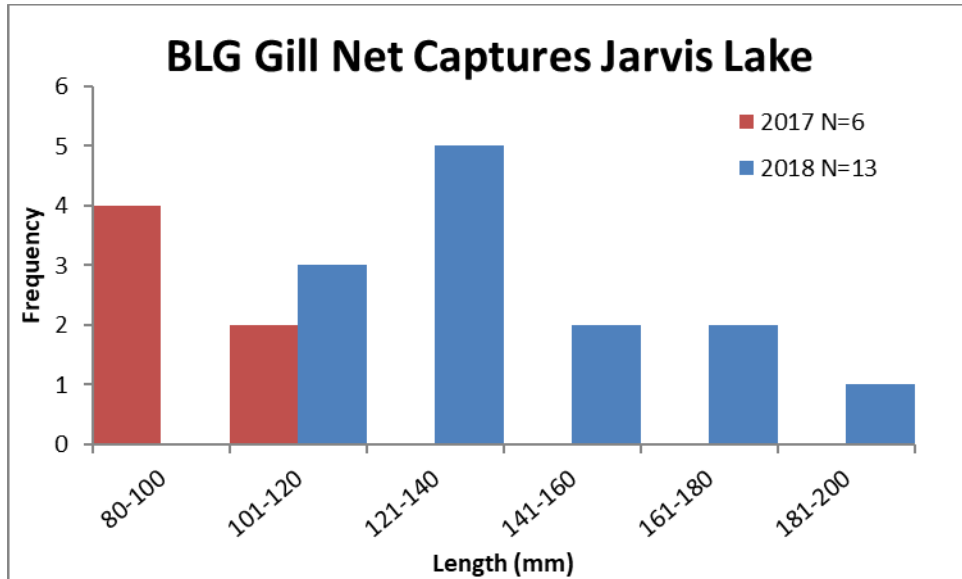


Figure 9: Length frequency histogram showing bluegill captures in Jarvis Lake from 2017 to 2018.

- d. **Yellow Perch** – Yellow perch introductions began in 1931 with intermittent stocking since then. Currently, natural reproduction sustains yellow perch populations. Yellow perch catch rates have varied from 45 to 71 fish per net/night in the past two years. Based on proportional stock densities, there are more stock to quality (61%) perch in Jarvis Lake than quality to preferred (26%) perch in 2018 (Table 8). Growth rates of yellow perch appear to slow between 200 to 250 mm. Management of yellow perch is for a forage fish with few preferred fish in the population.

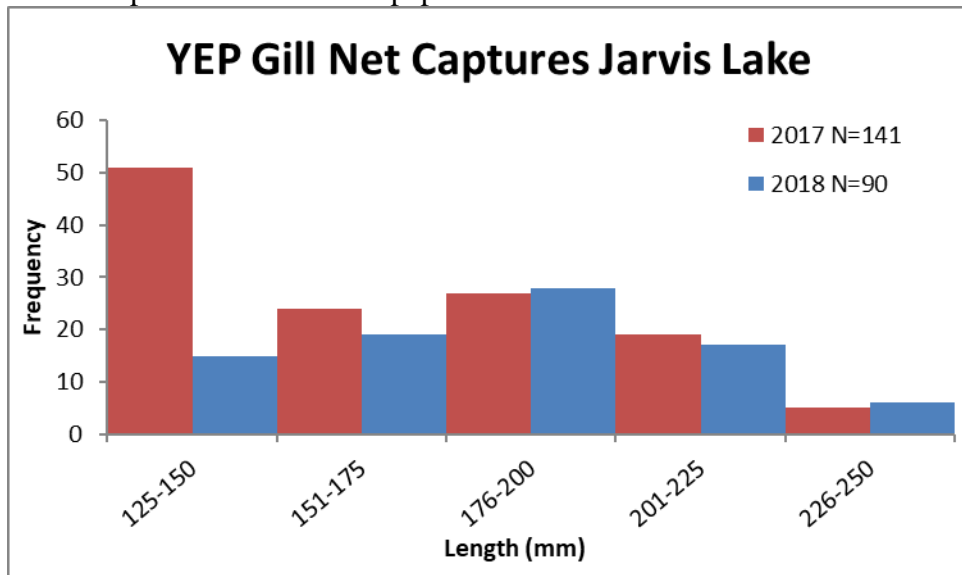


Figure 10: Length frequency histogram showing yellow perch captures in Jarvis Lake from 2017 to 2018.

Table 11: Population trend – 6' x 125' x ¾" – 2" gill nets in Jarvis Lake from 2011 to 2018.

Target Species		2011	2017	2018	Mean
Walleye	N	22	16	13	17
	CPUE (#/net-night)	11	8	6.5	8.5
	WPUE	7565	8941.5	10277	8927.8
	Mean Length (mm)	399.1	485.6	527.7	470.8
	Mean Weight (g)	687.7	1277.4	1581.1	1182.1
	Avg Wr	89.2	89.8	89.4	89.5
	PSD	14	44	31	29.7
	RSD S-Q	59	19	0	26
	RSD Q-P	14	44	46	34.7
	RSD P-M	27	31	31	29.7
	RSD M-T	0	6	23	9.7
		2011	2017	2018	Mean
Northern pike	N	6	5	23	11.3
	CPUE (#/net-night)	3	2.5	11.5	5.7
	WPUE	3500.5	4252.5	17634.5	8462.5
	Mean Length (mm)	529.2	664	576.9	590.0
	Mean Weight (g)	1166.8	2126.3	1603.1	1632.1
	Avg Wr	100.7	102.4	98.5	100.5
	PSD	33	80	26	46.3
	RSD S-Q	50	0	35	28.3
	RSD Q-P	33	80	26	46.3
	RSD P-M	17	20	13	16.7
	RSD M-T	0	0	13	13
		2011	2017	2018	Mean
bluegill	N	0	7	13	6.7
	CPUE (#/net-night)	0	3.5	6.5	3.3
	WPUE	0	48.5	462.5	170.3
	Mean Length (mm)	0	102	141.9	81.3
	Mean Weight (g)	0	33	71.2	34.7
	Avg Wr	0	119.6	108.9	76.2
	PSD	0	0	38	12.7
	RSD S-Q	0	86	62	46.3
	RSD Q-P	0	0	38	12.7
	RSD P-M	0	0	0	0

		2011	2017	2018	Mean
Yellow perch	N	73	141	90	101.3
	CPUE (#/net-night)	36.5	70.5	45	50.7
	WPUE	5297	3556	3060	3971
	Mean Length (mm)	210.7	178.2	181.3	190.1
	Mean Weight (g)	146.4	91.2	86.2	107.9
	Avg W _r	103.2	99.2	97.5	99.9
	PSD	44	23	26	31
	RSD S-Q	37	49	61	49
	RSD Q-P	44	23	26	31
	RSD P-M	19	1	0	6.7

4. History of Angler Use

- a. The most desired species, by anglers, include walleye, northern pike, yellow perch, and bluegill. These are the species that are most sought after during all seasons. Based on population assessments, natural reproduction appears to be limited with walleye. Populations of these fish have remained constant with annual stocking and management measures.

D. History of Management Actions

1. Eradications

- a. There have been no local expression in regards to undesirable species found in Jarvis Lake.

2. Stocking

- a. The N.D. Game and Fish and the U.S. Fish and Wildlife Service provide stocking information. Walleye, bluegill, northern pike, yellow perch, black crappie, and rainbow trout have historically been stocked in Jarvis Lake.

3. Special Regulations

- a. **More Information Needed**

E. Management Problems

1. Physical/Chemical

- a. Jarvis Lake was included in the study conducted by Houston Engineering. Though it is not in the same watershed as the Belcourt Lake watershed, land use management will be crucial for preventing future nutrient loading in Jarvis Lake.

2. Development

- a. Facilities – **Talk with the Turtle Mountain Department of Natural Resources and N.D. Game and Fish about piers, boat ramps, docks, lights, fish cleaning stations, etc.**

- b. Enhancement – None
- 3. Fishery
 - a. Walleye numbers have remained constant in 2017 and 2018, with larger fish in the system. Natural reproduction does not appear to be occurring in high numbers.
 - b. Yellow perch numbers are high with their size remaining small. It is unlikely that Jarvis Lake will produce quality-size perch.

F. Management Goals and Objectives

- 1. Goal
 - a. To maintain Jarvis Lake as a rustic, secluded, multi-purpose, recreational lake that provides the local community a quality outdoor experience.
- 2. Objectives
 - a. To meet management goals by maintaining a diverse quality sport fishery for walleye, yellow perch, northern pike, and bluegill.

Table 12: Accepted stock density index ranges for balanced fish populations. Target values by sampling effort and species should equal or exceed ranges.

<u>Species</u>	<u>Capture Rate</u>	<u>Wr</u>	<u>PSD</u>
walleye	10 fish/net-night	90	30-60
northern pike	5 fish/net-night	90	30-60
bluegill	10 fish/net-night	90	20-60
yellow perch	10 fish/net-night	90	30-60

- b. Improve habitat for desired species.
- c. Upgrade the capacity of the Turtle Mountain Department of Natural Resources to allow for improved monitoring and maintenance actions.
- d. Develop basic facilities and amenities to increase use of Jarvis Lake during summer months.

G. Proposed Management Actions

- 1. Physical/Chemical
 - a. The Department will seek to maintain water levels at Jarvis Lake to maximize fish habitat and populations.
- 2. Development
 - a. Discuss development opportunities with the Department of Natural Resources
- 3. Fishery
 - a. Stocking of walleye (even years) will occur on an alternate year basis. Stocking rates will be dependent on the current population trends. There are no plans for introducing new species.

4. Sociological
 - a. Regulations – Talk to the department about current regulations on fish limits.
 - b. Information/Education – Information kiosks and signs posted at each boat ramp will inform the public on current regulations and management problems.
 - c. Interagency Communication – Coordinate with the Turtle Mountain Department of Natural Resources on sampling dates and data collected.

H. Evaluation of Management Actions

1. Evaluation Design
 - a. Summer population surveys will need to occur annually. These surveys will provide important information on population dynamics, size structure, relative abundance, condition, and reproductive success. The data collected will influence management decisions.
 - b. Water quality measurements are crucial and taken periodically during late summer and mid-winter.

I. Other Management Options Considered

1. Ideas?

J. Projected Time Frame

January-February	Conduct winter water quality sampling
June	Conduct summer population sampling
July-August	Conduct summer water quality sampling

K. Literature Cited

Bluemle, J. 2002. Buried Glaciers and Dead-ice Moraine. North Dakota Geological Survey.

Murphy, B. and Willis, D. *Fisheries Techniques Second Edition*. (1996)

Nielsen, L. and Johnson, D. *Fisheries Techniques*. (1989)

VIII. Martin Lake



A. Inventory

1. **Legal Description:** Township 162N, Range 70W, Sections 14 and 15
2. **Location to nearest town:** 1.2 miles east, 1 mile north, and 0.8 miles east of Belcourt
3. **Ownership:** Martin Lake is considered federal waters by virtue of its location within trust lands of the Turtle Mountain Chippewa Reservation. Management of the lake lies primarily with the Turtle Mountain band of Chippewa with trust oversight by the Bureau of Indian Affairs (USDOI).
4. **Type:** Naturally occurring glacial lake
5. **Size:** 171.9 acres
6. **Elevation:** 1989 feet amsl
7. **Maximum Depth:** 19 feet found in 2018 sampling **Average Depth:** Unknown
8. **Volume:** Unknown
9. **Shoreline miles:** 6.2 miles
10. **Priority Score:** Unknown
11. **Lake Assessment:** None as of 2018

- 12. **Watershed Size:** Not determined
- 13. **Location of normal outlet:** Unknown
- 14. **Littoral area:** Unknown

B. Development

- 1. Martin Lake does not currently have a boat ramp. The main access is on the Northeast part of the lake along BIA Rd. 6. Currently there are no piers, docks, toilet facilities, or fish cleaning facilities at Martin Lake.

C. Fishery

1. General Description

- a. Martin Lake is a naturally occurring glacial lake formed by a dead-ice moraine. As glacial ice stopped advancing in the Turtle Mountains, large amounts of sediment accumulated on top of the ice. This insulation of sediment prevented the underlying ice from melting for several thousand years. This slow melting resulted in irregularities at the surface, causing the sediment on top of the ice to slump into lower areas. When this sediment slumped, the ice beneath the sediment began to melt more rapidly and transformed the area into a hole or a depression. These depressions created what are now the many lakes found in the Turtle Mountain area and the surrounding landscape.

2. Species List

Table 13: Fish species found in Martin Lake.

Common
yellow perch – NR
fathead minnow - NR
NR – Denotes Natural Reproduction

3. Population Status and Trend

- a. **Yellow perch** – With sampling of Martin Lake only occurring in 2018, there is not enough data collected to determine a population trend. Yellow perch have never been stocked by the U.S. Fish and Wildlife Service, but there is natural reproduction occurring. Based on adult population sampling in 2018, there appears to be too many yellow perch (Table 10) in the lake. With the population size being too large, yellow perch are unable to grow to a quality size.

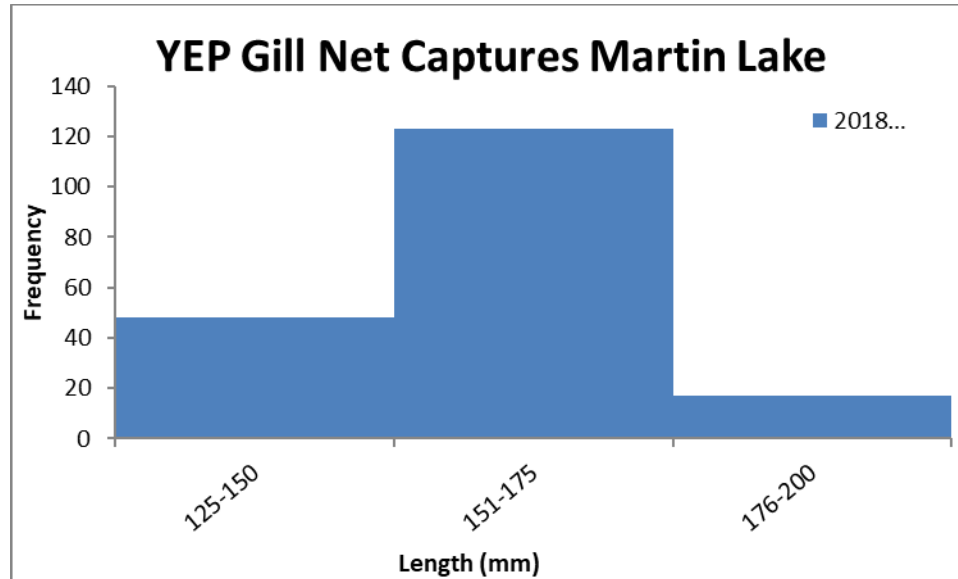


Figure 11: Length frequency histogram of yellow perch captures in Martin Lake in 2018.

Table 14: Population trend – 6’ x 125’ x ¾” – 2” gill nets in Martin Lake.

Target Species		2018
Yellow perch	N	219
	CPUE (#/net-night)	109.5
	WPUE	2222
	Mean Length (mm)	160.6
	Mean Weight (g)	53.5
	Avg Wr	94.1
	PSD	0
	RSD S-Q	100
	RSD Q-P	0
	RSD P-M	0

4. History of Angler Use

- a. The most desired species, by anglers, include northern pike, yellow perch, bluegill, and walleye. These are the species that are most sought after during all seasons. Anglers are interested in having more walleye lakes on the Turtle Mountain Reservation. Martin Lake could develop into a good walleye fishery based on current forage species present.

D. History of Management Actions

1. Eradications

- a. There has been no local expression in regards to undesirable species found in Martin Lake.
- b.

2. Stocking
 - a. The N.D. Game and Fish and the U.S. Fish and Wildlife Service provide stocking information. There have not been any fish stocked in Martin Lake.
3. Special Regulations
 - a. **More information needed**

E. Management Problems

1. Physical/Chemical
 - a. With too many yellow perch in the system, a predator introduction will keep yellow perch levels sustainable.
2. Development
 - a. Facilities – There currently is not a boat ramp or any facilities on Martin Lake. The development of a primitive boat ramp on the northeast part of the lake is in discussion. The development of a boat ramp, fishing piers, and a boat dock will be crucial for the public to gain access to Martin Lake.
 - b. Enhancement – None
3. Fishery
 - a. Populations will need monitoring each year to ensure they are sustainable.
4. Sociological
 - a. As a potential new walleye fishery, anglers will need to be patient for the fishery to grow. It could take a few years for future stockings to develop into quality size fish.

F. Management Goals and Objectives

1. Goal
 - a. To develop Martin Lake as a rustic, secluded, multi-purpose, recreational lake that provides the local community with a quality outdoor experience.
2. Objectives
 - a. To meet management goals by developing a diverse quality sport fishery for yellow perch and walleye.

Table 15: Accepted stock density index ranges for balanced fish populations. Target values by sampling effort and species should equal or exceed ranges.

<u>Species</u>	<u>Capture Rate</u>	<u>Wr</u>	<u>PSD</u>
walleye	10 fish/net-night	90	30-60
yellow perch	10 fish/net-night	90	30-60

- b. Improve habitat for desired species.

- c. Upgrade the capacity of the Turtle Mountain Department of Natural Resources to allow for improved monitoring and maintenance actions.
- d. Develop basic facilities and amenities to increase use of Martin Lake during summer months.

G. Proposed Management Actions

- 1. Physical/Chemical
 - a. The department will seek to maintain water levels at Martin Lake to maximize fish habitat and populations. Future population sampling and water quality measurements to ensure the lake is healthy enough to sustain fish populations.
- 2. Development
 - a. Discuss development opportunities with the Department of Natural Resources
- 3. Fishery
 - a. A recommendation of the stocking of walleye on an alternate year basis (odd years). Stocking rates will be dependent on the current population trends.
- 4. Sociological
 - a. Regulations – Talk to the department about current regulations on fish limits.
 - b. Information/Education – Information kiosks and signs posted at each boat ramp will inform the public on current regulations and management problems.
 - c. Interagency Communication – Coordinate with the Turtle Mountain Department of Natural Resources on sampling dates and data collected.

H. Evaluation of Management Actions

- 1. Evaluation Design
 - a. Summer population surveys will need to occur annually. These surveys will provide important information on population dynamics, size structure, relative abundance, condition, and reproduction success. The data collected will influence management decisions.

I. Other Management Options Considered

- 1. Ideas?

J. Projected Time Frame

January-February	Conduct winter water quality sampling
June	Conduct summer population sampling
July-August	Conduct summer water quality sampling

K. Literature Cited

Carlander, K., Whitney, R., Speaker, E., and Madden, K. Evaluation of Walleye Fry Stocking in Clear Lake, Iowa, by Alternate-Year Planting. Transactions of the American Fisheries Society, Vol. 89, 3, pp 249-254 (1960).

Murphy, B. and Willis, D. *Fisheries Techniques Second Edition*. (1996)

Nielsen, L. and Johnson, D. *Fisheries Techniques*. (1989)

IX. Crow Lake



A. Inventory

1. **Legal Description:** Township 163N, Range 71W, Section 15
2. **Location to nearest town:** ½ mile N, 6.5 miles W, ½ mile S of St. John
3. **Ownership:** Crow Lake is federal waters by virtue of its location within trust lands of the Turtle Mountain Chippewa Indian Reservation. Management of the lake lies primarily with the Turtle Mountain Band of Chippewa with trust oversight by the Bureau of Indian Affairs (USDOI).
4. **Type:** Naturally occurring glacial lake
5. **Size:** 58.5 acres
6. **Elevation:** 2123 feet amsl
7. **Maximum Depth:** 22 feet found in 2018 **Average Depth:** Unknown
8. **Volume:** Unknown
9. **Shoreline miles:** 2 miles
10. **Priority Score:** Unknown

11. **Lake Assessment:** None as of 2018
12. **Watershed Size:** Not determined
13. **Location of normal outlet:** Unknown
14. **Littoral area:** Unknown

B. Development

1. Crow Lake does not currently have a boat ramp. The main access is on the Southwest corner of the lake. Currently there are no piers, docks, toilet facilities, or fish cleaning facilities at Crow Lake.

C. Fishery

1. **General Description**

- a. Crow Lake is a naturally occurring glacial lake formed by a dead-ice moraine. As glacial ice stopped advancing in the Turtle Mountains, large amounts of sediment accumulated on top of the ice. This insulation of sediment prevented the underlying ice from melting for several thousand years. This slow melting resulted in irregularities at the surface, causing the sediment on top of the ice to slump into lower areas. When this sediment slumped, the ice beneath the sediment began to melt more rapidly and transformed the area into a hole or a depression. These depressions created what are now the many lakes found in the Turtle Mountain area and the surrounding landscape.

2. **Species List**

Table 16: Fish species found in Crow Lake.

Common
yellow perch – NR
fathead minnow – NR
brook stickleback - NR
NR – Denotes Natural Reproduction

3. **Population Status and Trend**

- a. **Yellow perch** – With sampling in Crow Lake only occurring in 2018, there is not enough data collected to determine a population trend. The U.S. Fish and Wildlife Service have never stocked yellow perch, but there is natural reproduction occurring (Table 12). Based on adult population sampling in 2018, it is difficult to make any management decisions at this time.

Table 17: Population trend – 6’ x 125’ x ¾”-2” gill nets in Crow Lake.

Target Species		2018
Yellow perch	N	6
	CPUE (#/net-night)	3
	WPUE	81.5
	Mean Length (mm)	143
	Mean Weight (g)	38.6
	Avg Wr	103.1
	PSD	0
	RSD S-Q	83
	RSD Q-P	0
	RSD P-M	0

4. History of Angler Use

- a. The most desired species, by anglers, include northern pike, yellow perch, bluegill, and walleye. These are the species that are most sought after during all seasons. Anglers are interested in having more walleye lakes on the Turtle Mountain Reservation. Crow Lake has the potential to develop as a good walleye and yellow perch fishery.

D. History of Management Actions

1. Eradications

- a. There has been no local expression in regards to undesirable species found in Crow Lake.

2. Stocking

- a. The N.D. Game and Fish and the U.S. Fish and Wildlife Service provide stocking information. There have not been any fish stocked in Crow Lake.

3. Special Regulations

- a. More information needed

E. Management Problems

1. Physical/Chemical

- a. There is not enough data collected from Crow Lake to make any management decisions.

2. Development

- a. Facilities – There currently is not a boat ramp or any facilities at Crow Lake. Development of Crow Lake will not occur until there is an established fishery.
- b. Enhancement – None

3. Fishery
 - a. With little information available from Crow Lake and very few fish captures in 2019, more information and data is necessary.

F. Management Goals and Objectives

1. Goal
 - a. To develop Crow Lake as a rustic, secluded, multi-purpose, recreational lake that provides the local community with a quality outdoor experience.
2. Objectives
 - a. To meet management goals by developing a diverse quality sport fishery for yellow perch and possibly walleye in the future.

Table 18: Accepted stock density index ranges for balanced fish populations. Target values by sampling effort and species should equal or exceed ranges.

<u>Species</u>	<u>Capture Rate</u>	<u>Wr</u>	<u>PSD</u>
yellow perch	10 fish/net-night	90	30-60

- b. Improve habitat for desired species.
- c. Upgrade the capacity of the Turtle Mountain Department of Natural Resources to allow for improved monitoring and maintenance actions.
- d. Develop basic facilities and amenities to increase use of Crow Lake during summer months.

G. Proposed Management Actions

1. Physical/Chemical
 - a. The department will seek to maintain water levels at Crow Lake to maximize fish habitat and populations. Future population sampling and water quality measurements to ensure the lake is healthy enough to sustain fish populations.
2. Development
 - a. There are currently no plans for development until a fishery is established.
3. Fishery
 - a. There are currently no plans to stock Crow Lake. Stocking will be dependent on the current population trends.
4. Sociological
 - a. Regulations – Talk to the department about current regulations on fish limits.
 - b. Information/Education – Information kiosks and signs posted at each boat ramp will inform the public on current regulations and management problems.

- c. Interagency Communication – Coordinate with the Turtle Mountain Department of Natural Resources on sampling dates and data collected.

H. Evaluation of Management Actions

1. Evaluation Design

- a. Summer population surveys will occur annually. These surveys will provide important information on population dynamics, size structure, relative abundance, condition, and reproductive success. The data collected will influence management decisions.

I. Other Management Options Considered

1. **Ideas?**

J. Projected Time Frame

January-February	Conduct winter water quality sampling
June	Conduct summer population sampling
July-August	Conduct summer water quality sampling

K. Literature Cited

- Carlander, K., Whitney, R., Speaker, E., and Madden, K. Evaluation of Walleye Fry Stocking in Clear Lake, Iowa, by Alternate-Year Planting. Transactions of the American Fisheries Society, Vol. 89, 3, pp 249-254 (1960).
- Murphy, B. and Willis, D. *Fisheries Techniques Second Edition*. (1996)
- Nielsen, L. and Johnson, D. *Fisheries Techniques*. (1989)

UWP Initiative Pollinator Plots Project

OHF Grant # 021-208

Amendment Details

- Request to add new budget line item for plant plugs
 - \$45,000 unallocated due to long-term management coming under budget
- **New budget line item = Plant Plugs for Volunteer Events**
 - \$3/plug, 15,000 plugs for 3 sites = \$45,000



UWP Initiative Pollinator Plots Project

Amendment Details

Original Budget

Project Expense Description	OHF Request	Match Share (Cash)	Match share (in-kind)	Match Share (indirect)	Other project sponsor's share	Total each project expense
Site Preparation					\$19,500	\$19,500
Seed Mix	\$29,375				\$10,000	\$39,375
Seeding Labor	\$7,500					\$7,500
Land Management (3 yrs.)	\$75,000					\$75,000
Staff	\$12,269		\$5,000			\$17,269
Subgrant - NDSU	\$12,914					\$12,914
Education Supplies	\$5,000					\$5,000
Indirect				\$20,496		\$20,496
	\$142,059	\$0	\$5,000	\$20,496	\$29,500	\$197,055



CK Pei, 2022

UWP Initiative Pollinator Plots Project

Amendment Details

Amended Budget

Project Expense Description	OHF Request	Match Share (Cash)	Match share (in-kind)	Match Share (indirect)	Other project sponsor's share	Total each project expense
Site Preparation					\$20,100	\$20,100
Seed Mix	\$27,000				\$10,000	\$37,000
Seeding Labor	\$0					\$0
Land Management (3 yrs.)	\$39,875					\$39,875
Plant Plugs	\$45,000					\$45,000
Staff	\$12,269		\$5,000			\$17,269
Subgrant - NDSU	\$12,914					\$12,914
Education Supplies	\$5,000					\$5,000
Indirect				\$20,496		\$20,496
	\$142,059	\$0	\$5,000	\$20,496	\$30,100	\$197,655



Progress To Date

• Volunteer Events:

- Fargo Birding Festival, 5/13/23, 200+ people, planted 750 plugs
- North Softball Complex, 6/20/23, 100+ volunteers expected, 4,000 plugs

• Habitat Impact:

- All 52 project acres have been site prepped (herbicide), awaiting seeding.
- Domesticated/invasive woody species removed at Forest River, 500 native, fruit bearing shrubs planted



Urban Pollinator Plots Project
A collaborative project to plant and restore native prairie landscapes across the Fargo metro

<p>North Softball Complex 25 acres of wildflower seeding 4 pollinator gardens</p> 	<p>Mickelson Fields 6.5 acres of wildflower seeding</p> 
<p>Golden Valley Park 2.75 acres of wildflower seeding 8,000 square foot pollinator strip along path</p> 	<p>Eagle Valley Park 2.2 acres of wildflower seeding</p> 
<p>Forest River Park 5 acres of wildflower seeding Flowering shrub rows</p> 	<p>Orchard Glen 3.75 acres of wildflower seeding</p> 

PRESENTED BY:







North Dakota Conservation Forage Program

Amendment Details

- Current program structure provides transition payments across first 3 years of enrollment, during grassland establishment period.

Will limit active enrollment through fall 2024.

- Amendment would allow transition payments to be paid in full within first year of enrollment, instead of across 3 years.

Benefits:

- Continue active enrollment until project end date, Jan. 2026.
- Increase project impact – more acres, more projects, more happy landowners.
- Spend additional OHF grant award dollars throughout entire project period.

Progress To Date

Completed Projects:

- Acres = 4,100 ac.
- Projects = 35
- Award = \$376,313
- Match = \$389,332

To Be Seeded in 2023:

- Acres = 3,635 ac.
- Projects = 26
- Award = \$200,173 (10 projects w/o estimates)
- Match = \$174,915

TOTAL:

- Acres = 7,735 ac.
- Projects = 61
- Award = \$632,097
- Match = \$564,247

2024 – at least 2,000 acres planned, with many other projects in the works.

Projected Impact

Assuming approximately 4,500 ac./yr. average enrollment

Without Amendment

- Active enrollment ends fall 2024
- Full Acreage Impact = 12,235 ac.
- Full Award Spent = \$2,569,350
- Full Match Recorded = \$1,211,265

With Amendment

- Active Enrollment Ends Jan. 2026
- Full Acreage Impact = 17,110 ac.
- Full Award Spent = \$3,593,100
- Full Match Recorded = \$1,693,890



RENEWABLE ENERGY PROGRAM PROJECT MANAGEMENT AND FINANCIAL REPORT

Reice Haase, Deputy Executive Director, NDIC

June 29, 2022

NORTH
Dakota

Be Legendary.™

ACTIVE PROJECTS

17

Active Projects

\$1.7 Million

Paid To Date

\$6.6 Million

Awarded Dollars

\$4.8 Million

Outstanding Committed Dollars

\$1.1 Million

Cash Available for Commitment in
Renewable Energy Fund

Renewable Energy Program Active Projects

Contract #	Project Name	Company	Total Project Cost	Original Commitment	Spent to Date	Balance
R-025-035	Pilot Scale Facility for Biocomposite Development for Industrial and Consumer Products	c2renew	\$ 1,250,000.00	\$ 500,000.00	\$ 330,443.74	\$ 169,556.26
R-027-036	Gateway to Science Ethanol Exhibit	North Dakota Ethanol Council	\$ 110,000.00	\$ 50,000.00	\$ 35,000.00	\$ 15,000.00
R-027-037	Landfill Gas to Compressed Natural Gas Fast-Fill Fueling Station	City of Fargo	\$ 1,000,000.00	\$ 500,000.00	\$ 15,000.00	\$ 485,000.00
R-042-052	Living Stone Lodge-Phase III	MHA Nation-South Segment	\$ 917,812.00	\$ 398,850.00	\$ 237,038.55	\$ 161,811.45
R-045-054	Spiritwood Greenhouse CO2 Supply	Glass Investment Projects Inc	\$ 2,684,713.00	\$ 500,000.00	\$ -	\$ 500,000.00
R-045-055	Autonomous Operations within the North Dakota Renewable Energy Sector	Evolve Analytics LLC	\$ 2,271,645.00	\$ 500,000.00	\$ 450,000.00	\$ 50,000.00
R-046-056	Electrostatic Lubrication Filtration of Wind Turbine Oil Reservoirs	UND Institute for Energy Studies	\$ 584,614.00	\$ 286,234.00	\$ 147,553.03	\$ 138,680.97
R-046-057	Geothermal Development Consortium	UND College of Engineering & Mines	\$ 873,895.00	\$ 432,895.00	\$ 128,452.70	\$ 304,442.30
R-047-058	Seismic Survey to Advance Potential for CO2 Storage in Eastern ND	Midwest AgEnergy Group	\$ 649,280.00	\$ 324,640.00	\$ 238,163.16	\$ 86,476.84
R-048-060	Renewable Hydrogen Microgrid	BWR Innovations LLC	\$ 665,909.00	\$ 332,159.00	\$ 184,356.07	\$ 147,802.93
R-048-061	Grand Forks Green Ag-Park	Quintessence Partners LLC	\$ 4,290,000.00	\$ 500,000.00	\$ -	\$ 500,000.00
R-049-062	MSCTM High Protein Project	GP Turnkey Tharaldson, LLC	\$ 80,322,468.00	\$ 500,000.00	\$ -	\$ 500,000.00
R-050-064	Novel Process for Biocoal Production with CO2 Mineralization to Achieve Negative Carbon Emissions	Envergen LLC	\$ 349,825.00	\$ 174,830.00	\$ -	\$ 174,830.00
R-050-065	Enhanced Sweep Efficiency for Geothermal Renewable Energy Using Bio-Polymer Supplement	University of North Dakota (UND)	\$ 942,877.00	\$ 468,877.00	\$ -	\$ 468,877.00
R-050-066	Production of Hydrogen and Valuable Carbons from Methane-Sources	University of North Dakota (UND)	\$ 360,000.00	\$ 180,000.00	\$ -	\$ 180,000.00
R-050-067	Unlocking Lithium Extraction in Produced Water	Triple 8, LLC Dba Wellspring Hydro	\$ 1,000,000.00	\$ 500,000.00	\$ -	\$ 500,000.00
R-050-068	Modular Biomass Gasification for Co-Production of Hydrogen and Power	University of North Dakota (UND)	\$ 2,120,000.00	\$ 500,000.00	\$ -	\$ 500,000.00
			\$ 100,393,038.00	\$ 6,648,485.00	\$ 1,766,007.25	\$ 4,882,477.75

Renewable Energy Development Fund
 Financial Statement
2021-2023 Biennium
 June 22, 2023 Renewable Energy Council Meeting

	Cash Balance
July 1, 2021 Balance	4,928,500.06
Revenues from Resources Trust Fund through April 30, 2023	\$3,000,000.00
Interest & Other Revenues through April 30, 2023	\$14,262.67
Refund/returned cash	\$16,036.63
Administrative Expenditures through April 30, 2023	(\$68,486.16)
Grant Expenditures through April 30, 2023	<u>(\$1,808,861.57)</u>
Cash Balance as of April 30, 2023	6,081,451.63
Outstanding Administrative Commitments	(\$71,513.84)
Outstanding Project Commitments as of April 30, 2023	<u>(\$4,882,477.75)</u>
Uncommitted Cash as of April 30, 2023	<u>1,127,460.04</u>

Renewable Energy Development Fund
Continuing Appropriation Authority
 2021-2023 Biennium Projections

July 1, 2021 Balance of Uncommitted Dollars	\$1,994,675.97
Transfer from Resources Trust Fund for 2021-2023 Biennium	\$3,000,000.00
Interest Income (Estimated)	\$10,000.00
Income from Project Applications (Estimated)	\$1,800.00
Returned commitments	<u>\$991.05</u>
	\$5,007,467.02
Administrative Commitments (Estimated)	(\$140,000.00)
Commitments 2021-2023	<u>(\$3,743,256.00)</u>
	<u>\$1,124,211.02</u>

There were no changes made to the Renewable Energy Fund during the 2021 legislative session. Following the 2017 Legislative Session N.D.C.C. Section 57-51.1-07. Allocation of moneys in Oil Extraction Tax Development Fund states the following:

Three percent of the amount credited to the Resources Trust Fund must be transferred no less than quarterly into the Renewable Energy Development Fund, not to exceed three million dollars per biennium.

Renewable Energy Development Fund (54-63-04, N.D.C.C.) – Continuing appropriation. The Renewable Energy Development Fund is a special fund in the state treasury. All funds in the Renewable Energy Development Fund are appropriated to the Industrial Commission on a continuing basis for the purpose of carrying out and effectuating this chapter. Interest earned by the Fund must be credited to the Fund.

Renewable Energy Development Program
Grant Round 51 Recommended Projects (June 2023)

Application #	Application Title	Applicant	Principal Investigator	Funding Requested	Total Project Costs	Category	Duration	Vote
R-051-C	DEFC Research and Development	4H2, Inc.	Dr. Yang Yang	\$346,915	\$693,832	Biofuel	24 Months	4-1
	Total Recommendation			\$346,915	\$693,832			



INDUSTRIAL COMMISSION OF NORTH DAKOTA
RENEWABLE ENERGY PROGRAM

TECHNICAL REVIEWERS' RATING SUMMARY

R-051-C

DEFC RESEARCH AND DEVELOPMENT

Principal Investigator: Dr. Yang Yang

Request for \$346,915; Total Project Costs \$693,832

TECHNICAL REVIEWERS' RATING SUMMARY

R-051-C

DEFC RESEARCH AND DEVELOPMENT

Principal Investigator: Dr. Yang Yang

Request for \$346,915; Total Project Costs \$693,832

Rating Category	Weighting Factor	Technical Reviewer			Average Weighted Score
		1C	2C	3C	
1. Objectives	9	4	3	4	33.00
2. Achievability	9	3	2	4	27.00
3. Methodology	7	4	2	4	23.33
4. Contribution	7	2	3	5	23.33
5. Awareness	5	2	4	1	11.67
6. Background	5	5	4	1	16.67
7. Project Management	2	3	4	4	7.33
8. Equipment Purchase	2	5	5	5	10.00
9. Facilities	2	3	3	5	7.33
10. Budget	2	3	3	5	7.33
Average Weighted Score		168	150	183	167.00
Maximum Weighted Score					250.00

- The objectives or goals of the proposed project with respect to clarity and consistency with North Dakota Industrial Commission/Renewable Energy Council goals are: 1 – very unclear; 2 – unclear; 3 – clear; 4 – very clear; or 5 – exceptionally clear.

Reviewer 1C (Rating 4)

The stated (and somewhat modest) objectives are very clear in terms of power output (at watts/cm², cell and stack) and milestone dates. Yang Lab has already achieved 0.57 watts/cm² (fluorine doping of Pd-N-C).

Reviewer 2C (Rating 3)

Goals for EtOH fuel cell power density are stated and consistent with the goals of the NDIC/REC for enhancement of ND renewable resources. However, these goals are applicable to any ethanol production, not just ND's. No additional scale up plans if the project is successful are provided.

Reviewer 3C (Rating 4)

This proposal does outline a very good concept for North Dakota as it is attempting to preserve a renewable energy resource along with the jobs and stability associated with this industry as the US attempts to eliminate the domestic use of fossil fuels. This R&D project is utilizing new technologies for the development of fuel cells. In the end, if the internal combustion engine remains, they may increase the demand for ethanol produced in North Dakota.

- 2. With the approach suggested and time and budget available, the objectives are: 1 – not achievable; 2 – possibly achievable; 3 – likely achievable; 4 – most likely achievable; or 5 – certainly achievable.**

Reviewer 1C (Rating 3)

The modest objectives are likely achievable within the timeframe and budget.

Reviewer 2C (Rating 2)

While this project builds on previous work, including the principal investigators, this project may be able to achieve an increased power density as the stated goal. The additional and un-addressed factors such as carbon management (where does it go?) are glossed over.

Reviewer 3C (Rating 4)

The timetable is well defined and certainly appears to be achievable. The proposed budget appears to be of realistic value.

- 3. The quality of the methodology displayed in the proposal is: 1 – well below average; 2 – below average; 3 – average; 4 – above average; or 5 – well above average.**

Reviewer 1C (Rating 4)

Given the past success of the Yang Lab at UCF, I believe the methodology is reasonably proven.

Reviewer 2C (Rating 2)

In addition to the above comments, longevity of the catalyst was not addressed, nor was the tolerance of contaminants/poisons. What are the systematic approaches you are going to take, ie size, edge factors, geometry, chemistry, EtOH concentration, etc. It's understood that there is proprietary information involved, but all that is listed is that the applicant will create the method.

Reviewer 3C (Rating 4)

The milestones for this two year research project are well define and the specified equipment available for use at the University of Central Florida is tremendous.

- 4. The scientific and/or technical contribution of the proposed work to specifically address North Dakota Industrial Commission/Renewable Energy Council goals will likely be: 1 – extremely small; 2 – small; 3 – significant; 4 – very significant; or 5 – extremely significant.**

Reviewer 1C (Rating 2)

If successful, and with continued funding for fuel cell development, this technology could prove significant for the ethanol industry over the long term, as transportation fuel blending markets wain.

Reviewer 2C (Rating 3)

If this technology becomes mainstream, then the contribution would be significant. The Letters of Intent/Interest listed are from researchers and EtOH producers who are not going to be the end users of the technology. LOI from various end users, such as Rural Elec. Cooperatives or vehicle manufactures (including farm implement and off-road) would be helpful.

Reviewer 3C (Rating 5)

This R&D project seeks to preserve a major industry in North Dakota at a minimum if Federal Governmental perspectives do not change. If there is a shift in the political direction and the internal combustion engine is not eliminated, this research certainly can provide a new industry that requires an increase in the production of ethanol.

- 5. The principal investigator's awareness of current research activity and published literature as evidenced by literature referenced and its interpretation and by the reference to unpublished research related to the proposal is: 1 – very limited; 2 – limited; 3 – adequate; 4 – better than average; or 5 – exceptional.**

Reviewer 1C (Rating 2)

We might assume that PI is aware due to his own published reports, However, no evidence was cited in the application.

Reviewer 2C (Rating 4)

Dr. Yang appears to have the experience and background necessary for this project. It appears the PI's involvement is on the order of 60 days over the 2 years of the project according to the budget portion of the application. Without a better methodology stated earlier, more involvement of the PI is welcome. A CV should be attached and not directed to a web-site.

Reviewer 3C (Rating 1)

At this time, I possess only minor knowledge of fuel cells and their production. However, I have read and produced scores of proposals in my career and can recognize a well thought out concept and the futuristic value that may be obtained.

- 6. The background of the investigator(s) as related to the proposed work is: 1 – very limited; 2 – limited; 3 – adequate; 4 – better than average; or 5 – exceptional.**

Reviewer 1C (Rating 5)

The PI is an active contributor to research in this particular field.
<https://www.ucf.edu/news/ucf-researchers-ethanol-fuel-cells-offer-new-alternative-to-power-cars-technology/>

Reviewer 2C (Rating 4)

See comment section 5.

Reviewer 3C (Rating 1)

This proposal is not in my area of expertise but it appears to be well thought out and could be a great value to the renewable industry of North Dakota.

7. **The project management plan, including a well-defined milestone chart, schedule, financial plan, and plan for communications among the investigators and subcontractors, if any, is: 1 – very inadequate; 2 – inadequate; 3 – adequate; 4 – very good; or 5 – exceptionally good.**

Reviewer 1C (Rating 3)

The milestone and schedule information is provided and presented in narrative rather than easy to interpret charts and tables.

Reviewer 2C (Rating 4)

The project management plan from 4H2 is very good. It provides tasks along with associated sub-tasks. A plan is provided to bring the project on track if it falls behind in scheduling. The required reporting is listed with dates.

Reviewer 3C (Rating 4)

The plan appears to be well thought out and the milestones cited can be achieved. The necessary cash flow is well defined and trackable. The communication of progress tracking is well outlined.

8. **The proposed purchase of equipment is: 1 – extremely poorly justified; 2 – poorly justified; 3 – justified; 4 – well justified; or 5 – extremely well justified. (Circle 5 if no equipment is to be purchased.)**

Reviewer 1C (Rating 5)

No equipment purchase is budgeted.

Reviewer 2C (Rating 5)

No equipment is proposed to be purchased.

Reviewer 3C (Rating 5)

The equipment to be utilized is provided by the research facility and included in the proposed R&D project at a considerable savings to the funding required.

9. **The facilities and equipment available and to be purchased for the proposed research are: 1 – very inadequate; 2 – inadequate; 3 – adequate; 4 – notably good; or 5 – exceptionally good.**

Reviewer 1C (Rating 3)

Established lab facility at University of Central Florida

Reviewer 2C (Rating 3)

The equipment as shown on the directed website in Dr. Yang's lab appears to be adequate for the proposed investigation.

Reviewer 3C (Rating 5)

The University of Central Florida has the facilities and equipment readily available to conduct this R&D project.

10. **The proposed budget “value”¹ relative to the outlined work and the financial commitment from other sources² is of: 1 – very low value; 2 – low value; 3 – average value; 4 – high value; or 5 – very high value. (See below)**

Reviewer 1C (Rating 3)

I think this work will continue with or without NDIC funding. Without funding, the North

Dakota connections with NDSU Biofuels Research and DEFC manufacturing would likely be sacrificed.

Reviewer 2C (Rating 3)

While the transition from ICE vehicles is underway in many areas. This transition will occur over time. From a ND Renewable funding value perspective, the time to reward is lengthy at best. The private funding match improves the value of the project.

Reviewer 3C (Rating 5)

The small amount of funding requested for a two year research project for the labor, facilities and equipment involved provide a tremendous potential value to the NDIC. If this research proves to be viable, regardless of political policies, the state of North Dakota comes out a winner. The project proposer is also investing their cash into the research and development rather than an "in-kind" determined value.

Section C. Overall Comments and Recommendations:

Please comment in a general way about the merits and flaws of the proposed project and make a recommendation whether or not to fund.

Reviewer 1C

Strong concept of ultimately finding new markets / applications for ethanol and generating dispatchable energy for the coming future with less reliance on internal combustion engines and more reliance on non-dispatchable solar and wind.

The application is somewhat mediocre without much supporting material (biographies, references, etc.)

Good (moral) support from regional corn and ethanol groups, no co-funding or in-kind, though. Wondering why letters of support from potential "partners" UCF Yang Lab, NDSU (Biofuels R&D) and ND Ag Extension office are missing?

Recommendation: FUNDING MAY BE CONSIDERED if 4H2, Inc has been around awhile and the LaPlante's are well known and respected within the state.

Reviewer 2C

An additional outlet for ND Ethanol is desirable and this project would increase the viability and demand for fuel ethanol eventually. However, the applicant does not have industry support for the stated end use nor address various methodology gaps.

Recommend: Do Not Fund

Reviewer 3C

This project surrounds a new perspective about the preservation of the renewable energy that North Dakota already has. If successful, the benefits could make a difference to the survival of a major industry. The requested funding is rather minor for what the potential outcome could be. The R&D proposal is well thought out and the requestor is also investing their own capital to fund the research as well. Given these few points, it is my recommendation to have the NDIC council approve this project.

Letter of Transmittal

May 23, 2023

Reice Haase

Executive Director

North Dakota Industrial Commission

State Capitol-14th Floor

600 East Boulevard Ave Dept 405

Bismarck, ND 58505-0840

Dear Mr. Haase,

On behalf of 4H2, Inc. we are submitting our grant application for the May 26th, 2023, grant round of the ND Industrial Commission Renewable Energy Program. We have sent via USPS the \$100 Application fee separately from the electronic submission of the grant.

Our submission includes the grant application, patent rights reservation, tax liability statement, and an appendix containing Letters of Support from agriculture-related associations and economic development entities.

4H2, Inc. is requesting \$346,915.00 over a 2-year research period, matched equally with private funding from within 4H2, Inc. for a total research and development proposal of \$693,832.00.

4H2, Inc. is a North Dakota corporation operating in the renewable, clean energy industry. We greatly appreciate the opportunity to apply to the Renewable Energy Program. Please feel free to contact me at any time with any questions regarding this submission.

Sincerely,

Jason LaPlante

Jason LaPlante



CEO - 4H2, Inc.

1610 Mill Road

Grand Forks, ND 58201



Renewable Energy Program

North Dakota Industrial Commission

Application

Project Title: DEFC Research and Development

Applicant: 4H2, Inc.

Principal Investigator: Dr. Yang Yang

Date of Application: May 22, 2023

Amount of Request: \$346,915

Total Amount of Proposed Project: \$693,832

Duration of Project: 2023 - 2025

Point of Contact (POC): Brian LaPlante

POC Telephone: (218) 280-0945

POC Email: brian.laplante@4h2inc.net

POC Address: 1610 Mill Road, Grand Forks,
ND 58201

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ABSTRACT

Objective:

4H2, Inc is engaging in a “Sponsored Research Project” with the University of Central Florida for the development of a high-energy density, direct ethanol fuel cell (DEFC). The goal is to develop a catalyst that is low in rare earth metals yet can achieve the same energy density as current state hydrogen fuel cell technology (1 watt per centimeter-squared). 4H2, Inc., (herein referred to as 4H2) will own the patent rights to this technology upon completion of the research work. Dr. Yang Yang and his team of researchers at the University of Central Florida (UCF) will be conducting the research and development effort of this novel catalyst.

In achieving the research goals of this project, the high energy output catalyst allows for 4H2 to create DEFC systems which are scalable in power output based upon its application. 4H2 believes that with the advent of high-energy density DEFC, this technology can assist the corn ethanol industry in surviving the negative market impact from recent California Air Resources Board (CARB) and related government regulations. These regulations will drive the phasing out of internal combustion engines and therefore the demand for ethanol fuel currently used to blend with gasoline.

DEFC technology allows for the direct creation of electricity from ethanol as a fuel source for the fuel cell without any additional steps. DEFC stationary, portable, and mobile electricity generation competes favorably against hydrogen fuel cell systems, utilizing the existing production and distribution infrastructure system of ethanol, whereas hydrogen fuel cell technology does not have significant production or distribution infrastructure to date.

Expected Results: Upon completion of the 2-year research project, the “Deliverables” from the UCF research team are:

- 1.) Novel, patentable, low rare or noble earth metal catalyst with a power density of 0.8 – 1.0 W per CM².
- 2.) DEFC prototype stack based upon the novel catalyst for 4H2 for the purposes of testing, feasibility, and design of a commercially viable DEFC system.
- 3.) 4H2 and UCF will file for patent of this novel catalyst, which 4H2 will own.

Duration: Research commences in 2023 and will continue for a period of two years, culminating in 2025 with the completion of the above-stated deliverables to 4H2.

Total Project Cost: The UCF project budget is \$693, 832.

Participants: Dr. Yang Yang as Primary Investigator and his team of UCF graduate students will undertake the direct research on behalf of 4H2 who is sponsoring the research.

PROJECT DESCRIPTION

Objectives: The objective of this project is to develop a novel technology based on direct-ethanol (EtOH) fuel cells (DEFC) with a power density of 0.8-1.0 W cm⁻² in both single cell and stack, which will be ideal as the power source in various commercial and defense applications.

Methodology: We will develop a high-throughput synthesis method to produce palladium (Pd)-based alloys, which will be employed as the catalysts for the DEFC.

Anticipated Results: The DEFC will deliver a power density of 0.8-1.0 W per cm² in both single cell and stack, which is competitive to hydrogen fuel cells but can be operated in a much safer and more convenient normal atmospheric pressure condition without the need for a high-pressure condition as is needed in hydrogen fuel cell.

Facilities: The University of Central Florida (UCF) research Laboratory has the necessary research facilities, including three hoods, three sinks, and sufficient counter space for postdocs and students to be working on simultaneously. More detailed information can be found from:
<http://www.yangyanglab.com/facilities.html>

Resources: Material characterization equipment is available at the UCF shared facilities. The Advanced Materials Processing and Analysis Center (AMPAC) has two user facilities centers, Advanced Microfabrication Facility (AMF) and Materials Characterization Facility (MCF), that provide sufficient shared instrument facilities to pave the way to project success. The following equipment and facilities can be accessible: Cryo Small Single Sputtering, CHA E-Beam Evaporation, Physical Electronics 5400 ESCA (XPS), PANalytical Empyrean Thin Film X-ray Diffraction (XRD), Hitachi S3500N Scanning Electron Microscope (SEM), FEI Tecnai F30 Transmission electron microscope (TEM), Renishaw RM 1000B Micro-Raman Spectrometer, inductively coupled plasma mass spectrometry (ICP-MS, Agilent Technologies, Palo Alto, CA) model 7500s, Perkin Elmer Spectrum 100 attenuated total reflection (ATR) Fourier Transform Infra-red Spectroscopy (FT-IR) Spectrometer, N₂ adsorption/desorption analyzer (NOVA 2000e, Quantachrome Instrument) for specific surface area measurement, PAR model M273 potentiostat/galvanostatic (Princeton Applied Research) for electrical conductivity measurement. A cleanroom facility is also available for nanodevice fabrication.

Techniques to Be Used, Their Availability and Capability: Thermal annealing technique will be used to synthesize the desired materials for DEFC, which has been well explored in the research lab at UCF.

Environmental and Economic Impacts while Project is Underway:

Current means of utilizing ethanol as an energy source is primarily via blending with gasoline for use in passenger vehicles. As has been determined, this contributes to the generation of climate threatening GHG's and the generation of harmful levels of nitrous oxides (NOx) emissions. Recent CARB and EPA regulations imposed on the internal combustion engine market calls for the phasing out of these internal combustion engines within the next several years. This will severely impact the current market for corn-derived ethanol resulting in a substantial loss of market revenue to corn producers and the ethanol production industry. This loss of revenue will have an extensive negative ripple-effect impact on the agriculture industry as a whole.

Further, with the current production of ethanol produced with the intention of blending with gasoline as a fuel oxygenation additive, this requires ethanol to be distilled to an anhydrous state. The energy required to remove all water from the ethanol requires significant energy input which in turn drives up the cost to reach this state. Because natural gas is used to fuel the distillation process, this adds to the CO₂ generated during production. Comparatively, it is desirable for ethanol used for fueling DEFC's to retain a certain amount of water, thereby reducing cost and CO₂ generation. As a result, the amount of fuel produced by existing ethanol plants could be increased by as much as 30% with no additional cost.

Ultimate Technological and Economic Impacts:

DEFC technology can utilize ethanol directly without blending with gasoline and without using thermal combustion. Rather, electro-chemical conversion of ethanol directly to electricity under ambient temperature and pressure is how DEFC operates. An important benefit of the DEFC technology that 4H2 will manufacture is that CO₂ found in ethanol will be molecularly converted to a non-gaseous carbon product, thereby not entering the atmosphere. Essentially, ethanol as a fuel becomes CO₂ negative within the DEFC we are developing.

The impact of the DEFC technology is that it provides a market pathway for ethanol to remain as a strategic commodity for North Dakota for the near and foreseeable future. 4H2 also seeks to set up manufacturing of the DEFC product line in the state of ND due to its business-friendly policies and proximity to the raw materials needed to produce DEFC's.

Why the Project is Needed:

Maintaining the current market for corn-derived ethanol is critical for maintaining the health of the agricultural industry and all those employed downstream and upstream of the corn producers. Furthermore, corn ethanol is a sustainable fuel that contributes to the United States' energy independence. DEFC technology creates a path forward for ethanol in a "post-internal combustion" era. DEFC technology increases the potential applications of ethanol beyond what is able to be achieved

today. Finally, by converting ethanol fuel into electricity by chemical process, it can help lead to the zero-carbon production of energy per the goals of federal regulations.

STANDARDS OF SUCCESS

Standards of Success should include: The measurable deliverables of the project that will determine whether it is a success; The value to North Dakota; An explanation of what parts of the public and private sector will likely make use of the project's results, and when and in what way; The potential that commercial use will be made of the project's results; How the project will enhance the education, research, development and marketing of North Dakota's renewable energy resources; How it will preserve existing jobs and create new ones; How it will otherwise satisfy the purposes established in the mission of the Program.

The measurable deliverables of the project:

- Report on DEFC prototype single cell - 12 months after Effective Date
- Report on DEFC prototype stack – 24 months after Effective Date
- Novel catalyst which will be patented and owned by 4H2

The value to North Dakota:

The DEFC research sponsored by 4H2 provides for the continuation of and growth of the value of corn-derived ethanol production in the state of North Dakota and the preservation of the jobs and commerce related to this industry. Further, with the support of North Dakota, 4H2 is looking to establish a DEFC manufacturing presence in the state, creating new job opportunities for its residents. Finally, in communications with the administration of North Dakota State University, 4H2 seeks to collaborate with the University in developing a biofuels research and development program starting with the manufacturing process development for DEFC production.

An explanation of what parts of the public and private sector will likely make use of the project's results, and when and in what way:

As stated above, the direct benefit for the private sector of the research is the preservation and growth of the state's corn growers, ethanol producers and the supply chains associated with both. An important public sector benefit is the continuation of state revenues related to these industries. Equally important is the utilization of the DEFC technology by the private and public sector. Stationary, portable, and mobile electricity generation via DEFC allows for a new approach to electricity generation for farms, homes, businesses, vehicles, and off-road vehicles and equipment. Power generation to complement the power grid via micro-grids and distributed energy resources (DER's) is critical today.

How the project will enhance the education, research, development and marketing of North Dakota's renewable energy resources:

By bringing a biofuels focus to North Dakota State University, this will enhance the University's standing in this extensive field of research and development. We have had discussions with and intend to partner with the ND Department of Ag Extension to demonstrate the feasibility of multiple applications of electrified ag production equipment as the future trend in the industry. Furthermore, by collaborating with the Agronomy department at NDSU, 4H2 wishes to explore the development of additional ethanol product feedstock plant varieties. The ability of DEFC to play a critical role in complimenting existing electricity generation (especially intermittent sources such as wind and solar) by producing electricity on demand when insufficient electricity exists will impact renewable energy vitality in North Dakota. Finally, promoting ethanol as a verified carbon neutral (or negative) fuel will aid in the transition of North Dakota as a leader in fossil fuels production to a sustainable clean energy production state of the future.

How it will preserve existing jobs and create new ones:

By supporting the ND ethanol industry in its transition from ethanol as a pure additive for blending with gasoline as a fuel for ICE-powered vehicles, which is facing its demise via recent fossil fuel free regulatory mandates, this research will lay the foundation for a more robust future for the ethanol industry and all who are employed in it and its supply chain. Growing this industry brings with it the opportunity for employment growth, as will the manufacturing of the DEFC's themselves in the state of ND.

How it will otherwise satisfy the purposes established in the mission of the Program:

An important aspect of the Renewable Energy Development program is to identify technologies "presently not used in North Dakota". DEFC technology does not commercially exist on the market today. 4H2 will endeavor to make DEFC commercially viable after this research is completed and intends to set up manufacturing within North Dakota. DEFC research serves to promote the growth of North Dakota's standing as a renewable energy industries leader through direct research and development. Furthermore, by collaborating with NDSU and the ND Department of Ag Extension, we will be enabling the education of a new and future generations of technical careers in this industry.

BACKGROUND/QUALIFICATIONS

*Please provide a summary of prior work related to the project conducted by the applicant and other participants as well as by other organizations. **This should also include summary of the experience and qualifications pertinent to the project of the applicant, principal investigator, and other participants in the project.***

Dr. Yang Yang, an associate professor at UCF, has devoted research and published more than 130 peer-reviewed articles related to the programmable and controlled synthesis of innovative materials for many applications across different fields of renewable energy, including energy conversion and storage, green catalysis, artificial photosynthesis, and reactor design for various energy devices such as fuel cells, flow batteries, and (water and CO₂) electrolyzers. In particular, Dr. Yang's expertise in exploring innovative techniques and approaches for the development of fuel cells catalysts will be the solid basis for the project's success.

This new research intends to build on the science used to develop the catalyst which is now under patent pending and for which 4H2 has secured the option for exclusive rights. This previous catalyst technology shows that the DEFC can generate 0.7 W per CM² and therefore is a solid basis on which to improve to the desired output of 1.0 W per CM² while reducing the amount of rare earth materials in the catalyst formulation.

Jason LaPlante, co-founder of 4H2 Inc., obtained his B.S. degree in Agricultural Engineering from North Dakota State University in 1986 and has been leading product development efforts for several major corporations since then. He currently serves as Vice President of Product and Technology for TBEI, Inc., a manufacturer of light to heavy duty dump trucks and semi trailers. While serving as VP at TBEI, Jason is also involved in running 4H2, Inc.

Brian LaPlante, co-founder of 4H2, Inc., obtained his B.S. degree in Business Administration from North Dakota State University in 1990. He has since led a career in research and development in a number of industries, including machinery and food production. He co-authored published studies jointly with the University of Minnesota in the field of cereal grain genetics and fermentation. He was the co-founder of the Hydrogen Economy Collaborative launched in 2020, now administered by the Great Plains Initiative in Minneapolis, MN. Brian initiated the founding of 4H2 in order to pursue the research and development of direct ethanol fuel cells based on his knowledge of the science and a need for this technology as detailed elsewhere in this application.

MANAGEMENT

*A description of **how** the applicant will manage and oversee the project to ensure it is being carried out on schedule and in a manner that best ensures its objectives will be met, **and a description of the evaluation points to be used** during the course of the project.*

Jason LaPlante and Brian LaPlante have extensive experience in project management and research management. The following project management approach will be implemented, along with the utilization of a Project Management software system for precise implementation, tracking, and cataloging of data.

❖ **Management and Oversight of the Sponsored research by 4H2, Inc.**

- 4H2, Inc. is the sponsor of the research project with Dr. Yang and the UCF team. As such we will manage and oversee the funding of the research as well as “milestone” and “deliverables” set forth in our “Master Agreement” and “Task Orders” of the project.
- Dr. Yang will complete monthly reports for work completed and hours of work undertaken for invoicing by the UCF. 4H2 will pay the invoices on a monthly basis.
- 4H2, Inc. will remain in weekly, monthly, and quarterly “Status Meetings” for project progress and to address any specific questions or needs of the UCF team.
- Quarterly and Semi-annual performance and outcome reports from Dr. Yang will be delivered to 4H2 to ensure progress of the project is on time as per the Task Order timeline.
- 4H2 will remain in quarterly contact with the Director of Intellectual Property at UCF for discussions regarding patent application as the project meets specific goals and the stated deliverables are undergoing performance testing.

❖ **Ensuring the project remains on schedule and objectives are met.**

- 4H2 will maintain very tight schedules for weekly, monthly, and quarterly meetings with Dr. Yang to monitor progress and to discuss any needs the research team has that may impact milestones stated within the project task order.
- 4H2 will establish a weekly and monthly “Roadblocks Protocol” which will be a designated discussion in our meetings in the attempt of anticipating any research roadblocks either in outcomes, materials used in research, equipment malfunctions, staffing situations, etc. and how alternate solutions can be made ready for such potentials.

❖ **Evaluation points within the project.**

- Specific evaluation points are tied directly to the Project Task Order with Milestones and Deliverables stated. These milestones and deliverables are:
 - Milestone 1.1: Catalyst with a power density of 0.7-0.8 W cm⁻² in DEFC
 - Milestone 1.2: Scale up of DEFC prototype cell from 10 cm²/cell to 50 cm²/cell
 - Deliverable 1: DEFC prototype single cell (3-4 W/Cell)
 - Milestone 2.1: The catalyst with a power density of 0.8-1.0 W cm⁻² in DEFC
 - Milestone 2.2: DEFC prototype cell (50 cm²/cell)
 - Milestone 2.3: DEFC prototype cells in a stack (50 cm²/cell)
 - Deliverable 2: DEFC prototype stack (20-100 W/stack)

TIMETABLE

Please provide a project schedule setting forth the starting and completion dates, dates for completing major project activities, and proposed dates upon which the interim reports will be submitted.

Master Schedule for DEFC Project (2-Year timeline)

Project Begin Date (proposed): August 1, 2023

Project Completion Date (proposed): July 31, 2025

Task 1: Composition selection of Pd-based Catalysts (August 2023-July 2024)

Milestone 1.1: Catalyst with a power density of $0.7-0.8 \text{ W cm}^{-2}$ in DEFC (to be completed by July of 2024).

Milestone 1.2: Scale up DEFC prototype cell from $10 \text{ cm}^2/\text{cell}$ to $50 \text{ cm}^2/\text{cell}$ (to be completed by July of 2024).

Deliverable 1: DEFC prototype single cell, 3 to 4 W/ cell (to be completed by July of 2024).

Quarterly reporting due dates: (Due to 4H2, Inc.)

October 31, 2023

January 31, 2024

April 30, 2024

July 31, 2024

Semi-annual reporting due dates: (Due to the ND Industrial Commission-REP)

January 31, 2024

July 31, 2024

Task 2: Supporting materials selection to immobilize Pd-based catalysts (August 2024-July 2025).

Milestone 2.1: The catalyst with a power density of 0.8 W cm^{-2} in DEFC (to be completed by January 31, 2025).

Milestone 2.2: DEFC prototype cell, 50 cm²/cell (to be completed by July of 2025).

Milestone 2.3: DEFC prototype cells in a stack, 50 cm²/cell (to be completed by July of 2025).

Deliverable 2: DEFC prototype stack, 20-100 W/stack (to be completed by July of 2025).

Quarterly reporting due dates: (Due to 4H2, Inc.)

October 31, 2024

January 31, 2025

April 30, 2025

July 31, 2025

Semi-annual reporting due dates: (Due to the ND Industrial Commission-REP)

January 31, 2025

July 31, 2025

BUDGET

Please use the table below to provide an **itemized list** of the project's capital costs; direct operating costs, including salaries; and indirect costs; and an explanation of which of these costs will be supported by the grant and in what amount. The budget should identify all other committed and prospective funding sources and the amount of funding from each source. **Please feel free to add columns and rows as needed.** Higher priority will be given to those projects have matching private industry investment equal to at least 50% or more of total cost.

Project Associated Expense	NDIC's Share	Applicant's Share (Cash)	Applicant's Share (In-Kind)	Other Project Sponsor's Share
Key Personnel	\$ 13,023	\$13,024		
Other Personnel	\$152,250	\$152,250		
Fringe Benefits	\$ 28,397	\$ 28,398		
Direct Costs	\$ 2,000	\$ 2,000		
Other Direct Costs	\$ 39,096	\$ 39,096		
Indirect Costs	\$112,149	\$112,149		
Total	\$346,915	\$346,917		

Below is the budget prepared by UCF to cover the expenses for the research project as defined in their proposal. The funds indicated below have been entered into the table above.

Cumulative Budget				
Budget Cost Category	RATE	Funds Requested		
		Year 1	Year 2	Total Project
A. Direct Labor - Key Personnel				
Dr. Yang Yang	1	\$ 12,831	\$ 13,216	
Subtotal Salary		\$ 12,831	\$ 13,216	\$ 26,047
Direct Labor - Other Personnel				
Post Doctoral Associate	2	\$ 100,000	\$ 103,000	
Graduate Student	2	\$ 50,000	\$ 51,500	
Undergraduate Student				
Subtotal OPS		\$ 150,000	\$ 154,500	\$ 304,500
B. Fringe Benefits				
Faculty	31%	\$ 3,978	\$ 4,097	
Post Doc	23%	\$ 23,000	\$ 23,690	
Students	2%	\$ 1,000	\$ 1,030	
Subtotal Fringe		\$ 27,978	\$ 28,817	\$ 56,795
Total Labor Costs (A+B)		\$ 190,809	\$ 196,533	\$ 387,342
C. Direct Costs - Equipment				
		\$ -	\$ -	\$ -
D. Direct Costs - Travel				
Domestic Travel		\$ 2,000	\$ 2,000	
Total Travel Costs		\$ 2,000	\$ 2,000	\$ 4,000
F. Other Direct Costs				
Materials & Supplies		\$ 10,000	\$ 10,000	
OCO or Facility Rental		\$ 10,000	\$ 10,000	
Tuition	2	\$ 18,630	\$ 19,562	
Total Other Direct Costs		\$ 38,630	\$ 39,562	\$ 78,192
G. Total Direct Costs (A+B+C+D+E+F)		\$ 231,439	\$ 238,095	\$ 469,534
Modified Total Direct Costs		\$ 212,809	\$ 218,533	\$ 431,342
H. Indirect Costs	52%	\$ 110,661	\$ 113,637	\$ 224,298
I. Total Direct and Indirect Costs (G+H)		\$ 342,100	\$ 351,732	\$ 693,832
				\$ 693,832

Please use the space below to justify project associated expenses, and discuss if less funding is available than that requested, whether the project's objectives will be unattainable or delayed.

The project expenses indicated above are the direct and indirect costs associated with performing the research at the University of Central Florida. If the funding of \$346,915 is not available from the NDIC, then other sources of funding will need to be sought out and obtained, which will delay the start of the research project. In turn, this will delay the economic benefits for ND as a result of this research.

CONFIDENTIAL INFORMATION

Any information in the application that is entitled to confidentiality and which the applicant wants to be kept confidential should be placed in an appendix to allow for administrative ease in protecting the information from public disclosure while allowing public access to the rest of the application. The appendix must be clearly labeled as confidential and must include the following information: (a.) a general description of the nature of the information sought to be protected, (b.) an explanation of why the information derives independent economic value, actual or potential, from not being generally known to other persons, (c.) an explanation of why the information is not readily ascertainable by proper means by other persons, (d.) a general description of any person or entity that may obtain economic value from disclosure or use of the information, and how the person or entity may obtain this value, and (e.) a description of the efforts used to maintain the secrecy of the information.

If there is no confidential information, please note that below. If you plan to request confidentiality for reports if the proposal is successful, this section must still be completed.

There is no confidential information in this application.

PATENTS/RIGHTS TO TECHNICAL DATA

Any patents or rights that the applicant wishes to reserve must be identified in the application. If this does not apply to your proposal, please note that below.

4H2, Inc holds the exclusive rights to the following patent filed by the University of Central Florida:

High-Entropy Alloy for High-Performance Direct Ethanol Fuel Cells (63/388,085)

STATE PROGRAMS AND INCENTIVES

Any programs or incentives from the State that the applicant has participated in within the last five years should be listed below, along with the timeframe and value.

None to date

Appendix: Tax Liability Statement

Tax Liability Statement

Applicant:

4H2, Inc.

Application Title:

DEFC Research and Development

Program:

- Lignite Research, Development and Marketing Program
- Renewable Energy Program
- Oil & Gas Research Program
- Clean Sustainable Energy Authority

Certification:

I hereby certify that the applicant listed above does not have any outstanding tax liability owed to the State of North Dakota or any of its political subdivisions.


Signature JASON LAPLANTE

CEO - 4H2, Inc.

Title

May 22, 2023

Date

Appendix: Letters of Support

North Dakota Ethanol Council:



Sept. 9, 2022


To whom it may concern:

On behalf of the North Dakota Ethanol Council (NDEC), representing the state's six ethanol plants, we are submitting this letter of support for research on direct ethanol fuel cell technology. It is our understanding 4H2 Inc. is one of the companies exploring this opportunity.

While we have limited details on the technology proposed by 4H2 Inc., North Dakota's ethanol industry generally supports the exploration of the direct ethanol fuel cell technology given its many benefits to the ethanol industry, along with consumers. These include, but aren't limited to, a decreased carbon footprint and an additional market for ethanol increasing the sustainability of the industry through diversification of marketing options.

We would welcome the opportunity to learn more about the technology and the opportunities it would create for the state's ethanol industry.

Sincerely,


Jeff Zueger
Chairman


Deana Wiese
Executive Director

1605 E. Capitol Avenue
PO Box 1091 • Bismarck, ND 58502
Phone: 701.355.4458 • Fax: 701.223.4645



May 12, 2023

North Dakota Renewable Energy Program
Director: Reice Haase
North Dakota Industrial Commission
State Capitol, 14th Floor, 600 E Boulevard Ave. Dept. 405
Bismarck, ND 58505-0840

RE: AURI Letter of Support for 4H2, Inc.'s North Dakota Renewable Energy Program application

North Dakota Renewable Energy Program Review Committee,

It is my pleasure to write this letter of support on behalf of the Agricultural Utilization Research Institute (AURI) for 4H2 Inc.'s proposal submitted to the North Dakota Renewable Energy Program. AURI is a non-profit corporation funded primarily by the State of Minnesota with a mission to foster long-term economic benefit for Minnesota through value-added agricultural products. AURI accomplishes this by developing new uses for agricultural products through science and technology, using a deliberate approach on multiple levels, including focused basic research, public information dissemination, building strategic collaborations among partners and by placing a strong emphasis on applications with near-term implementation plans.

The proposed project aims for direct ethanol fuel cell systems which will direct conversion of ethanol to electricity via fuel cell technology. Developing this technology may play a critical role in complimentary electricity generation. 4H2, Inc. believes the additional benefits of agriculturally sourced byproducts for the components of the DEFC systems are important factors.

AURI supports 4H2, Inc. as it partners to seek external funding to reach its research objectives.

Sincerely,

Jennifer Wagner-Lahr
Senior Director of Commercialization

Minnesota Corn Research & Promotion Council:



5/17/2023

500 E. Travelers Trail, Suite 600
Burnsville, MN 55337
952.233.0333
mncorn.org

Riece Haase
Executive Director
North Dakota Industrial Commission
State Capitol-14th Floor
600 East Boulevard Ave Dept 405
Bismarck, ND 58505-0840

Dear Ms. Haase,

I am writing this letter on behalf of the Minnesota Corn Research and Promotion Council (MCR&PC) to provide support for funding research on Direct Ethanol Fuel Cell technology. The mission of MCR&PC is to identify and promote opportunities for Minnesota's 24,000 corn farmers, while enhancing quality of life. As a part of this mission, the MCR&PC supports quality research and encourage novel ideas.

Corn plays a vital role in the supply chain for human, animal, and ethanol feedstocks. Minnesota is the 3rd largest corn producer in the U.S. and corn is the largest crop grown in Minnesota. Regarding ethanol, Minnesota is home to 19 ethanol plants producing over 1.4 billion gallons. Corn and ethanol are critically important to the state of Minnesota.

The MCR&PC is aware of technology being developed by 4H2, Inc. which could impact the future of ethanol. 4H2, Inc. is developing Direct Ethanol Fuel Cell systems which allows for the **DIRECT** conversion of ethanol to electricity via fuel cell technology. Ethanol is electro-chemically manipulated to release electrons for direct electricity creation, rather than ethanol being utilized as a thermal energy source via internal combustion engines. The process also has the potential to reduce or even eliminate CO₂ release to the atmosphere from the utilization of ethanol. This technology allows for stationary, portable, and mobile electricity generation. Microgrids, portable generators, and vehicle electrification are just a few of the applications of this DEFC technology.

We are dedicated to identifying and promoting opportunities for corn growers while enhancing quality of life.



Clean energy technologies are the focus of great attention and developing technologies for ethanol as a clean power source is essential for the future of ethanol. Therefore, MCR&PC supports the ongoing development of this technology and encourages the REP to support funding of 4H2, Inc. research and development.

A handwritten signature in black ink that reads "Maciej Kazula".

Sincerely Yours,

Maciej Kazula, Ph.D.
Research Director
Minnesota Corn Research and Promotion Council

Southern Valley Economic Development Authority:



Reice Haase

Executive Director
North Dakota Industrial Commission
State Capitol-14th Floor
600 East Boulevard Ave Dept 405
Bismarck, ND 58505-0840

Dear Reice Haase,

SVEDA is writing to express our strong support for 4H2, Inc. in their application for a grant from the Renewable Energy Program. As an economic development entity, we have had the pleasure of working closely with 4H2, Inc. and witnessing their dedication, innovation, and impact they will have on our region.

4H2, Inc. is dedicated to providing a better source of energy. Their commitment to renewable energy involving ethanol has set them apart as a true leader in the industry.

SVEDA believes that 4H2, Inc. would make excellent use of the grant funds from the Renewable Energy Program. The grant would enable them to develop high energy output catalysts for their direct ethanol fuel cell system. This would not only benefit their business, but also our region as a whole.

I strongly urge you to consider 4H2, Inc. for the grant from the Renewable Energy Program. They are a deserving and impactful business that has already achieved great things and has the potential to achieve even more with the support of this grant.

Thank you for your time and consideration.

Sincerely,

Southern Valley Economic Development Authority



Justin Neppi
Executive Director



Kory Kaste
Business Development

Crookston MN Housing & Economic Development Authority:



May 18th, 2023

To whom it may concern:

On behalf of the Crookston Housing & Economic Development Authority we are submitting this letter as a letter of support for funding research on Direct Ethanol Fuel Cell (DEFC) technology.

Minnesota is in the top 5 largest producers of ethanol in the nation and houses 19 ethanol plants capable of producing over 28 million barrels of ethanol per year. Ethanol is produced from fermenting the sugar in the starches of grains which includes corn. There are more than 24,000 farmers who grow corn in Minnesota, making Minnesota the 3rd largest corn producer in the nation. Therefore, corn and ethanol are very important to the state of Minnesota and its economy.

Recent federal events, including Minnesota and California (California Air Resource Board), are creating potential risks and opportunities for the corn and ethanol industries. Creating a focus on developing Clean Energy technologies surrounding ethanol and using it as a clean power source is essential for ethanol's future.

Crookston Housing & Economic Development Authority is aware of the technology and initiatives being developed by 4H2, Inc. which could greatly impact the future of ethanol. 4H2, Inc. is developing Direct Ethanol Fuel Cell systems which allows for the direct conversion of ethanol to electricity via fuel cell technology. In this system, ethanol is electro-chemically manipulated to release electrons for direct electricity creation, rather than ethanol being applied as a thermal energy source through internal combustion engines.

This process also has the potential to reduce and possibly eliminate CO₂ release to the atmosphere as a product of utilizing ethanol. This technology allows for stationary, portable, and mobile electricity generation. Microgrids, portable generators, and vehicle electrification are just a few of the applications of this Direct Ethanol Fuel Cell technology.

The Crookston Housing & Economic Development Authority supports 4H2, Inc.'s ongoing development of Direct Ethanol Fuel Cell technology and encourages REP to support funding of their continued research and development.

Karie Kirschbaum
Executive Director

Docket for Hearing
Thursday, April 27, 2023
N.D. Oil & Gas Division N.D. Oil & Gas Division 1000 East Calgary Avenue

Case No. 29808, Order No. 32416: In the matter of a hearing called on a motion of the Commission to consider the termination, reduction, or any other appropriate action of the Tracy Mountain-Tyler Unit (TMTU), Billings County, ND, operated by Northwestern Production, LLC; to consider the temporarily abandoned status extension requests for the following wells within the TMTU: Jiggs #11-16 (File No. 13382); Jiggs #32-16 (File No. 13396); Ardene #14-8 (File No. 13408); Custer State #41-8 (File No. 13409); Tracy Mountain #1-16 (File No. 15936); Tracy Mountain Unit #1-15 (File No. 16058); and Tracy Mountain WSW #1 (File No. 90079); review the compliance status of the following wells: Ardene #34-8 (File No. 13375); Shapiro #23-10 (File No. 13414); J.O. Federal #42-18 (File No. 13464); Tracy Mountain Federal #1-17 (File No. 14611); Tracy Mountain Federal #4-17 File No. 14853); Tracy Mountain Federal #2-17 (File No. 15147); Tracy Mountain #5-17 (File No. 15597); and Tracy Mountain Unit #1-15 (File No. 16058); review the reclamation status of the following wells: Shapiro #22-10 (File No. 13448); Custer State #11-8 (File No. 13454); Buffalo Federal #34-7 (File No. 13768); and Tracy Mountain Federal #2-9 (File No. 14609); and to review the TMTU bond amount required for the operation of said unit pursuant to NDAC Section 43-02-03-15; and such other relief as is appropriate.

Docket for Hearing

Thursday, April 27, 2023

N.D. Oil & Gas Division N.D. Oil & Gas Division 1000 East Calgary Avenue

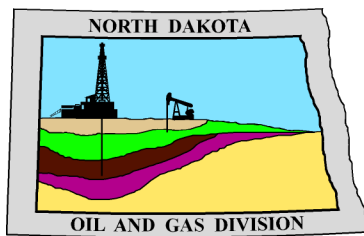
Case No. 30008, Order No. 32617: Application of Resonance Exploration (North Dakota) LLC for an order granting temporary authority to use the proposed Resonance Fylling 6-36H INJ well to be located in a 720-acre spacing unit comprised of the E/2, E/2W/2 of Section 36, T.163N., R.79W. and NE/4, E/2NW/4 of Section 1, T.162N., R.79W., Bottineau County, ND, as an injection well for an enhanced oil recovery pilot project in the West Roth-Madison Pool, and such further and additional relief.

Docket for Hearing

Thursday, April 27, 2023

N.D. Oil & Gas Division N.D. Oil & Gas Division 1000 East Calgary Avenue

Case No. 30009, Order No. 32618: Application of Resonance Exploration (North Dakota) LLC for an order granting temporary authority to use the proposed Resonance Stratton 16-12H INJ well to be located in a 640-acre spacing unit comprised of the S/2SW/4 of Section 1 and the S/2, NW/4, and S/2NE/4 of Section 12, T.162N., R.80W., Bottineau County, ND, as an injection well for an enhanced oil recovery pilot project in the South Westhope-Spearfish/Charles Pool, and such further and additional relief.



Oil and Gas Division

Lynn D. Helms - Director

Bruce E. Hicks - Assistant Director

Department of Mineral Resources

Lynn D. Helms - Director

North Dakota Industrial Commission

www.oilgas.nd.gov

QUARTERLY REPORT JAN-FEB-MAR 2023

to the

NORTH DAKOTA INDUSTRIAL COMMISSION

Bruce E. Hicks
Assistant Director
Oil and Gas Division
Department of Mineral Resources
North Dakota Industrial Commission

June 29, 2023

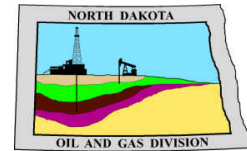
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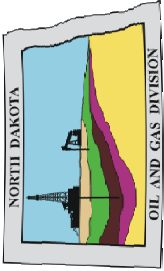
2023 REPORT

1st QUARTER

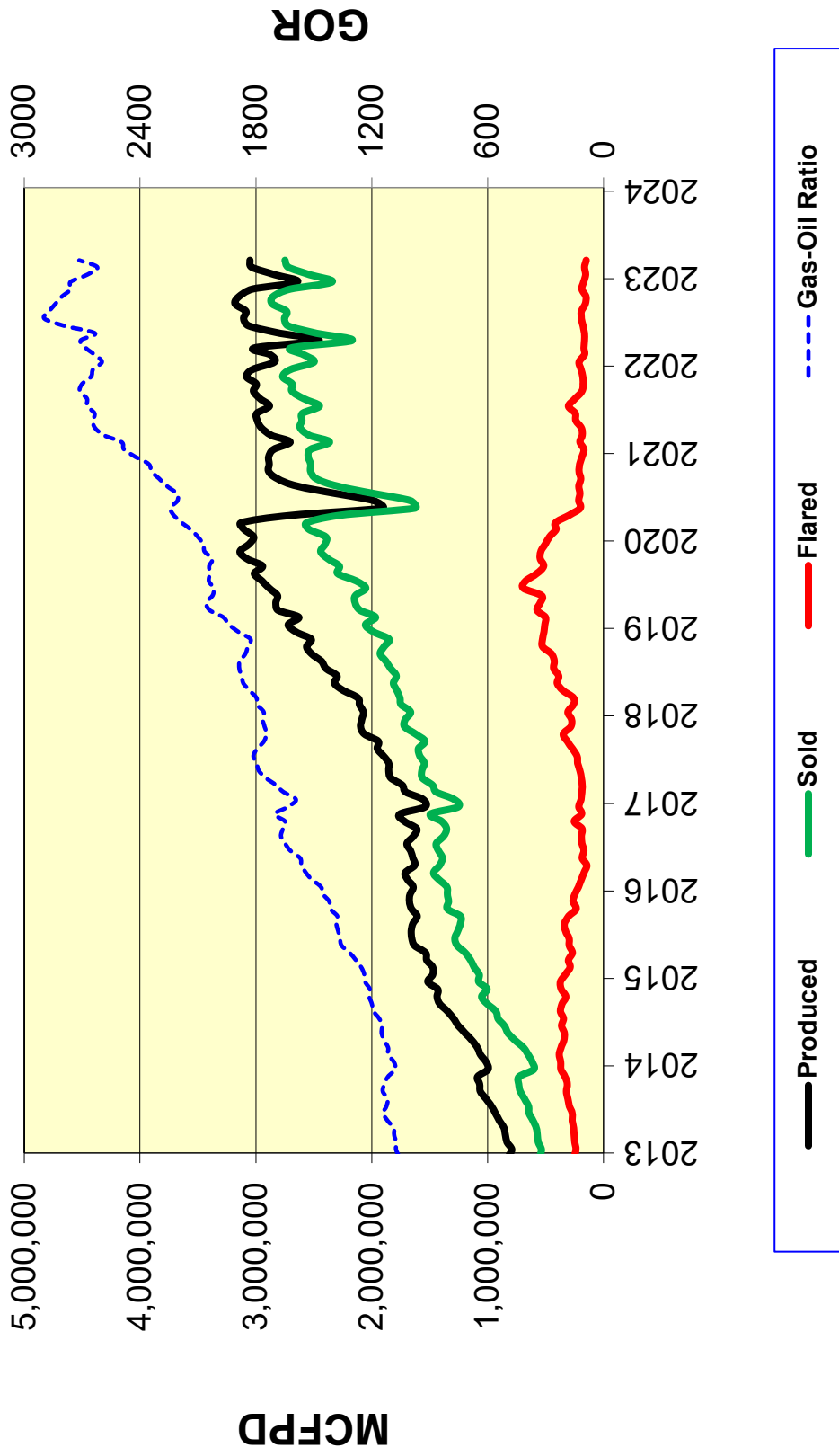
June 29, 2023



Statistics	1Q 2022	2Q 2022	3Q 2022	4Q 2022	1Q 2023
Permitting:					
Permit Applications Received	181	285	209	188	231
Rec'd in AOI: PP 2.01	0	0	0	0	0
Permits issued in PP 2.01	0	0	0	0	0
Denied/Relocated: PP 1.01	0	0	3	0	0
Stips: PP 1.02 (per well)	5.9	5.8	6.5	6.2	6.3
Permits Issued	133	194	213	252	227
YTD Permits (new permits only)	133	327	540	792	1,019
Approval Time (days)	46	34	35	44	42
Drilling:					
Rig Count	33	40	45	42	46
Well count:					
Producing	16,900	17,107	17,591	17,538	17,538
Newly Completed (Wells -- Wells/Rig)	218 -- 2.2	135 -- 1.1	221 -- 1.6	216 -- 1.7	225 -- 1.6
Enhanced Recovery	543	547	538	541	536
SWD	474	476	468	479	470
Waiting on Completion	454	491	422	462	480
Production:					
Barrels of Oil per Day	1,100,115	1,020,808	1,089,106	1,058,942	1,056,285
MCFD	2,902,864	2,769,026	3,123,025	2,940,478	2,944,176
Gas Capture (Bakken)	94%	95%	95%	95%	95%
Unit Oil	3%	3%	3%	3%	4%
Bakken Petroleum System Oil	96%	96%	96%	96%	97%
Prices:					
North Dakota Avg (\$/barrel)	\$89.55	\$105.42	\$89.59	\$79.64	\$71.49
Differential (WTI-ND avg)	\$4.90	\$3.28	\$2.25	\$2.90	\$4.33
ND Northern Border Gas (\$/MCF)	\$4.22	\$7.04	\$7.55	\$5.11	\$2.21
Geophysical:					
Water Well Complaints received	0	0	0	0	0
Inspection and Enforcement					
Inspections	28,462	36,973	34,466	31,749	40,189
Rigs-weekly goal	102%	100%	100%	100%	100%
UIC-monthly goal	80%	79%	87%	91%	92%
Well/Fac (Oct-Mar/mth: Apr-Sep/qtr)	83%	77%	70%	82%	82%
Problems Encountered	594	702	857	708	910
Resolved <30 days (verbal)	84%	65%	79%	85%	72%
Resolved <180 days (written)	8%	2%	5%	1%	2%
Complaints	4	0	0	0	2
Investigations Ongoing	0	0	0	0	0
Oil & Gas Research Fund	\$32,690,385	\$33,705,173	\$32,714,048	\$31,889,961	\$29,454,267
Reservoir Data Fund	\$376,340	\$402,879	\$431,048	\$469,218	\$495,956
Abandoned Well Restoration Fund	\$14,120,920	\$17,892,068	\$19,465,292	\$20,498,455	\$21,970,227
Cash Bond Restoration Fund	\$1,321,124	\$1,378,893	\$1,382,805	\$1,384,660	\$1,475,893
Cash Bond Total	\$11,720,340	\$11,470,340	\$11,020,340	\$10,290,478	\$9,530,478
Surety Bond Total	\$140,158,790	\$144,194,360	\$152,826,610	\$153,409,210	\$156,629,210



North Dakota Daily State Gas Volumes

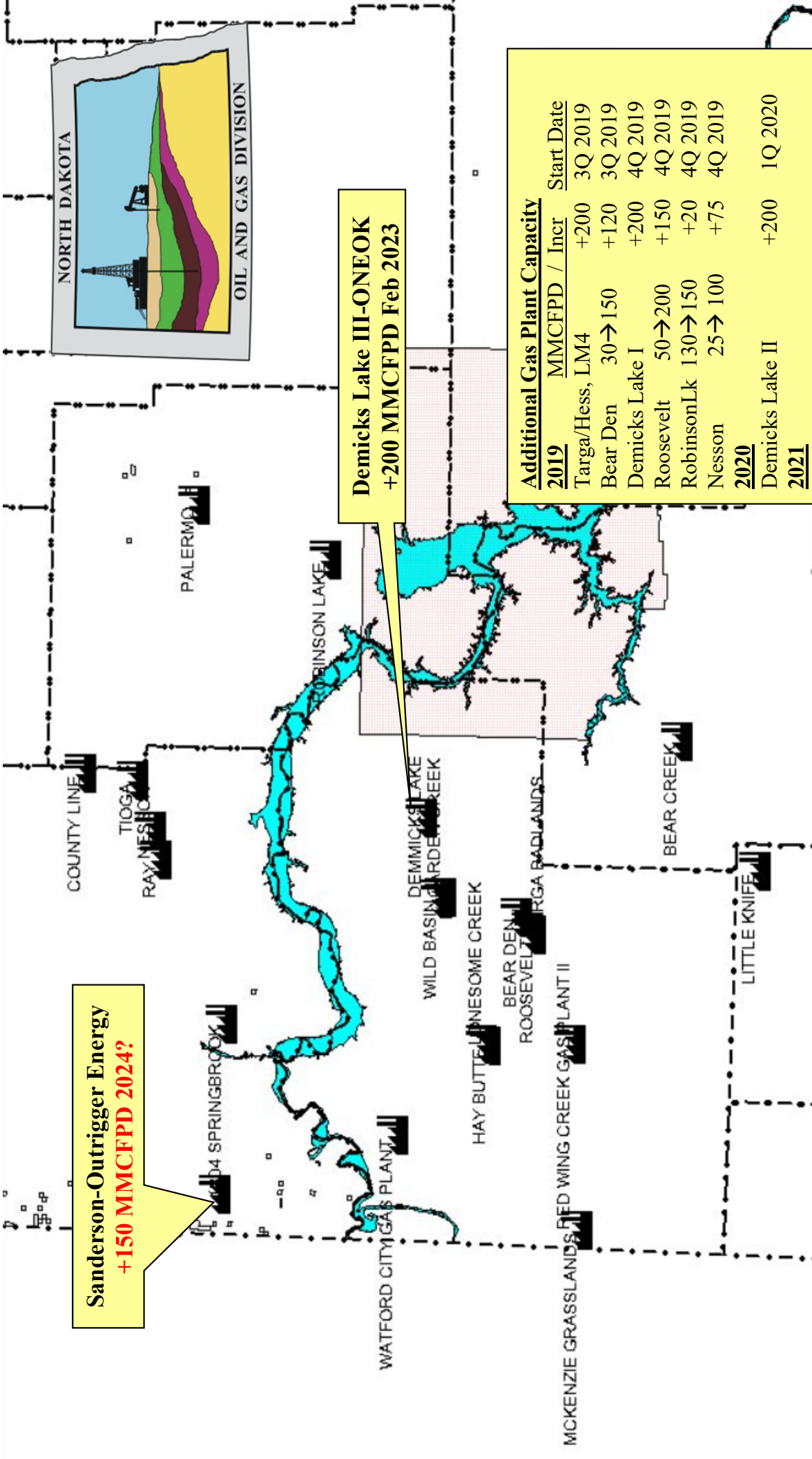


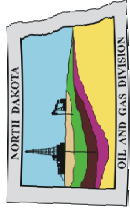
Sanderson-Outrigger Energy
+150 MMCFPD 2024?

Demicks Lake III-ONEOK
+200 MMCFPD Feb 2023

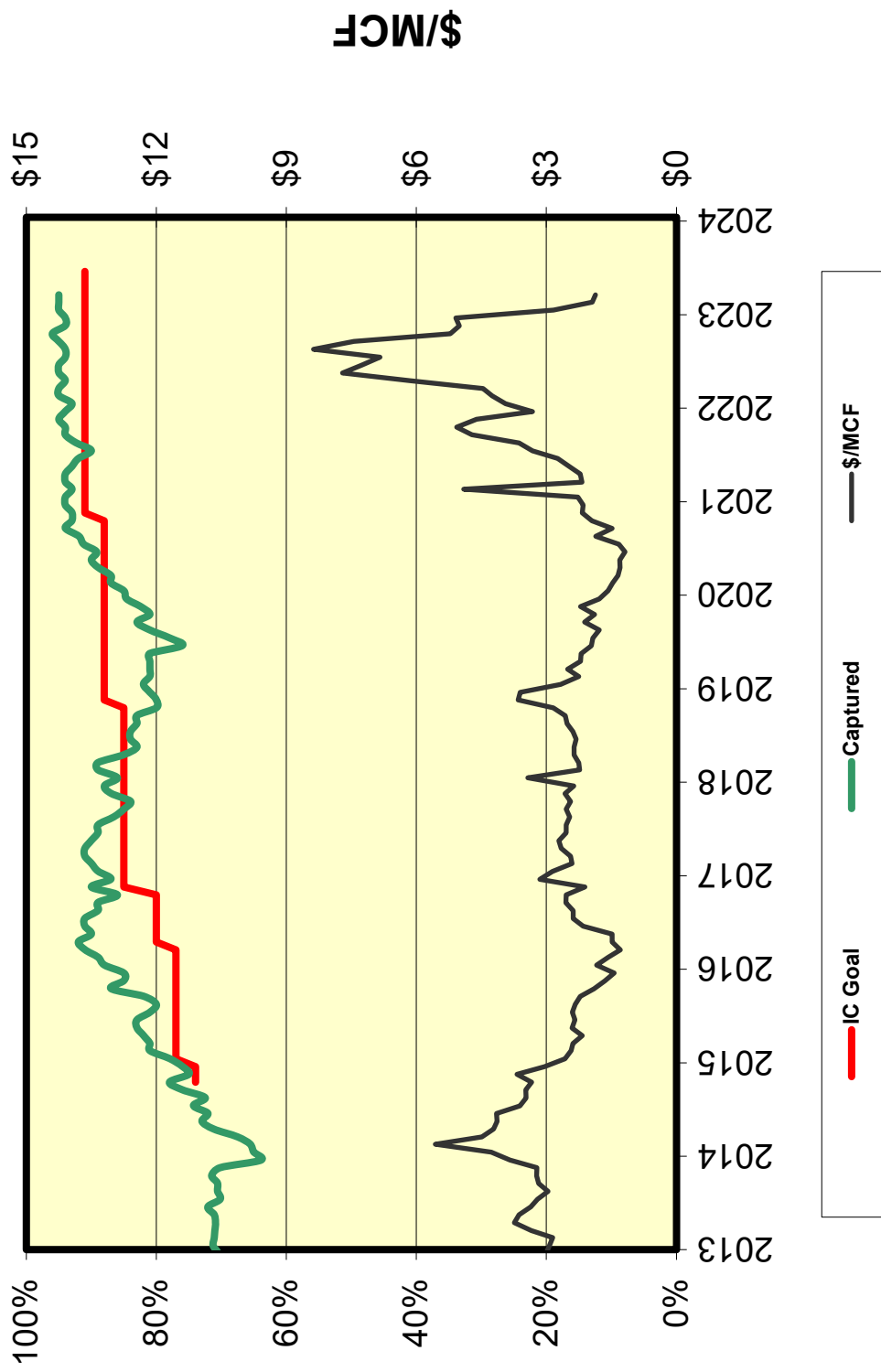
Additional Gas Plant Capacity		
2019	MMCFPD / Incr	Start Date
Targa/Hess, LM4	+200	3Q 2019
Bear Den	30 → 150	3Q 2019
Demicks Lake I	+200	4Q 2019
Roosevelt	50 → 200	4Q 2019
RobinsonLk	130 → 150	4Q 2019
Nesson	25 → 100	4Q 2019
2020		
Demicks Lake II	+200	1Q 2020
2021		
Sanderson	+250	3Q 2021
Tioga	265 → 415	3Q 2021
Bear Creek II	+200	4Q 2021
2023		
Demicks Lake III	+200	1Q 2023
2024		
Sanderson	250 → 400 +150	2024?
	Additional → 350 MMCFPD	

**GAS PLANTS
 NEW AND EXPANDED**

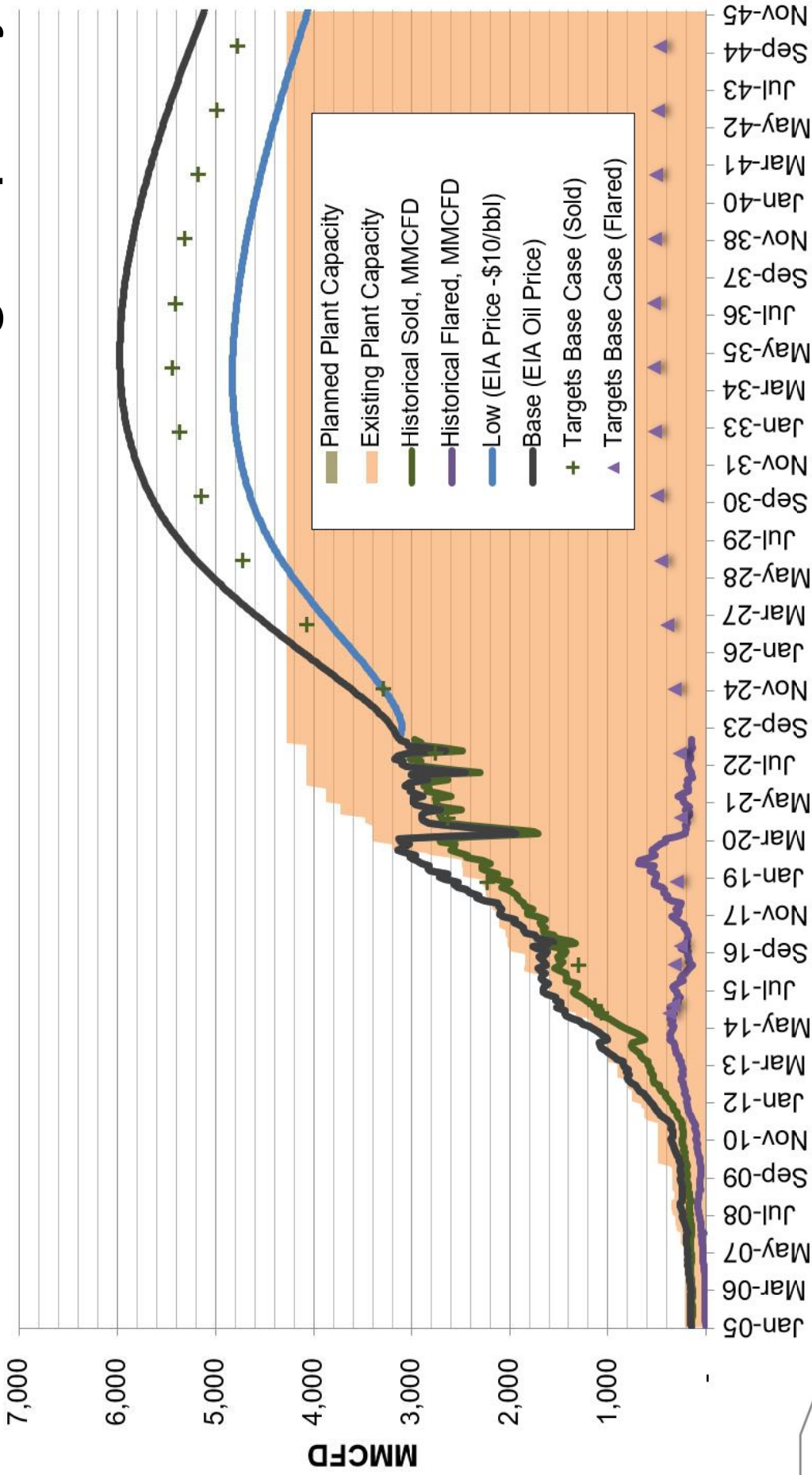


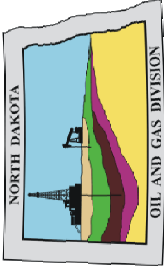


North Dakota Bakken Gas Captured



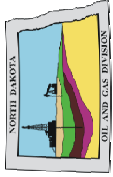
North Dakota Natural Gas Processing Capacity





NDIC -- DRILLING PERMIT REVIEW POLICY

APD Rec'd	Operator	Area of Interest	Public Land (sur' loc)	Review Distance	Distance to Area of Interest	Well Pad Name	Surface Loc	Field	Existing Pad	Work Planned	Comments Received	Stipulations Imposed																				
9/28/2021	CLR	Lake Sakakawea	National Grasslands	0.5 mile	0.4 mile	LCU Ralph and Reckitt 6 wells	22-153-99 12 mi NW Newtown	Long Creek Bakken Unit	yes	No pad extension	USFWS SHSND NDWR	Perimeter berm; Spill Contingency Plan; No drilling pit will be utilized; Remote or auto shutdown equip; Onsite inspection prior to construction																				
10/20/2021	CLR	Lake Sakakawea	National Grasslands	0.5 mile	0.4 mile	LCU Ralph 1 well	22-153-99 12 mi NW Newtown	Long Creek Bakken Unit	yes	No pad extension	USFWS SHSND NDWR	Perimeter berm; Spill Contingency Plan; No drilling pit will be utilized; Remote or auto shutdown equip; Onsite inspection prior to construction																				
<div style="border: 1px solid black; padding: 5px; display: inline-block; margin-bottom: 5px;">No 1Q 2023 changes</div> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%;">BCA</td> <td>Badlands Conservation Alliance</td> </tr> <tr> <td>NDCWS</td> <td>North Dakota Chapter of The Wildlife Society</td> </tr> <tr> <td>NDDOT</td> <td>North Dakota Department of Transportation</td> </tr> <tr> <td>NDDTL</td> <td>North Dakota Department of Trust Lands</td> </tr> <tr> <td>NDGFD</td> <td>North Dakota Game and Fish Department</td> </tr> <tr> <td>NDWR</td> <td>North Dakota Water Resources</td> </tr> <tr> <td>NPSTRNP</td> <td>National Park Service-TR National Park</td> </tr> <tr> <td>SHSND</td> <td>State Historical Society of North Dakota</td> </tr> <tr> <td>USACOE</td> <td>United States Army Corps of Engineers</td> </tr> <tr> <td>USFWS</td> <td>United States Fish and Wildlife Service</td> </tr> </table>													BCA	Badlands Conservation Alliance	NDCWS	North Dakota Chapter of The Wildlife Society	NDDOT	North Dakota Department of Transportation	NDDTL	North Dakota Department of Trust Lands	NDGFD	North Dakota Game and Fish Department	NDWR	North Dakota Water Resources	NPSTRNP	National Park Service-TR National Park	SHSND	State Historical Society of North Dakota	USACOE	United States Army Corps of Engineers	USFWS	United States Fish and Wildlife Service
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COMPLAINTS

Case No.	Respondent	Complaint Served	Penalty Proposed	Reasonable Fees and Expenses Proposed	Collected	Suspended Penalty			
						Amount Suspended	Justification	Suspended Period	Same or Similar Violation Committed
28908	Specialized Technological Threading, Inc. (signed CA 5-11-2023)	07/2021	\$162,886	\$288	\$90,288	\$72,886	First Offense	2 years	No
29036	Scout Energy Management LLC (signed CA 4-28-2023)	9/2021	\$783,183	\$67	\$430,067	\$353,183	First Offense	2 years	No
29141	Norton Frickey (signed CA 6-09-2023)	12/2021	\$574,458	\$114	\$293,114 + \$100,000 bond	\$281,458	First Offense	1 year	No
29950	Empire North Dakota LLC	3/2023	Determine costs at administrative hearing	\$285			Answer Rec'd 4-17-2023		No
29835	WW Oilfield Services, LLC	4/2023	Determine costs at administrative hearing	\$114			Served upon WW Oilfield by Bot City Sheriff on 4-12-2023		No

It was moved by ____ and seconded by ____ that the Industrial Commission approves the submittal of agency comments in support of the State of Louisiana Application for Underground Injection Control Class VI Primacy.



INDUSTRIAL COMMISSION OF NORTH DAKOTA

Doug Burgum
Governor

Drew H. Wrigley
Attorney General

Doug Goehring
Agriculture Commissioner

RESOLUTION OF THE INDUSTRIAL COMMISSION OF NORTH DAKOTA NAMING HEARING EXAMINERS

Whereas, Section 38-08-04.1 of the North Dakota Century Code provides that the Industrial Commission may use hearing examiners under such rules and regulations as the Commission may prescribe; and

Whereas, Section 43-02-03-93 of the North Dakota Administrative Code provides that the Commission may by motion designate and appoint qualified individuals to serve as examiners,

NOW, THEREFORE, the Industrial Commission rescinds all prior appointments of examiners and designates and appoints the following individuals to serve as the Commission's examiners as it relates to the Commission's responsibilities under Chapter 38-08 of the North Dakota Century Code:

David Garner, Assistant Attorney General
Matt Sagsveen, Assistant Attorney General
**Lynn D. Helms, Ph.D., Director, Department of Mineral Resources and
Director, Oil and Gas Division**
Mark Bohrer, Assistant Director, Oil and Gas Division
Ashleigh Day, UIC and Treating Plant Manager, Oil and Gas Division
Michael Ziesch, EGIS Staff Officer, Department of Mineral Resources
David Tabor, Field Supervisor, Oil and Gas Division

This Resolution shall be effective as of July 1, 2023.

INDUSTRIAL COMMISSION OF NORTH DAKOTA

Doug Burgum, Governor and Chairman

ATTEST:

Karen Tyler, Interim Executive Director

Minutes of a Meeting of the Industrial Commission of North Dakota

Held on May 25, 2023 beginning at 12:30 p.m.

Governor's Conference Room – State Capitol

Present: Governor Doug Burgum, Chairman

Attorney General Drew H. Wrigley

Agriculture Commissioner Doug Goehring

Also Present: This meeting was open through Microsoft Teams so not all attendees are known.

Agency representatives joined various portions of the meeting.

Governor Burgum called the meeting of the Industrial Commission to order at approximately 12:39 p.m.

OFFICE OF THE INDUSTRIAL COMMISSION

Ms. Karen Tyler presented for consideration of approval the Industrial Commission meeting minutes for the April 25, 2023, Industrial Commission meeting.

It was moved by Commissioner Goehring and seconded by Attorney General Wrigley that the Industrial Commission approve the Industrial Commission meeting minutes for the April 25, 2023, meeting.

On a roll call vote, Governor Burgum, Attorney General Wrigley, and Commissioner Goehring voted aye. The motion carried unanimously.

Ms. Tyler gave an agency transition update. The Office of the Industrial Commission (OIC) will be an independent business unit (#405). The budget, payroll, agency financials, grant program payments, human resource management, and technology systems and support will move from DMR to the OIC and support to the OIC will transition to OMB and NDIT. There will also be an addition of two new FTEs for the OIC. OIC's data will be transitioning off DMR's server, desktop support services such as asset inventory, equipment upgrades, and establishing replacement cycles will take place, and the new grant management system funding was approved for the 23-25 budget. The Office is also procuring and beginning a historical records scanning project, a GovDelivery communications system, and a meeting management system.

Mr. Reice Haase gave a final Industrial Commission 68th Legislative Session Report. All red-tape reduction items were approved. The updated FTE count for all Industrial Commission Agencies totals 528.75. The Office of the Industrial Commission received \$1.24 million for new grant management software, \$75,000 for records digitization, \$80,000 for DMR server transition to ITD cloud service, and \$804,278 for BND IT projects. There was \$3 million General Fund appropriation for lignite litigation expenses with an emergency clause and a \$3 million General Fund appropriation for oil and gas litigation expenses with an emergency clause. CSEA received \$30 million for grants, \$250 million for loans (\$30 million LOC paid off, extended another \$140 million, \$80 million decommitted from Bakken Energy CSEA project), and the new co-chairs will be one member from the House and one from the Senate. The CSEA funding bucket was removed from legacy streams and was directed to develop a new fertilizer

development incentive program.

Lignite, Oil and Gas, and Renewable Energy Funds were all directed to provide up to \$100,000 each towards Carbon Capture education and the councils are to provide recommendations to the Industrial Commission for carbon capture and utilization education and marketing. The Transmission Authority will have \$300,000 from General Fund for contract employee(s) and \$7.5 million from a federal IJIA Grid Resilience Grant, with a \$1.1 million General Fund match. The SERC's expiration was extended to 2027, there was an increased biennial appropriation from \$5 million to \$7.5 million, the Salt Cavern Study is receiving \$6 million from the Strategic Investments and Improvements Fund (SIIF), and \$5.3 million from decommitted Bakken project funds, and the Rare Earth study is receiving \$1.5 million from SIIF. The Pipeline Authority has a \$60 million/year SIIF guarantee through BND's PACE program for pipeline capacity purchases. The Oil and Gas Research Fund (OGRF) cap was raised by \$3 million to \$17.5 million for DMR/Oil and Gas and SB 2089 converted a natural gas capture tax credit into a grant program. iPipe was appropriated \$3 million from SIIF, there is a new well status for wells with future EOR potential, and there is a tax credit to incent re-stimulation of wells.

Lignite was appropriated \$500,000 for Lignite Plant of the Future, and HB 1511 will use tax exemption for rare earth or critical mineral processing. BND was appropriated 14 new FTEs for bank growth and valuation program, and 93% of the Bank's profits were transferred by the Legislature this budget cycle. Governor Burgum stated that the appropriation of BND funds should have been zero because there will be record balances in all the buckets at biennium end, and those funds would be better used to grow the Bank's capital and deploy it for higher return rates. Commissioner Goehring added that taking money from the Bank, when it is not necessary, cripples the state because it negatively effects economic development and not being able to support more communities or be involved in more lending activities. A homeless grant program was transferred to the Housing Finance Agency from Commerce, and single-family housing is now eligible under the Housing Incentive Fund (HIF). The Mill was appropriated 14 new FTEs for adding a 4th milling shift, 2nd grain mixing shift, and Midds operations, and 50% of the profits were transferred to the General Fund this budget cycle. The oversight of WAWS was transferred from the Industrial Commission to the Water Commission.

Under other business, Mr. Haase gave an update on the legislative management studies. There are 9 studies that the OIC is currently tracking, related to records management, infrastructure, public and private partnerships, siting electric facilities, using autonomous systems for workforce solutions, and natural gas accessibility and stable energy practices.

Under other business, Mr. Haase gave an update on the upcoming grant round meetings this summer. Lignite Research Council met earlier in May so there are 7 applications, totaling \$11.4 million, requesting action at today's meeting. CSEA received 9 applications, there is \$30 million available for grants, with the grant requests this round totaling \$27.7 million, and an over-subscription of \$427 million in requests for loans in the first round. Renewable Energy currently has 3 applications totaling \$1.3 million, and Outdoor Heritage Fund currently has 5 applications totaling \$4.2 million.

BANK OF NORTH DAKOTA

Mr. Jared Mack gave a presentation of the Beginning Farmer Revolving Loan Fund – December 31, 2022. BND received an unmodified opinion on the financial statements with no findings in terms of internal controls.

Mr. Mack gave a presentation of the North Dakota Guaranteed Student Loan Program – December 31, 2022. BND received an unmodified opinion on financial statements with no findings in terms of internal controls.

Mr. Mack gave a presentation of Independent Auditor's Report and Financial Statement – December 31, 2022. The Bank received an unmodified opinion on the financial accounting standards board based audit, and an adverse opinion on the US Generally Accepted Accounting Principles based audit. The reason for this is because the Bank is a state agency, required to report under government accounting standards, so under generally accepting auditing standards, Eide Bailley cannot give a clean opinion over a government that does not report on government accounting. If it was FASB only, it would be an unmodified opinion, but because it is not, an adverse opinion had to be given. On the FASB side, no internal controls deficiencies were found. There were no findings, deficiencies, or noncompliance found in the GASB report.

Mr. Todd Steinwand gave a presentation of the 2022 BND Annual Report. The Bank reported total record assets of \$10.2 billion at year-end in 2022 and had record profits of \$191 million. The growth enabled the Bank to increase its loan portfolio to a record \$5.4 billion in loans to the state's farmers and ranchers, business owners and students in North Dakota. The return on investment to North Dakota was 19% and BND administers nearly \$1 billion in legislative-directed loan programs, including school construction, state infrastructure, water projects and disaster recovery. The bank originated or renewed \$2.8 billion in loans in 2022, and Mr. Steinwand said that it is the partnership with all the other banks that drives these numbers.

Ms. Lori Leingang and Mr. Steinwand presented for consideration of approval the 2022-2024 BND Strategic Plan. The strategic plan was previously approved with five strategies, each with various initiatives, but there were four initiatives that were added since the initial approval of the plan. The four initiatives that were added are as follows:

1. Strategy #3: Evaluate loan programs to ensure they meet today's needs by reviewing out-of-state lending strategies.
2. Strategy #3: Evaluate loan programs to ensure they meet today's needs by participating in the statewide cash management study.
3. Strategy #3: Determine the role of BND related to ESG (environmental, social and corporate governance) in ND by leading the statewide initiative to study ESG and make recommendations to the 2025 legislative session.
4. Strategy #5: Effectively communicate the bank's financial performance to key stakeholder's by working with the Industrial Commission, and studying the feasibility and desirability of creating an employee recruitment and retention incentive program.

It was moved by Commissioner Goehring and seconded by Attorney General Wrigley that the Industrial Commission approve the 2022-2024 Bank of North Dakota Strategic Plan.

On a roll call vote, Governor Burgum, Attorney General Wrigley, and Commissioner Goehring voted aye. The motion carried unanimously.

Mr. Steinwand presented the March 15, 2023, Non-confidential Finance and Credit Committee Minutes.

Mr. Steinwand presented the March 16, 2023, Non-confidential Advisory Board Minutes.

Under other Bank of North Dakota business, Ms. Leingang presented a memo regarding a BND Advisory Board request for an equity increase for the President of Bank of North Dakota, Todd Steinwand, as part of the Bank's equity pool distribution plan. The recommendation is based on an analysis at the 50th percentile for CEO compensation, and does not include incentive compensation. The requested adjustments include a 6% increase effective 6-1-2023 from the Legislative equity pool and a 6% Legislative increase effective 7-1-2023. This would result in an 85% compa-ratio, and Mr. Steinwand has not had a salary increase since he took the role in July 2021. This proposal was discussed and approved by the Advisory Board at their meeting on April 20, 2023.

It was moved by Commissioner Goehring and seconded by Attorney General Wrigley that the Commission approve the equity increase for the BND President position as stated in the memo presented.

On a roll call vote, Governor Burgum, Attorney General Wrigley, and Commissioner Goehring voted aye. The motion carried unanimously.

It was moved by Attorney General Wrigley and seconded by Governor Burgum that under the authority of North Dakota Century Code Sections 6-09-35, 44-04-18.4, 44-04-19.1, 44-04-19.2, the Industrial Commission enter into executive session for the purposes Bank of North Dakota confidential business, for attorney consultation related to the North Dakota Mill and Elevator, and for Department of Mineral Resources negotiation strategy regarding Abandoned Well Plugging and Site Restoration Fund reimbursements.

On a roll call vote, Governor Burgum, Attorney General Wrigley, and Commissioner Goehring voted aye. The motion carried unanimously.

The Commission is meeting in executive session regarding Bank of North Dakota business pursuant to N.D.C.C. 6-09-35 to consider those items listed on the agenda under Bank of North Dakota confidential business. Only Commission members, their staff, Commission staff, and BND staff will participate in that executive session.

After the Bank of North Dakota executive session, the Commission will meet in executive session for attorney consultation related to the North Dakota Mill and Elevator. Only Commission members, their staff, Commission staff, and North Dakota Mill and Elevator staff will participate in that executive session.

After the Mill and Elevator executive session, the Commission will meet in executive session regarding Department of Mineral Resources negotiation strategy regarding Abandoned Well Plugging and Site Restoration Fund reimbursements. Only Commission members, their staff, Commission staff, and DMR staff will participate in that executive session.

Any formal action taken by the Commission will occur after it reconvenes in open session.

Governor Burgum reminded the Commission members and those present in the executive sessions that the discussion must be limited to the announced purposes which is anticipated to last approximately 1 hour and 15 minutes.

The executive session began at 1:55 p.m.

The Meeting Closed to the Public for Executive Session Pursuant to NDCC 6-09-35, 44-04-18.4, 44-04-19.1, 44-04-19.2.

BANK OF NORTH DAKOTA EXECUTIVE SESSION

Industrial Commission Members Present

Governor Doug Burgum
Attorney General Drew H. Wrigley
Agriculture Commissioner Doug Goehring

Bank of North Dakota Members Present

Todd Steinwand, BND
Rob Pfennig, BND
Kirby Evanger, BND
Lori Leingang, BND

Others in attendance

Ryan Norrell	Governor's Office
John Reiten	Governor's Office
Jace Beehler	Governor's Office
Dutch Bialke	Dept. of Agriculture
Karen Tyler	Industrial Commission Office
Reice Haase	Industrial Commission Office
Brenna Jessen	Industrial Commission Office

NORTH DAKOTA MILL AND ELEVATOR EXECUTIVE SESSION

Industrial Commission Members Present

Governor Doug Burgum
Attorney General Drew H. Wrigley
Agriculture Commissioner Doug Goehring

ND Mill and Elevator Members Present

Vance Taylor, ND Mill
Cathy Dub, ND Mill

Others in attendance

Ryan Norrell	Governor's Office
John Reiten	Governor's Office
Dutch Bialke	Dept. of Agriculture
Steve Nelson	Attorney General's Office
Karen Tyler	Industrial Commission Office
Reice Haase	Industrial Commission Office
Brenna Jessen	Industrial Commission Office

DEPARTMENT OF MINERAL RESOURCES EXECUTIVE SESSION

Industrial Commission Members Present

Governor Doug Burgum

Attorney General Drew H. Wrigley

Agriculture Commissioner Doug Goehring

DMR Members Present

Lynn Helms, DMR

Mark Bohrer, DMR

Others in attendance

Ryan Norrell	Governor's Office
John Reiten	Governor's Office
Dutch Bialke	Dept. of Agriculture
Steve Nelson	Attorney General's Office
Karen Tyler	Industrial Commission Office
Reice Haase	Industrial Commission Office
Brenna Jessen	Industrial Commission Office

The executive session ended at 3:36 p.m. and the Commission reconvened in open session.

During the Bank of North Dakota executive session, the Commission discussed the Bank of North Dakota confidential items listed on the agenda.

During the Mill and Elevator executive session, the Commission consulted with its attorney.

During the Department of Mineral Resources executive session, the Commission discussed negotiation strategy related to Abandoned Well Plugging and Site Restoration Fund reimbursements.

No formal action was taken by the Commission in any of the three executive sessions.

NORTH DAKOTA MILL AND ELEVATOR

Mr. Vance Taylor presented a Review of Operations, 3rd Quarter Ended March 31, 2023. Profits for the 3rd quarter of the year were \$4,809,663 compared to \$3,268,737 last year. Operating activity for the nine months ending March 2023 resulted in a profit of \$11,315,019 compared to \$9,660,882 last year, which is an increase of 17.1%. 3rd quarter sales were \$128,057,893 compared to \$121,287,778 last year, and sales for the nine months ended March 2023 were \$406,765,188 compared to \$333,604,323 last year, which is an increase of 21.9%

Under other business, Mr. Taylor gave an update on the Midds handling and storage facility that is currently under construction.

NORTH DAKOTA DEPARTMENT OF MINERAL RESOURCES

Dr. Lynn Helms presented for approval the following cases:

- i. **Case No. 29888, Order No. 32474:** Application of Blue Flint Sequester Company, LLC requesting consideration for the geologic storage of carbon dioxide in the Broom Creek Formation from the Blue Flint Ethanol Facility in the storage facility located in Sections 11, 12, 13, 14, and 24, Township 145 North, Range 83 West and Sections 6, 7, 8, 17, 18, and 19, Township 145 North, Range 82 West, McLean County, North Dakota pursuant to North Dakota Administrative Code Section 43-05-01.
- ii. **Case No. 29889, Order No. 32475:** A motion of the Commission to consider the amalgamation of the storage reservoir pore space, in which the Commission may require that the pore space owned by nonconsenting owners be included in the geologic storage facility and subject to geologic storage, as required to operate the Blue Flint Sequester Company, LLC storage facility located in Sections 11, 12, 13, 14, and 24, Township 145 North, Range 83 West and Sections 6, 7, 8, 17, 18, and 19, Township 145 North, Range 82 West, McLean County, North Dakota, in the Broom Creek Formation, pursuant to North Dakota Century Code Section 38-22-10.
- iii. **Case No. 29890, Order No. 32476:** A motion of the Commission to determine the amount of financial responsibility for the geologic storage of carbon dioxide from the Blue Flint Ethanol Facility in the storage facility located in Sections 11, 12, 13, 14, and 24, Township 145 North, Range 83 West and Sections 6, 7, 8, 17, 18, and 19, Township 145 North, Range 82 West, McLean County, North Dakota, in the Broom Creek Formation, pursuant to North Dakota Administrative Code Section 43-05-01-09.1.

It was moved by Commissioner Goehring and seconded by Attorney General Wrigley that the Industrial Commission approves Order No. 32474 issued in Case No. 29888 approving the application of Blue Flint Sequester Company, LLC for the geologic storage of carbon dioxide in the Broom Creek Formation in Sections 11, 12, 13, 14 and 24, Township 145 North, Range 83 West and Sections 6, 7, 8, 17, 18 and 19, Township 145 North, Range 82 West, McLean County, North Dakota, pursuant to North Dakota Administrative Code Section 43-05-01, and

that the Industrial Commission approves Order No. 32475 issued in Case No. 29889 approving the amalgamation of the storage reservoir pore space, and including the pore space owned by nonconsenting owners in the geologic storage facility and subject to geologic storage, as required to operate the Blue Flint Sequester Company, LLC storage facility located in Sections 11, 12, 13, 14 and 24, Township 145 North, Range 83 West and Sections 6, 7, 8, 17, 18 and 19, Township 145 North, Range 82 West, McLean County, North Dakota, in the Broom Creek Formation, pursuant to North Dakota Century Code Section 38-22-10, and

that the Industrial Commission approves Order No. 32476 issued in Case No. 29890 approving the motion of the Commission to determine the amount of financial responsibility for the geologic storage of carbon dioxide from the Blue Flint Ethanol Facility, LLC storage facility located in Sections 11, 12, 13, 14 and 24, Township 145 North, Range 83 West and Sections 6, 7, 8, 17, 18 and 19, Township 145 North,

Range 82 West, McLean County, North Dakota, in the Broom Creek Formation, pursuant to North Dakota Administrative Code Section 43-05-01-09.1.

On a roll call vote, Governor Burgum, Attorney General Wrigley, and Commissioner Goehring voted aye. The motion carried unanimously.

- iv. **Case No. 29951, Order No. 32559:** In the matter of a hearing called on a motion of the Commission to consider the name change of the Squaw Gap Field and any associated pools, McKenzie County, ND, and for such other and further relief as the Commission deems appropriate.

It was moved by Commissioner Goehring and seconded by Attorney General Wrigley that the Industrial Commission approves Order No. 32559 issued in Case No. 29951 approving the motion of the Commission to change the name of the Squaw Gap Field and any associated pools, McKenzie County, ND, to Homesteaders Gap Field, and/or such further relief.

On a roll call vote, Governor Burgum, Attorney General Wrigley, and Commissioner Goehring voted aye. The motion carried unanimously.

Mr. Ed Murphy gave a presentation of the Geological Survey Division Quarterly Report. Geologists from two oil companies, two consulting geologists, and scientists from EERC and the Geological Survey, as well as students and professors from the UND Dept. of Geology and Geological Engineering, and Petroleum Engineering studied 6,049 feet of core during the first quarter of 2023. In addition, there was 5,846 feet of core generating 9,492 standard photographs for the subscription site. On April 25th, the eighth critical minerals report in the last six years was released. There were 22 geological sections from the upper part of the Sentinel Butte Formation into the overlying Golden Valley Formation and 122 rock samples were collected for critical mineral analyses.

Lignite in the lower Bear Den Member of the Golden Valley Formation contain the highest concentrations of rare earth elements yet reported from North Dakota, and the elevated concentrations were present in 60-70% of the lower Bear Den Member samples that were collected across a five-county area in west-central North Dakota. Enriched rare earth elements include neodymium, praseodymium, dysprosium, gadolinium, terbium, and scandium. Additionally, enrichment was found in this horizon for a number of other critical minerals including gallium, germanium, vanadium, titanium, antimony, and molybdenum.

Dr. Helms gave an update on Litigation:

- i. Case No. 31-2020-CV-0018 – Northern Oil and Gas, Inc. vs. Continental Resources, Inc; Board of University and School Lands and ND Industrial Commission et al – Ordinary High Water Mark challenge
- ii. Blue Appaloosa – appeal of Industrial Commission Order 31208
- iii. Case No. 27-2022-CV-00305 – Blue Steel Oil and Gas, LLC v. North Dakota Industrial Commission, Slawson Exploration Company, Inc and White Butte Oil Operations, LLC – appeal of Industrial Commission Order 31501
- iv. Liberty Resources vs. NDIC et al – appeal of Industrial Commission Order 31792
- v. North Dakota Industrial Commission v. U.S. Department of Interior – quarterly lease sales

- vi. Dominek v Equinor et al – allocation of production from overlapping spacing units
- vii. Spec Tech v NDIC – appeal of Industrial Commission Order 31900 – settled

Dr. Helms gave an update on Bureau of Land Management North Dakota Resource Management Plan revision. The comments were submitted Monday, May 22nd, and Dr. Helms thanked everyone for their hard work on getting those comments submitted.

Dr. Helms gave an update on Dakota Access Pipeline Environmental Impact Statement cooperating agency comments. There was a consultation on May 3rd, 2023 and it has gone silent since then.

Dr. Helms presented for consideration of approval the submittal of agency comments related to the Bureau of Land Management proposed rule to re-define “conservation” in the context of land use – Comments due June 20, 2023.

It was moved by Commissioner Goehring and seconded by Attorney General Wrigley that the Industrial Commission approves the submittal of agency comments related to the Bureau of Land Management proposed rule to re-define “conservation” in the context of land use, and directs the Director of the Department of Mineral Resources to draft and submit comments on behalf of the Commission prior to the public comment deadline.

On a roll call vote, Governor Burgum, Attorney General Wrigley, and Commissioner Goehring voted aye. The motion carried unanimously.

Governor Burgum commented with a quote from Theodore Roosevelt stating, “Conservation means as much development as it does preservation.” He followed it up with stating that they are not talking about conservation here, they are talking about preservation where nobody sets foot, cuts trees, nobody hunts, or drills a well. He stated that there needs to be an objection to the usage of the word conservation in this instance, because it is not what they are doing. Dr. Helms agreed and said they are redefining conservation in a vastly different way than how President Roosevelt defined it, and emphasized that preservation and conservation have very different meanings.

NORTH DAKOTA PUBLIC FINANCE AUTHORITY

Ms. DeAnn Ament presented for consideration of approval an amendment to 2022 Legacy Fund Infrastructure Program Bonds’ Authorizing Resolution.

It was moved by Commissioner Goehring and seconded by Attorney General Wrigley that the Industrial Commission approves the amendment to 2022 Legacy Fund Infrastructure Program Bond’s Authorizing Resolution.

On a roll call vote, Governor Burgum, Attorney General Wrigley, and Commissioner Goehring voted aye. The motion carried unanimously.

A RESOLUTION WAS MADE

WHEREAS, the North Dakota Public Finance Authority (the “Authority”) is duly constituted as an instrumentality of the State of North Dakota exercising public and governmental functions

under the operation, management and control of the Industrial Commission of North Dakota (the "Industrial Commission"), pursuant to Chapter 6-09.4, North Dakota Century Code (the "Act");

WHEREAS, on July 19, 2022, the Authority issued its Legacy Fund Infrastructure Program Bonds, Federally Taxable Series 2022 in the aggregate principal amount of \$320,915,000 (the "2022 Bonds"), pursuant to the Act and the resolution of the Industrial Commission adopted April 29, 2022 (the "2022 Resolution") with respect thereto, the proceeds of which were to be allocated by the Bank of North Dakota to the funding of certain infrastructure projects and programs;

WHEREAS, the 2022 Resolution authorized proceeds of the 2022 Bonds to be used to fund transfers to the Bank of North Dakota for allocation to, among other projects, the Highway Fund in the amount of \$54,000,000; provided that the allocation to the Highway Fund was subject to Section 10 of HB 1431 enacted by the Sixty-seventh Legislative Assembly ("HB 1431") which provided that up to \$35 million of the funds allocated to the Highway Fund not required to match federal funds for highway projects as of October 1, 2022 was to be transferred to the Infrastructure Revolving Loan Fund at the direction of the Office of Management and Budget (such provision of Section 10 of HB 1431 (codified as Section 10 of Chapter 80 of the 2021 Session Laws) is hereinafter referred to as the "Contingent Reallocation Clause");

WHEREAS, the transfer of the proceeds of the 2022 Bonds to the Bank of North Dakota for allocation to the Highway Fund is to be made pursuant to a Project Agreement dated as of July 1, 2022 (the "Project Agreement") between the Authority and the Bank of North Dakota;

WHEREAS, the \$35 million portion of the proceeds of the 2022 Bonds that was subject to the Contingent Reallocation Clause remains on deposit in the Project Fund under the Indenture of Trust (the "Trust Indenture") dated as of July 1, 2022 between the Authority and the Bank of North Dakota, as trustee;

WHEREAS, Section 15 of HB 1012 enacted by the Sixty-eighth Legislative Assembly ("HB 1012") amended Section 10 of HB 1431 (codified as Section 10 of Chapter 80 of the 2021 Session Laws) to, among other things, delete the Contingent Reallocation Clause;

WHEREAS, the Industrial Commission desires to supplement and amend the 2022 Resolution to conform with the provisions of Section 15 of HB 1012 by deleting the Contingent Reallocation Clause from the 2022 Resolution and authorizing any necessary or appropriate supplements and amendments to the Trust Indenture, the Project Agreement and any other documents, agreements or instruments in connection with the 2022 Bonds to conform to the provisions of Section 15 of HB 1012;

NOW, THEREFORE, BE IT RESOLVED by the Industrial Commission of North Dakota as follows:

ARTICLE I

Authority and Definitions

Section 1.01. Resolution. This Resolution is adopted in accordance with the provisions of and pursuant to the authority contained in the Act.

Section 1.02. Definitions. All terms defined in Article I of the Trust Indenture, in the 2022 Resolution or in the Act shall have the same meanings, respectively, in this Resolution and with respect to the 2022 Bonds as such terms are given in said Article I of the Trust Indenture, in the 2022 Resolution or in the Act.

ARTICLE II

Amendment of 2022 Resolution

Section 2.01. Change in Use of Proceeds of 2022 Bonds. In conformity with the amendment of Section 10 of HB 1431 (codified as Section 10 of Chapter 80 of the 2021 Session Laws) by Section 15 of HB 1012, the 2022 Resolution is supplemented and amended to delete the Contingent Reallocation Clause, such that the fourth whereas clause of the 2022 Resolution is amended and restated in its entirety as follows:

WHEREAS, the Authority proposes to issue up to \$330,000,000 Legacy Fund Infrastructure Program Bonds in one or more series (the "Bonds") to fund transfers to the Bank of North Dakota for allocation to the Projects in the following estimated amounts:

Fargo Diversion Project	\$216,500,000
Highway Fund	54,000,000
NDSU Agriculture Products Facility	35,000,000

and to fund capitalized interest on the Bonds and provide for the payment of the costs of issuance of the Bonds;

Section 2.02. Effect on 2022 Bonds. Notwithstanding any other provision of this Resolution, nothing in this Resolution is intended to, nor shall anything in this Resolution be construed or interpreted to, adversely affect in any manner the authorization of the 2022 Bonds, the security for the 2022 Bonds or the payment of the 2022 Bonds. Section 2.01 of this Resolution affects only the use of the proceeds of the 2022 Bonds.

Section 2.03. Effect on 2022 Resolution. Except as specifically amended pursuant to Section 2.01 of this Resolution, all provisions of the 2022 Resolution are hereby ratified and shall remain in full force and effect.

ARTICLE III

Amendment of Documents

There is hereby approved and there shall be executed by the Chairman of the Industrial Commission, the Executive Director of the Authority or any Authorized Officer such supplements and amendments to the Trust Indenture, the Project Agreement, the Administrative Agreement or other document, agreement or instrument executed in connection with the issuance of the 2022 Bonds, if any, as may from time to time be deemed necessary or appropriate to conform such documents, agreements or instruments to the amendment of the 2022 Resolution as set forth in Article II of this Resolution, all and in each case as the Chairman of the Industrial Commission, the Executive Director of the Authority or the Authorized Officer may approve, which approval shall be conclusively evidenced by the execution thereof.

ARTICLE IV

Effective Date

This Resolution is effective immediately.

Adopted: May 25, 2023

Ms. Ament presented for consideration of approval the following loan applications:

- i. Grand Forks – Clean Water State Revolving Fund - \$5,607,000.

It was moved by Commissioner Goehring and seconded by Attorney General Wrigley that the Commission approve a \$5,607,000 Clean Water State Revolving Fund loan to the city of Grand Forks.

On a roll call vote, Governor Burgum, Attorney General Wrigley, and Commissioner Goehring voted aye. The motion carried unanimously.

A RESOLUTION WAS MADE

WHEREAS, the Industrial Commission has heretofore authorized the creation of a Clean Water State Revolving Fund Program (the "Program") pursuant to N.D.C.C. chs. 6-09.4 and 61-28.2; and

WHEREAS, the Clean Water State Revolving Fund is governed in part by the Master Trust Indenture dated as of July 1, 2011 (the "Indenture"), between the North Dakota Public Finance Authority (NDPFA) and the Bank of North Dakota (the Trustee); and

WHEREAS, the City of Grand Forks (the "Political Subdivision") has requested a loan in the amount of \$5,607,000 from the Program to construct a domestic lift station and associated forcemains to serve a newly annexed area and provide additional redundancy for wastewater service to the City and East Grand Forks; and

WHEREAS, the NDPFA's Advisory Committee is recommending approval of the Loan; and

WHEREAS, there has been presented to this Commission a form of Loan Agreement proposed to be adopted by the Political Subdivision and entered into with the NDPFA;

NOW, THEREFORE, BE IT RESOLVED by the Industrial Commission of North Dakota as follows:

- 1. The Loan is hereby approved, as recommended by the Advisory Committee.**
- 2. The form of Loan Agreement to be entered into with the Political Subdivision is hereby approved in substantially the form on file and the Executive Director is hereby authorized to execute the same with all such changes and revisions therein as the Executive Director shall approve.**
- 3. The Executive Director is authorized to fund the Loan from funds on hand in the Clean Water Loan Fund established under the Indenture upon receipt of the Municipal Securities described in the Political Subdivisions bond resolution, to submit to the Trustee a NDPFA Request pursuant to the Indenture, and to make such other determinations as are required under the Indenture.**
- 4. The Commission declares its intent pursuant to Treasury Regulations '1.150-2 that any Loan funds advanced from the Federally Capitalized Loan Account shall be reimbursed from the proceeds of bonds issued by the NDPFA under the Indenture.**

Adopted: May 25, 2023

- ii. Jamestown Regional Airport Authority – Capital Financing Program - \$565,000

It was moved by Commissioner Goehring and seconded by Attorney General Wrigley that the Commission approve a \$565,000 Capital Financing Program loan for the Jamestown Regional Airport Authority.

On a roll call vote, Governor Burgum, Attorney General Wrigley, and Commissioner Goehring voted aye. The motion carried unanimously.

A RESOLUTION WAS MADE

WHEREAS, Jamestown Regional Airport Authority (the "Political Subdivision") has requested a loan in the amount of \$565,000 (the "Loan") from the North Dakota Public Finance Authority (the "NDPFA") to refinance the 2018 passenger parking lot mill and overlay; and

Whereas, the Political Subdivision will issue revenue bonds payable with passenger facility charge revenues as well as City and County mill levy to repay the loan;

Whereas, upon a review of the loan application, the NDPFA's Advisory Committee is recommending approval of the Loan; and

NOW, THEREFORE, BE IT RESOLVED by the Industrial Commission of North Dakota as follows:

1. The Loan is hereby approved.

2. The Executive Director is authorized to fund the Loan as an eligible investment with funds available under the NDPFA's Capital Financing Program General Bond Resolution Operating Account, upon receipt of the Municipal Securities described and authorized to be issued in the Resolution to be adopted by the Political Subdivision's governing body.

Adopted: May 25, 2023

Ms. Ament gave a presentation of State Revolving Fund loans approved by the Advisory Committee:

- i. Milnor – Drinking Water State Revolving Fund - \$119,000. They will also receive a \$98,175 grant from the ND Department of Emergency Services and use \$100,242 of local ARPA funds. The project will update and incorporate the existing supervisory control system for the lift stations into the water control system. The request term is 20 years and the City will issue revenue bonds payable with water user fees. The Public Finance Authority's Advisory Committee approved the loan at their May 16, 2023 meeting.

LIGNITE RESEARCH, DEVELOPMENT AND MARKETING PROGRAM

Mr. Reice Haase gave a presentation of the Lignite Research, Development and Marketing Program Project Management and Financial Report. There are currently 29 active projects, \$53 million that has been awarded, and \$19.2 million outstanding committed dollars.

Mr. Haase presented for consideration of approval the following Lignite Research, Development and Marketing Grant Round 102 applications:

- i. LRC-102A Lignite Energy Council: Education Program, \$450,000
- ii. LRC-102B EERC: Redundancy Study for CO2 Capture at Coal Creek Station, \$837,313
- iii. LRC-102C UND & EERC: Coal Creek Carbon Capture: Geologic CO2 Storage Complex Development, \$6,119,690
- iv. LRC-102D Americarbon Products, LLC: Engineering Design and Feasibility Analysis for Commercial Graphite and Asphalt Manufacturing from Lignite-Derived Carbon Pitch, \$700,000
- v. LRC-102E UND & EERC: Williston Basin CORE-CM Initiative – Continued Assessment, \$1,050,000
- vi. LRC-102F UND: Assessment of Lignite-Based Industrial Residues for Value-Added Product Creation through CO2 Mineralization, \$250,000
- vii. LRC-102G UND: Recovery and Refining of Rare Earth Elements from Lignite Mine Wastes, \$2,000,000

It was moved by Commissioner Goehring and seconded by Attorney General Wrigley that the Industrial Commission accepts the recommendation of the Lignite Research Council and approve funding of the following seven projects in the total amount of \$11,407,003 and authorizes the Office of the Industrial Commission to enter into contracts with the applicants as noted below:

- i. LRC-102A Lignite Energy Council: Education Program, \$450,000**
- ii. LRC-102B EERC: Redundancy Study for CO2 Capture at Coal Creek Station, \$837,313**
- iii. LRC-102C UND & EERC: Coal Creek Carbon Capture: Geologic CO2 Storage Complex Development, \$6,119,690**
- iv. LRC-102D Americarbon Products, LLC: Engineering Design and Feasibility Analysis for Commercial Graphite and Asphalt Manufacturing from Lignite-Derived Carbon Pitch, \$700,000**
- v. LRC-102E UND & EERC: Williston Basin CORE-CM Initiative – Continued Assessment, \$1,050,000**
- vi. LRC-102F UND: Assessment of Lignite-Based Industrial Residues for Value-Added Product Creation through CO2 Mineralization, \$250,000**
- vii. LRC-102G UND: Recovery and Refining of Rare Earth Elements from Lignite Mine Wastes, \$2,000,000**

With no further business, the Industrial Commission meeting adjourned at 5:05 p.m.

North Dakota Industrial Commission

Karen Tyler, Interim Director and Secretary

Memorandum

TO: Governor Doug Burgum, Chairman FR: Karen Tyler, Interim ED
Attorney General Drew H. Wrigley
Agriculture Commissioner Doug Goehring

DT: June 29, 2023 RE: Salary increases

Senate Bill 2015 adopted by the 2023 Legislative Assembly states in part:

The 2023-25 biennium compensation adjustments for permanent state employees are to average 6 percent per eligible employee for the first fiscal year of the biennium and are to average 4 percent per eligible employee for the second year of the biennium. The increases for the first year of the biennium are to be given beginning with the month of July 2023, to be paid in August 2023, and for the second year of the biennium are to be given beginning with the month of July 2024, to be paid in August 2024. Increases for eligible state employees are to be based on documented performance and are not to be the same percentage increase for each employee.

The Industrial Commission Agency Directors continue to lead with excellence and a dedicated commitment to serving North Dakota citizens and businesses, and supporting the Industrial Commission in executing on its vast portfolio of responsibilities. I am recommending the following salary increases effective July 1, 2023:

	<u>Current</u>	<u>6%</u>	<u>New</u>
DeAnn Ament	128,503	7,710	136,213
Dave Flohr	153,690	9,222	162,912
Lynn Helms	276,271	16,576	292,847
Vance Taylor	358,378	21,503	379,881

Regarding the Interim Executive Director salary, my current compensation from the Industrial Commission is \$60,000. A 6% increase is \$3,600.

Respectfully submitted for your consideration,

KT