

## **2015 Project Abstract**

For the Period Ending June 30, 2018

**PROJECT TITLE:** Reintroduction and Interpretation of Bison in Minnesota State Parks

**PROJECT MANAGER:** Ed Quinn

**AFFILIATION:** MN Dept. of Natural Resources – Division of Parks & Trails

**MAILING ADDRESS:** 500 Lafayette Rd. Box 39

**CITY/STATE/ZIP:** St. Paul, MN 55155

**PHONE:** 651-259-5594

**E-MAIL:** Edward.Quinn@state.mn.us

**WEBSITE:** [https://www.dnr.state.mn.us/state\\_parks/minneopa/bison.html](https://www.dnr.state.mn.us/state_parks/minneopa/bison.html)

**FUNDING SOURCE:** Environment and Natural Resources Trust Fund. Additional funding was provided through Parks and Trails Legacy Fund (2303) and the State Parks Working Capital Account (2001).

**LEGAL CITATION:** M.L. 2015, Chp. 76, Sec. 2, Subd. 03h

**APPROPRIATION AMOUNT:** \$600,000

**AMOUNT SPENT:** \$590,777 (\$293,056 is encumbered in construction contract for the bison handling facility at Minneopa. Construction is underway).

**AMOUNT REMAINING:** \$9,223

### **Overall Project Outcome and Results**

This project helps to preserve the genetics and population of American bison (*Bison bison*), a species classified as Near-Threatened by the International Union for the Conservation of Nature and provide more and better opportunities for the public to learn about bison and prairie ecosystems. Eleven bison were reintroduced to Minneopa State Park in the fall, 2015. That population has now grown to 20 and will continue to expand until the population reaches about 40, the carrying capacity for the site. Annual Minneopa park attendance has increased approximately 70% since the bison were introduced. Further evidence of this increase is demonstrated by a 98% increase in annual permit sales compared to pre-reintroduction as well as a 66% increase in daily permit sales. Approximately 1,100 vehicles utilize the bison drive through in the park each week. Tours using the customized “safari” vehicle, which provides visitors with up-close opportunities to view bison and prairie at Blue Mounds State Park were initiated over Memorial Day weekend, 2018. Nearly 1,000 visitors had taken the tour through Labor Day with 98% saying they would recommend it to others. This project has received extraordinary amounts of publicity, from the initial stories posted about the re-introduction which were picked up by over 100 media outlets to continued TV and radio interviews and a MN Lottery spot that should start airing this fall.

### **Project Results Use and Dissemination**

Information about this project has been shared through a variety of communication tools. Approximately 290,000 visitors to Minneopa are able to experience the bison and prairie ecosystems through interpretive programs, signage and radio broadcast. Another 65,000 visitors to Blue Mounds State Park learn about bison and prairies through programs and signage with approximately 1,000 annually able to participate in “safari” tours out into the prairie for close-ups looks at bison and the prairie ecosystem. Stories about the initial reintroduction at Minneopa were disseminated by over 100 media outlets across the country. The project continues to be highlighted in television and radio interviews. A MN Lottery spot was recently filmed as well as a commercial with Explore Minnesota tourism.



# Environment and Natural Resources Trust Fund (ENRTF) M.L. 2015 Work Plan

**Date of Report:** January 31, 2019

**Date of Work Plan Approval:** June 11, 2015

**Project Completion Date:** ~~December 31, 2017~~ June 30, 2019

**Does this submission include an amendment request?** Yes

**PROJECT TITLE:** Reintroduction and Interpretation of Bison in Minnesota State Parks

**Project Manager:** Edward Quinn

**Organization:** MN Department of Natural Resources – Division of Parks & Trails

**Mailing Address:** Box 39, 500 Lafayette Road

**City/State/Zip Code:** St. Paul, MN 55155

**Telephone Number:** (651) 259-5594

**Email Address:** Edward.Quinn@state.mn.us

**Web Address:**

- [MNDNR Minneopa Reintroduction Webpage](#)
- [MNDNR Minneopa Bison Reintroduction plan amendment](#)
- [MNDNR Prairie and Bison tours Webpage](#)
- [Minnesota Zoo Bison Conservation Webpage](#)

**Location:** Blue Earth & Rock counties (include map)

**Total ENRTF Project Budget:**

**ENRTF Appropriation:** \$600,000

**Amount Spent:** \$495,107

*\*\$95,670 is encumbered in construction contracts for the bison handling facility & completion of the wetland. Both projects are underway and will be completed by June 30, 2019.*

**\*Balance:** \$104,893

**Legal Citation:** M.L. 2015, Chp. 76, Sec. 2, Subd. 03h

**Appropriation Language:**

\$600,000 the first year is from the trust fund to the commissioner of natural resources to preserve American bison by reintroducing Bison to Minneopa state park and provide interpretive learning opportunities at Blue Mounds and Minneopa State Parks. This appropriation is available until June 30, 2018, by which time the project must be completed and final products delivered.

**I. PROJECT TITLE:** Reintroduction and Interpretation of Bison in Minnesota State Parks

**II. PROJECT STATEMENT:**

This project will help preserve American bison (*Bison bison*), provide more and better interpretive opportunities to learn about bison and prairie ecosystems, and improve prairie quality.

- The International Union for the Conservation of Nature classifies bison as Near-Threatened due to the small number (< 32,000 in N. America) managed to preserve the species in the public interest. Existing threats include genetic manipulation of commercial herds for marketable traits, habitat loss, cattle gene introgression & small population effects. Genetic testing of most of the approx. 100 bison at Blue Mounds State Park has shown the herd to be free of cattle mitochondrial DNA and containing 99.8% bison nuclear DNA. This genetic composition and diversity is on par with several Dept. of Interior/National Park herds and makes the Blue Mounds herd an excellent candidate to contribute to the conservation of the genome and population of wild bison. In order to sustain the genetic viability of the MN population and play a role in national conservation efforts requires increasing the MN population to 400-500 animals utilizing several DNR sites and the MN Zoo. This project will aid in the reintroduction of bison to a second location, Minneopa State Park, in order to begin growing DNR's bison population.
- Re-introducing bison to Minneopa requires installation of fencing, well-drilling, construction of a handling facility and construction of a watering pond within the bison range at the park. Fencing and well-drilling efforts are underway utilizing other funding sources. This project will help provide the monies needed for design and construction of the handling facility and watering pond.
- This project will also provide the means to create excellent opportunities to view bison up close via personal vehicle or public tours and learn about the history and importance of bison and prairie ecosystems. It is anticipated that these new opportunities will increase visitation at Minneopa State Park by > 32,000 and at Blue Mounds by > 1,000 visitors.
- At Blue Mounds, this funding will support acquisition of an ADA-accessible, off-highway safari vehicle to transport visitors into the prairie among the bison and the staffing/signage needed for visitors to learn about bison and the prairie ecosystems in which they live.
- At Minneopa these monies will be used to obtain critical informational, regulatory and safety signage and road improvements to insure that visitors will be able to experience bison and prairies three or more seasons a year.
- Additionally, reintroduction of bison to Minneopa will aid in the restoration/maintenance of remnant prairie in the park. Bison feed primarily on grasses and use their horns to create wallows (shallow depressions). These activities provide variation in vegetative species/structure which improves wildlife diversity on-site.

**III. OVERALL PROJECT STATUS UPDATES:**

**Project Status as of January 1, 2016:**

This project is funded by multiple sources. Parks & Trails Legacy funds and general fund monies were used in 2014-15 to conduct natural/cultural resource reviews of the reintroduction site and install necessary infrastructure (fencing, well and waterer, etc.) in preparation for the reintroduction. 11 bison were released at Minneopa State Park at the end of September. Vehicle traffic at Minneopa has increased approximately 270% as a result of the reintroduction. \$1,058 of Environment and Natural Resources Trust Fund (ENRTF) was used to pay for interpretive and safety signage at Minneopa State Park. \$41,000 is encumbered to pay for design services for the bison handling facility (Activity 1), watering pond (Activity 2) and wildlife road upgrade (Activity 3). \$45,000 is encumbered for an interpretive naturalist to provide programming for the Blue Mounds bison herd.

### **Project Status as of July 1, 2016:**

#### LCCMR Project Funding

- A 5" gravel lift was completed in spring of 2016 on the wildlife viewing drive through the bison range at Minneopa State Park to provide better access for visitors coming to see the bison.
- Site visits to other bison handling facilities are taking place as well as meetings with MN Zoo staff to develop a design for the handling facility.
- After further review of the two watering pond sites identified last year, it was determined that those sites would be too expensive for the surface area/depth of water that would be created. A third, much better site, was identified and mapped by DNR Engineering this spring. Information needed for the joint application for activities affecting water resources is being prepared for review by the local Technical Evaluation Panel.
- An RFP for bison exhibits at Blue Mounds and Minneopa State Parks is currently open and will close July 31, 2016.

#### Other Highlights Using Alternative Funding Sources

- Three calves were born at Minneopa this spring increasing the herd size to 14.
- Arrangements have been made with Theodore Roosevelt National Park to obtain a yearling bull in the fall of 2016 to improve the genetic diversity of the MN Bison Conservation Herd.
- An additional strand of wire was added to the entire fence to provide better security for bison calves and still provide wildlife passage.

### **Project Status as of January 1, 2017:**

#### LCCMR Project Funding

- A contract was awarded for the design and construction of outdoor exhibits at Blue Mounds and Minneopa State Parks. Staff worked with Dakota advisors to insure a balanced perspective. Exhibits are at 50% design and are scheduled to be installed in early June 2017 at both locations.
- Development of the bison wetland continues to be a challenge. A third location was identified and designed. However, further evaluation suggests that surface flow may be insufficient. Another location was suggested by the local Technical Evaluation Panel. That site has now been delineated and a preliminary design completed. Groundwater flow will be monitored in the upcoming season.
- Design meetings/discussions continue between MN Zoo staff and DNR staff regarding handling facility design. Plans are to bid the project in the spring with construction in the summer of 2017.

#### Other Highlights Using Alternative Funding Sources

- This project continues to be very popular with the public and media. Many additional programs were provided to the public and stories continue to appear on regional TV news and local radio stations – see dissemination section for details.
- Vehicle permit sales at Minneopa State Park have increased approximately 80% as a result of bison being reintroduced to the park.
- A yearling bull from Theodore Roosevelt National Park was obtained in the fall of 2016 to improve the genetic diversity of the MN Bison Conservation Herd.

### **Project Status as of July 1, 2017:**

This update was not required

## **Project Status as of January 1, 2018:**

### LCCMR Project Funding

- Activity #1 - A design for the bison handling facility was completed in the fall and a construction bid let in December 2017. Bids came in too high so the design was reviewed and revised. The construction bid will be re-let in February 2018 and awarded in March. Construction is expected to begin in May with completion by August, 2018. \$284,056 in LCCMR funding is pre-encumbered as well as \$60,649 in State Parks Working Capital and \$75,295 in Parks & Trails Legacy monies.
- Activity #2 - A contract for wetland excavation/restoration has been awarded. \$34,496 in LCCMR funds and \$24,705 in Parks & Trails Legacy monies have been encumbered. Safety measures have been installed around the site. Excavation is anticipated to be finished by April 2018, with the project fully completed by fall, 2019.
- Activity #3 – Completed April 2016.
- Activity #4 - Updated safety signage for the bison drive road at Minneopa based on watching user behavior \$3,170 encumbered. Interpretive exhibits were installed in June 2017 at both Blue Mounds and Minneopa at key observation points. An interpretive naturalist 2 was hired July 2017 at 80% FTE providing outreach and developing the vehicle tour at Blue Mounds. The "Bison Buggy" tour vehicle is in the final assembly stage and will be delivered to Blue Mounds in early May 2018. It is built on a customized Ford F250 chassis with seating for 12 and includes a wheelchair lift.

### Other Highlights

- This project continues to be very popular with the public and media. Many additional programs were provided to the public and stories continue to appear on regional TV news and local radio stations – see dissemination section for details.
- Annual park attendance has increased nearly 70% since the bison reintroduction in fall 2015.
- The herd has increased in size to 15 animals – the 11 originally introduced have been augmented by the birth of 3 calves in 2016 and the addition of a yearling bull in fall 2016 from Theodore Roosevelt National Park to improve the genetic diversity of the MN Bison Conservation Herd. It is possible that additional calves will be born in 2018.

## **Project Status as of January 2019:**

### LCCMR Project Funding

- Activity #1 – Due to the issues referenced above, a construction contract was awarded for the bison handling facility in July 2018 and construction began shortly after and continued into the fall. Construction has been suspended due to inclement conditions and will resume in the spring. The handling facility is expected to be completed by May 31, 2019. \$284,056 in LCCMR funding is encumbered as well as \$60,649 in State Parks Working Capital and \$75,295 in Parks & Trails Legacy monies. \$220,495 has been expended.
- Activity #2 – Excavation was completed and the enhanced wetland filled with water and remained so throughout the summer of 2018. The site remains fenced off from the bison till completion of the project in June 2019. Excavated material will be shaped to improve water retention and then the site seeded with additional native species. \$49,987 has been expended with the remainder encumbered to complete the project.
- Activity #3 – Completed April 2016.
- Activity #4 – Tours using the customized accessible “safari” vehicle, which provides visitors with up-close opportunities to view bison and prairie at Blue Mounds State Park were initiated over Memorial Day weekend, 2018. Nearly 1,000 visitors had taken the tour through Labor Day with 98% saying they would recommend it to others.

### Other Highlights

- Eleven bison were reintroduced to Minneopa State Park in the fall, 2015. That population has now grown to 20 and will continue to expand until the population reaches about 40, the carrying capacity for the site (see photo below).
- This project continues to be very popular with the public and media. Many additional programs were provided to the public and stories continue to appear on regional TV news and local radio stations – see dissemination section for details.

### Amendment Request (01/31/19)

We are requesting two amendments to this project:

1. An extension of the project reporting end date to June 30, 2019. Challenges in the processes of designing and bidding the bison handling facility and wetland enhancement delayed the project beyond the anticipated end date. Funds were encumbered in construction contracts prior to 6/30/18 so were preserved for use in completing the project.
2. Apply \$2,273 from the surplus in Activity #4, signage: interpretive, directional and safety category to the shortfall in Activity #4 Interpretive Naturalist 2 to eliminate the negative balance in that category.

### Bison at Minneopa State Park



### Overall Project Outcomes and Results

#### IV. PROJECT ACTIVITIES AND OUTCOMES:

##### ACTIVITY 1: Design and Construct a Humane Bison Handling Facility (Minneopa)

**Budget: \$305,787**

**Description:** This facility is for annual roundup of animals for genetic testing, animal transfers to manage genetic diversity and carrying capacity, micro-chip placement for animal ID and disease prevention/management. It will be designed using Grandin humane livestock handling principles and other recent innovations in bison handling facilities, such as serpentine passageways and a hydraulic cube and squeeze chute (Berlinic Cube). See examples on illustration page).

##### Summary Budget Information for Activity 1:

**ENRTF Budget: \$ 305,787**

**Amount Spent: \$ 220,495**

\*Balance is encumbered in a construction contract

\*Balance: \$ 85,292

Outcome	Completion Date
1. Conduct site visits to view/evaluate bison handling facilities at similar agencies.	06/30/2016
2. Design the handling facility to complement the site identified in 2014.	12/31/2016
3. Prepare bid specifications, request proposals, review proposals, select contractor.	3/1/2017
4. Complete installation/construction of handling facility components.	10/31/2017

**Project Status as of January 1, 2016:**

Work on this activity has not begun. A portion of the \$41,000 encumbered for design services will be used to design the handling facility. Design work will begin in late summer/fall of 2016.

**Project Status as of July 1, 2016:**

Site visits to other bison handling facilities are taking place as well as meetings with MN Zoo staff to develop a design for the handling facility. It is anticipated that the handling facility design will be completed in the fall of 2016 with an RFP going out in early 2017. Approximately \$500.00 has been spent to date on design services.

**Project Status as of January 1, 2017:**

Design meetings/discussions continue between MN Zoo staff and DNR staff regarding handling facility design. Plans are to bid the project in the spring with construction in the summer of 2017.

**Project Status as of July 1, 2017:**

This update was not required.

**Project Status as of January 1, 2018:**

A design for the bison handling facility was completed in fall 2017 and a construction bid let in December 2017. Bids came in too high so the design was reviewed and revised. The construction bid will be re-let in February 2018 and awarded in March. Construction is expected to begin in May with completion by August, 2018. \$284,056 in LCCMR funding is pre-encumbered as well as \$60,649 in State Parks Working Capital and \$75,295 in Parks & Trails Legacy monies.

**Project Status as of September 2018:**

A contract for \$459,989 was awarded in July, 2018 and work is underway. Contract funding included \$284,056 in LCCMR monies, \$80,849 in State Parks Working Capital and \$95,084 from the Parks & Trails Legacy account. The handling facility is expected to be completed by late Fall, 2018.

**Project Status as of January 2019:**

A contract was awarded in July 2018 and construction began shortly after and continued into the fall. Construction has been suspended due to inclement conditions and will resume in the spring. The project is expected to be completed by May 31, 2019.

**Final Report Summary**

**ACTIVITY 2: Design & Construction of a Watering Pond (Minneopa)**

**Budget: \$60,367**

**Description:** Design/construction of a watering pond resembling a "prairie pothole" approx. ¼ acre in size at Minneopa to provide a permanent, no maintenance water source to complement livestock waterers installed in 2014. An isolated water source is necessary to minimize the risk of disease introduction so the source may be a well or spring.

**Summary Budget Information for Activity 2:**

**ENRTF Budget: \$ 60,367**

**Amount Spent: \$ 49,987**

\*Balance is encumbered in a construction contract

Outcome	Completion Date
1. Identify potential pond locations and select site.	08/31/2015
2. Complete pond design.	10/31/2015
3. Prepare bid specifications, request proposals, review proposals, select contractor.	02/01/2016
4. Complete pond construction.	07/31/2016

**Project Status as of January 1, 2016:**

Two pond sites were identified and evaluated by staff during fall of 2015. A survey by DNR Engineering was also conducted this fall at both locations. If there is sufficient funding available or can be augmented by other sources, two ponds may be developed. A joint application for activities affecting water resources is being prepared for review by the local Technical Evaluation Panel to determine if there are wetland issues to be resolved at either site. A portion of the \$41,000 encumbered for design services will be used for design of the site(s). Plans are to design the pond(s) in spring 2016, bid the project in late summer with construction in the fall of 2016.

**Project Status as of July 1, 2016:**

After further review of the two watering pond sites identified last fall, it was determined that those sites would be too expensive for the surface area/depth of water that would be created. A third, much better site, was identified and mapped by DNR Engineering this spring. Information needed for the joint application for activities affecting water resources is being prepared for review by the local Technical Evaluation Panel. Plans are to design the pond by August 2016, bid the project in late summer with construction in the fall of 2016.

**Project Status as of January 1, 2017:**

Development of the bison wetland continues to be a challenge. A third location was identified and designed. However, further evaluation suggests that surface flow may be insufficient. Another location was suggested by the local Technical Evaluation Panel. That site has now been delineated and a preliminary design completed. Groundwater flow will be monitored in the upcoming season.

**Project Status as of January 1, 2018:**

The site selected is a Type 2 wetland (seasonally flooded basin/wet meadow) 95% dominated by reed canary grass. The project will enhance wetland functions/values in approximately 0.9 acres of the 2.4 acres existing wetland by converting it to a shallow prairie pothole. A MN Wetland Conservation Act No-Loss decision was completed 10/10/2017. Communication with the US Army Corps of Engineers (USACE) suggests that based on the location and planned activities they will determine it is not a jurisdictional wetland. Once confirmation from the USACE is received work in the wetland will begin. A contract for wetland excavation/restoration has been awarded. \$34,496 in LCCMR funds and \$24,705 in Parks & Trails Legacy monies have been encumbered. Safety measures have been installed around the site. Excavation is anticipated to be finished by April 2018, with the project fully completed by fall, 2019.

**Project Status as of September 2018:**

Wetland excavation was completed spring of 2018. An approximately one acre wetland has been established in the bison range at Minneopa (see photo below). Excavated material is dewatering and final grading is scheduled to take place in the fall of 2018. Wetland banks were seeded and the wetland filled soon after excavation. It is fenced off from the bison while vegetation is becoming established. The wetland is already being used by a number of mammal, avian, amphibian and invertebrate species. \$34,496 in LCCMR funds and \$24,705 in Parks & Trails Legacy monies were encumbered in a construction contract. An initial payment of \$29,650 has been made to the contractor. The remainder of the amount will be paid after final grading is completed.

**Project Status as of January 2019:**

The excavated site filled with water after the excavation was finished in spring 2018. It has remained full to date (see photo below). The site remains fenced off from the bison till completion of the project in June 2019. Excavated material has been shaped to improve water retention and the site seeded with additional native species.

**Final Report Summary**

**Bison Wetland at Minneopa State Park – Summer 2018**



**ACTIVITY 3: Upgrading of approx. 2.8 miles of Wildlife Viewing Drive (Minneopa). Budget: \$51,157**  
**Description:** A lift of 3"-4" of gravel will be placed on the wildlife viewing drive through the bison range to provide for three season+ observation of bison by visitors similar to the experience at Custer State Park in South Dakota.

**Summary Budget Information for Activity 3:**

**ENRTF Budget: \$ 51,157**  
**Amount Spent: \$ 44,157**  
**Balance: \$ 7,000**

Outcome	Completion Date
1. Prepare bid specifications, review RFP's, select contractor	09/15/2015
2. Oversee contractor/project implementation	11/01/2015

**Project Status as of January 1, 2016:**

A portion of the \$41,000 encumbered for design services will be used in planning the road upgrade. It was determined that it would be best to complete the road upgrade following pond construction. Survey work has been completed for the road upgrade. Plans are to complete road design in spring 2016, bid the project in late summer with construction in the fall of 2016, following pond construction.

**Project Status as of July 1, 2016:**

This project was completed in April 2016. It included prepping and shaping the road surface with heavy equipment and then installing a 5” gravel lift on the wildlife viewing drive through the bison range at Minneopa State Park to provide better access for visitors coming to see the bison.

**Project Status as of January 1, 2017:**

Same as above – project completed in April 2016.

**Project Status as of September 2018:**

Same as above – project completed in April 2016

**Final Report Summary**

**ACTIVITY 4: Connecting Blue Mounds & Minneopa State Park visitors with bison and prairie ecosystems through personal and non-personal interpretation. Budget: \$182,689**

**Description:** At Blue Mounds park visitors will view bison up-close via naturalist-led tours using an ADA-accessible, 12 passenger off-highway vehicle designed to minimally impact prairie. This project will fund acquisition and necessary customization of the safari vehicle, initial staffing to design/conduct tours and develop/install new interpretive signage. At Minneopa, this project will fund critical interpretive, informational and safety related signage related to bison at the park.

**Summary Budget Information for Activity 4:**

**ENRT Budget: \$182,689**  
**Amount Spent: \$180,468**  
**Balance: \$2,221**

<b>Outcome</b>	<b>Completion Date</b>
1. Design of Interp., informational, safety signage for Minneopa & Blue Mounds (viewing drive, self-guided trails, etc).	10/31/2015
2. Creation and Installation of signage at Minneopa & Blue Mounds	5/15/2016
3. ½ year Interpretive naturalist 2 to coordinate/conduct safari tours as well as other tasks.	4/16—10/2016
4. Acquisition & necessary customization of multi-passenger OHV for bison range tours	6/30/2016

**Project Status as of January 1, 2016:**

Informational and safety signage was purchased and installed at Minneopa to help insure the safety of visitors and the bison. \$45,000 is encumbered for an interpretive naturalist to provide programming for the Blue Mounds bison herd. An RFP is currently being written for design and construction of interpretive wayside exhibits at Minneopa State Park.

**Project Status as of July 1, 2016:**

An RFP for bison exhibits at Blue Mounds and Minneopa State Park is currently open and will close the end of July. Work on procuring the multi-passenger OHV for bison range tours is underway. Hiring for a ½ year Interpretive Naturalist 2 will start this winter and be on staff in the spring. The primary responsibilities of this position will be to develop and conduct public tours of the bison range using the multi-passenger OHV. It is anticipated that public tours will begin in the early summer of 2017.

**Project Status as of January 1, 2017:**

A contract was awarded for the design and construction of outdoor exhibits at Blue Mounds and Minneopa State Parks. Staff worked with Dakota advisors to insure a balanced perspective. Exhibits are at 50% design and are scheduled to be installed early June 2017 at both locations. Writing specifications continues for the OHV tour vehicle. A vendor who extends and customizes jeep vehicles has been identified as the best match for needed specifications. A Naturalist position will be posted this late winter for a spring hire to better overlap with vehicle acquisition.

**Project Status as of July 1, 2017:**

This update was not required.

**Project Status as of January 1, 2018:**

Updated safety signage for the bison drive road at Minneopa was created to better communicate with park users and will be installed after thaw this spring. Interpretive exhibits were installed in June 2017 at both Blue Mounds and Minneopa at key overlooks. An interpretive naturalist 2 was hired July 2017 at 80% FTE providing outreach and developing the vehicle tour at Blue Mounds. The "Bison Buggy" tour vehicle is in the final assembly stage and will be delivered to Blue Mounds in early May 2018. It is built on a customized Ford F250 chassis with seating for 12 and includes a wheelchair lift.

**Project Status as of September 2018:**

January-early September 2018

*Minneopa* – During the previous 8 months nearly 3,000 visitors participated in programs to learn more about bison. Programs included bison tours, American Bison programs and bison hikes. Volunteer bison ambassadors continue to provide great support donating 120 hours and making contact with 4,320 individuals/groups. *Blue Mounds* - Tours using the customized "safari" vehicle, which provides visitors with up-close opportunities to view bison and prairie at Blue Mounds State Park were initiated over Memorial Day weekend, 2018. Nearly 1,000 visitors had taken the tour through Labor Day with 98% saying they would recommend it to others.



Bison Safari Vehicle



Interpretive signage at Minneopa

The response from visitors to the reintroduction of bison at Minneopa and Prairie and Bison Tours at Blue Mounds has been remarkable. Since the fall of 2015, approximately 8,900 visitors have participated in programs about bison and another 8,800 have met a Bison Ambassador and learned about bison and prairies. In addition, visitors to Minneopa are able to listen to short stories about bison & prairies via an AM transmitter that broadcasts these pieces to visitors traveling along the bison drive. The interpretive exhibits co-created by Parks and Trails Interpretive staff and the contractor (106 Group) won the 2017 National Association of Interpretation (NAI) best outdoor-wayside exhibits award. NAI won't publically announce this award until their national convention in November, 2018.

**Project Status as of January, 2019:**

No change from previous report.

**Final Report Summary**

## **V. DISSEMINATION:**

**Description:** The effort to re-introduce bison to Minneopa State Park and grow a conservation herd in Minnesota has already generated significant interest from the media and the public. See the following link as an example [Bison Being Reintroduced to Minneopa State Park by Fall 2015](#). It is anticipated that additional coverage will occur as the site is developed and certainly when the bison are reintroduced to Minneopa in the fall of 2015. In addition to media coverage and DNR and MN Zoo news releases, information about the project will also be disseminated through personal and non-personal interpretation at both Blue Mounds and Minneopa as well as through the MN Zoo's information and education efforts. There are currently two webpages that communicate efforts about the project (see links below).

[Minnesota DNR Minneopa Reintroduction Webpage](#)  
[Minnesota Zoo Bison Conservation Webpage](#)

### **Project Status as of January 1, 2016:**

A media event was held on 9/25/15 at Minneopa to allow representatives from print, television and radio outlets to do stories on the reintroduction of bison to Minneopa. The story was also picked up by other news organizations. In total over 100 media outlets from all across the United States carried the story. Representatives from DNR and the MN Zoo also did a presentation for University of MN Conservation Biology Graduate students. A recent follow-up story on the project was done by WCCO television. It aired on Jan 10-11, 2016. The story was titled [Finding Minnesota-Minneopa Bison at Minneopa State Park](#).

### **Project Status as of July 1, 2016:**

The reintroduction of bison to Minneopa continues to draw increased numbers of visitors, attention from the media and interest from the public and other organizations. Interpretive staff coordinated and led:

- A series of guided bus tours through the bison range (314 participants). A Mankato Free Press article featured the tours. Also, a visitor survey found that >85% of participants would plan to view the bison again and 100% said it was very likely/likely they would recommend coming to Minneopa to see the bison to their friends and family.
- 15 other bison tours (465 participants).
- 12 bison talks (315 participants)
- 3 bison hikes (snowshoe & regular) – 157 participants

A group of volunteers known as the Bison Ambassadors have been trained to disseminate information to visitors of the bison range during high visitation periods. The 5 current ambassadors talked to about 550 people during this reporting period. Additional volunteers can join the group. The next recruitment meeting is 8/27/16.

Other staff gave presentations on the project to University of Minnesota classes and civic organizations.

### **Project Status as of January 1, 2017:**

Approximately 30 presentations on bison were given to visitors at Minneopa & Blue Mounds State Parks. The total audience was nearly 1,000. Seven additional bison ambassadors have been trained and provided 64 hours of volunteer service and made about 675 public contacts. Four interviews were conducted with regional TV news and local radio stations regarding the Minnesota Bison Conservation Herd.

### **Project Status as of July 1, 2017:**

This report was not required.

### **Project Status as of January 1, 2018:**

- Parks & Trails interpretive staff presented 72 programs including 2,779 participants related to bison. Examples include: Public and private tours through the bison range at Minneopa, presentations at Farm America and the State Fair and for National Bison Day.
- Bison ambassadors at Minneopa made 3,281 contacts with individuals or groups.
- An additional training was held for 11 new Bison Ambassadors. The Mankato Free Press covered the training. See [Minneopa Trains Bison Ambassadors](#).
- Pioneer Public TV did a story about the MN Bison Conservation herd (Blue Mounds, Minneopa, MN Zoo) that aired this past fall called: "[Snow Travel and Prairie Beasts](#)" - The bison story begins at about 12:07.

**Project Status as of September 2018:**

This project has generated a great deal of publicity from the very beginning and continues to hold the interest of the public and media. Initially > 100 media outlets picked up the 2015 reintroduction event. Since that time, there have been additional stories published in local (Mankato Free Press) newspapers and aired on television stations. This past June, six reporters from MN and South Dakota participated in a prairie and bison tour via the safari vehicle at Blue Mounds. Spots have recently been filmed by the MN Lottery highlighting the project and Explore MN tourism. In addition information about this project has been disseminated to thousands of visitors through programs detailed under Activity #4 above as well as through staff presentations to civic organizations and local universities.

**Project Status as of January 2019:**

No change from previous update.

**Final Report Summary**

**VI. PROJECT BUDGET SUMMARY:**

**A. ENRTF Budget Overview:**

Budget Category	\$ Amount	Overview Explanation
<b>Personnel:</b>	\$ 45,000	Interpretive Naturalist 2 (70% salary, 30% benefits). 50% FTE for 1 year.
<b>Professional/Technical/Service Contracts:</b>		
Design & installation of bison handling facility at Minneopa State Park	\$300,000	For similar work at Blue Mounds, DNR used Grandin Livestock Handling Systems for design and Hi-Hog Farm/Ranch Equipment for materials and installation. These or similar contractors will be utilized for the work at Minneopa.
Design & construction of a watering pond at Minneopa	\$59,210	DNR will coordinate with the local Soil & Water Conservation District on location/design and local excavators/pond builders for construction.
Add 3-4" gravel to 2.8 miles of wildlife drive.	\$50,000	DNR will contract with a sand/gravel operation and driveway installer type company for this contract.
<b>Equipment/Tools/Supplies:</b>	\$ 54,217	Safety, directional, interpretive signs at Minneopa & Blue Mounds.
<b>Capital Expenditures over \$5,000:</b>	\$ 80,000	12 passenger, ADA-accessible, Off-Highway safari type vehicle designed for minimal impact on prairie.
<b>Direct &amp; Necessary Expenses*</b>	\$ 11,573	HR Support (~\$663), Safety Support (~\$164), Financial Support (~\$7,539), Communication Support (~\$1,141), IT Support (~\$1,137), Planning Support (~\$704), and Procurement Support (~\$235) that are necessary to accomplishing funded programs/projects.
<b>TOTAL ENRTF BUDGET:</b>	<b>\$600,000</b>	

*\*Direct and Necessary expenses include both Department Support Services (Human Resources, IT Support, Safety, Financial Support, Communications Support, Planning Support, and Procurement Support) and Division Support Services. Department Support Services are described in the agency Service Level Agreement, and billed internally to divisions based on rates that have been developed for each area of service. These services are directly related to and necessary for the appropriation. Department leadership services (Commissioner’s Office and Regional Directors) are not assessed. Division Support Services include costs associated with Division business offices and clerical support. Those elements of individual projects that put little or no demand on support services such as large single-source contracts, large land acquisitions, and funds that are passed-thru to other entities are not assessed Direct and Necessary costs for those activities.*

**Explanation of Use of Classified Staff:**

No classified staff will be funded from this appropriation.

**Explanation of Capital Expenditures Greater Than \$5,000:**

Design and Construction of a Humane Handling Facility at Minneopa State Park (\$300,000) – this facility is critical for managing herd size and genetic diversity during annual round-ups. It will be permanently used for these purposes as well as to mark animals (micro-chip placement) and disease prevention/management.

Design and Construction of a watering pond at Minneopa State Park (\$59,210) – this pond will serve as a secondary water source for bison in cold weather and likely their primary source of drinking water during the warmer months. The pond, once built, will be a permanent part of the Minneopa State Park landscape.

Safari type Tour Vehicle at Blue Mounds State Park (\$80,000) – For several years, the division has discussed ways that visitors might be able to see bison within the large (533 acre) range at the park. This 12 passenger, ADA-accessible off-highway vehicle will provide that opportunity. It is fully anticipated that the vehicle will remain at Blue Mounds through its useful existence.

**Number of Full-time Equivalents (FTE) Directly Funded with this ENRTF Appropriation:**

0.5 FTE Interpretive Naturalist 2 at Blue Mounds State Park

**Number of Full-time Equivalents (FTE) Estimated to Be Funded through Contracts with this ENRTF Appropriation:**

N/A

**B. Other Funds:** The DNR will utilize approximately \$220,000 in other funds to implement this project. \$120,000 in in-kind services will be provided by DNR staff for park operations, resource management and interpretation related to bison at Minneopa State Park. In addition MN Zoo staff will provide about \$50,000 in in-kind services to assist with DNA sampling, managing the herd’s genetic data and provide technical assistance related to the handling facility and watering pond construction. About \$50,000 will be needed in other monies for infrastructure.

Source of Funds	\$ Amount Proposed	\$ Amount Spent	Use of Other Funds
<b>Non-state</b>	N/A	N/A	
Mn Propane Association	\$	\$4,000	Reduce carbon emissions from Safari vehicle.
<b>State</b>			
Parks and Trails Legacy Fund	\$120,000	\$120,000	PAT in-kind funding needed annually for park operations, resource management and interpretation related to bison management at Minneopa. 2 yr total.

Parks and Trails Legacy Fund	\$50,000	\$568,891	Assist with construction of necessary infrastructure, required archaeological investigations and professional services.
Working Capital		\$80,849	Assist with costs of handling facility.
Arts and Cultural Heritage Legacy Fund (50%) General Fund (50%) Grant from Shakopee Mdewakanton Sioux Community	\$50,000	\$50,000	MN Zoo In-kind services provided during the project: assisting with DNA sampling, compiling & analyzing studbook data, consultation on design of handling facility and pond installation, transport & quarantine of bison, interagency meeting coordination. Additional funds expended to manage bison at the MN Zoo as part of the MN Conservation herd effort.
<b>TOTAL OTHER FUNDS:</b>	<b>\$220,000</b>	<b>\$823,740</b>	

## VII. PROJECT STRATEGY:

### A. Project Partners:

The project team includes staff from DNR Parks and Trails and the MN Zoo. Since 2012, DNR Parks & Trails and MN Zoo have an interagency agreement for cooperative management of bison and prairie wildlife native to Minnesota. Only DNR Parks and Trails will be receiving project funds. DNR Parks and Trails is responsible for planning and implementing the four major activities identified in this work plan. MN Zoo staff will provide technical advice regarding design of the handling facility and pond as well as conduct the other activities of the project identified above.

### B. Project Impact and Long-term Strategy:

Three-four more reintroduction sites will eventually be needed to reach the 400-500 animals required. DNR has suitable state parks, but is open to partnering with other organizations. In-kind contributions have been made by DNR and MN Zoo staff in managing the existing population and planning for the Minneopa reintroduction. DNR and MN Zoo will provide partial funding via project dollars and in-kind services toward future reintroduction efforts and may also submit a future request to assist with additional reintroduction sites.

**C. Funding History:** This is a new project. The DNR selected Minneopa for reintroducing bison in 2013. Staff time (in-kind services) has been invested since then in planning for the infrastructure, operations, resource management and interpretive needs related to the reintroduction. Funds have also been secured and/or expended on site preparation, well installation and installation of fencing and gates.

Funding Source and Use of Funds	Funding Timeframe	\$ Amount
Genetic Testing (P&T Legacy Fund*) – confirm bison genetics & heritage of animals.	FY14-FY15	\$3,100
Site Preparation at Minneopa (P&T Legacy Fund*) – baseline vegetation assessment, woody plant removal, invasive species control & prescribed burning.	FY14-FY15	\$10,200
Well Installation Minneopa (P&T Legacy Fund*) – provide permanent watering source for bison.	FY15	\$62,000
Fence and gate installation (P&T Legacy Fund) – installation of approx. 22,000' of 6 strand wire fence & several gates around 330 acres or remnant prairie/bison range at Minneopa.	FY15	\$145,000

\*Parks and Trails Legacy Fund – Laws 2013, Chapter 137, article 3.

**VIII. FEE TITLE ACQUISITION/CONSERVATION EASEMENT/RESTORATION REQUIREMENTS:**

**A. Parcel List:**

N/A

**B. Acquisition/Restoration Information:**

N/A

**IX. VISUAL COMPONENT or MAP(S):**

See attached document for location map and examples of a handling facility and safari vehicle.

**X. RESEARCH ADDENDUM:**

N/A

**XI. REPORTING REQUIREMENTS:**

Periodic work plan status update reports will be submitted no later than January 2016, July 2016, January 2017, July 2017, and January 2018. A final report and associated products will be submitted between January 1 and March 1, 2018.

**Environment and Natural Resources Trust Fund  
M.L. 2015 Project Budget**

Project Title: *Reintroduction and Interpretation of Bison in Minnesota State Parks*

Legal Citation: *M.L. 2015, Chp. 76, Sec. 2, Subd. 03h*

Project Manager: *Edward Quinn*

Organization: *MNDNR Division of Parks & Trails*

M.L. 2015 ENRTF Appropriation: \$ 600,000

Project Length and Completion Date: *2.5 years, December 31, 2017*

Date of Report: *January 31, 2019*



ENVIRONMENT AND NATURAL RESOURCES TRUST FUND BUDGET	Activity 1 Budget	Amount Spent	Activity 1 Balance	Activity 2 Budget	Amount Spent	Activity 2 Balance	Activity 3 Budget	Amount Spent	Activity 3 Balance	Activity 4 Budget	Revised Activity 4 Budget 1/29/19	Amount Spent	Activity 4 Balance	TOTAL BUDGET	TOTAL BALANCE
<b>BUDGET ITEM</b>	<i>Design &amp; Construct a Humane Bison Handling Facility - Minneopa</i>			<i>Design &amp; Construction of a Watering Pond - Minneopa</i>			<i>Upgrading of approx. 2.8 miles of Wildlife Viewing Drive - Minneopa</i>			<i>Connecting Blue Mounds &amp; Minneopa State Park visitors with bison and prairie ecosystems through personal and non-personal interpretation.</i>					
<b>Personnel (Wages and Benefits)</b>															
Interpretive Naturalist 2 (70% salary, 30% benefits). 50% FTE for 1 year										\$45,000	\$47,273	\$47,273	\$0	\$45,000	\$0
<b>Professional/Technical/Service Contracts</b>															
Upgrading of approx. 2.8 miles of wildlife drive to provide for three season+ observation. The upgrade consists of a 3"-4" lift of gravel to be placed on the road. Will contract with sand/gravel operation, driveway installer type company for this work. A competitive process will be used to select the contractor.							\$50,000	\$43,000	\$7,000					\$50,000	\$7,000
Design & installation of bison handling facility (gathering pen, holding pens, squeeze chute, etc). For similar work at Blue Mounds we have used Grandin Livestock Handling Systems for design and Hi-Hog Farm & Ranch Equipment for materials/installation. A competitive process will be used to select the contractor.	\$300,000	\$214,710	\$85,290											\$300,000	\$85,290
Design & construction of a watering pond at Minneopa to provide a permanent, no maintenance water source for bison in addition to the livestock waterers. Will potentially utilize an exterior exhibit company for the design and then work with local excavators/pond builders for construction. A competitive process will be used to select the contractor.				\$59,210	\$48,830	\$10,380								\$59,210	\$10,380
<b>Equipment/Tools/Supplies</b>															
Signage: interpretive, directional and safety										\$54,217	\$51,944	\$49,724	\$2,220	\$54,217	\$2,220
<b>Capital Expenditures Over \$5,000</b>															
Off-highway safari vehicle for 12 passengers, ADA-accessible, designed to minimally impact prairie - to provide visitor field experiences to view bison and prairie at Blue Mounds SP.										\$80,000	\$80,000	\$80,000	\$0	\$80,000	\$0
<b>Other</b>															
Direct & Necessary Expenses* HR Support (~\$663), Safety Support (~\$164), Financial Support (~\$7,530), Communication Support (~\$1,141), IT Support (~\$1,137), Planning Support (~\$704), and Procurement Support (~\$235) necessary to accomplishing funded programs/projects.	\$5,787	\$5,785	\$2	\$1,157	\$1,157	\$0	\$1,157	\$1,157	\$0	\$3,472	\$3,472	\$3,471	\$1	\$11,573	\$3
<b>COLUMN TOTAL</b>	<b>\$305,787</b>	<b>\$220,495</b>	<b>\$85,292</b>	<b>\$60,367</b>	<b>\$49,987</b>	<b>\$10,380</b>	<b>\$51,157</b>	<b>\$44,157</b>	<b>\$7,000</b>	<b>\$182,689</b>	<b>\$182,689</b>	<b>\$180,468</b>	<b>\$2,221</b>	<b>\$600,000</b>	<b>\$104,893</b>

Balance encumbered in construction contract

Balance encumbered in construction contract

\*Direct and Necessary expenses include both Department Support Services (Human Resources, IT Support, Safety, Financial Support, Communications Support, Planning Support, and Procurement Support) and Division Support Services. Department Support Services are described in the agency Service Level Agreement, and billed internally to divisions based on rates that have been developed for each area of service. These services are directly related to and necessary for the appropriation. Department leadership services (Commissioner's Office and Regional Directors) are not assessed. Division Support Services include costs associated with Division business offices and clerical support. Those elements of individual projects that put little or no demand on support services such as large single-source