



Environment and Natural Resources Trust Fund (ENRTF) M.L. 2017 LCCMR Work Plan

Date of Submission: 10/21/2016
Date of Next Status Update Report: March 30th 2018
Date of Work Plan Approval: 06/07/2017
Project Completion Date: 06/30/2021
Does this submission include an amendment request? No

PROJECT TITLE: Minnesota Bee and Beneficial Species Habitat Restoration

Project Manager: Steven Burdick
Organization: Pheasants Forever
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Location: Statewide

Total ENRTF Project Budget:	ENRTF Appropriation:	\$732,000.00
	Amount Spent:	\$0
	Balance:	\$732,000.00

Legal Citation: M.L. 2017, Chp. 96, Sec. 2, Subd. 08g

Appropriation Language:

\$732,000 the first year is from the trust fund to the commissioner of natural resources for an agreement with Pheasants Forever in cooperation with the University of Minnesota and the Minnesota Honey Producers Association to restore approximately 800 acres of permanently protected land to enhance bee, butterfly, beneficial insect, and grassland bird habitats. This appropriation is available until June 30, 2021, by which time the project must be completed and final products delivered.

I. PROJECT TITLE: MN Honey Bee & Monarch Butterfly Partnership

II. PROJECT STATEMENT: This proposal contributes to the recovery of monarch butterflies and native pollinators by working cooperatively on 75-100 sites to enhance 800-acres of permanently protected habitat in priority Minnesota landscapes. Enhancements will be designed to provide high-diversity native plantings for the benefit of native pollinators, especially the monarch butterfly. Unique and innovative to this partnership is the effort to engage beekeepers directly (via MN Honey Producer’s Association) in the promotion of the program to landowners. Further, we propose to monitor these enhancements in collaboration with the University of Minnesota in an effort to evaluate enhancements, inform practitioners of best practices and provide a path to future habitat enhancements for native pollinators across Minnesota’s farmland region. Grassland habitat loss and fragmentation continue to be the major factor in the decline of monarchs, pollinators & grassland wildlife. In Minnesota, 99% of the original prairie has been converted. And while we have restored hundreds of thousands of acres of grasslands over the last three decades, our early restorations rarely considered or appreciated the needs of pollinators, the value of milkweed species to the monarch, or the vegetative structural & species diversity required by many species of grassland dependent wildlife now in decline. Projects will be solicited, scored, and selected to maximize benefits to native bees, honey bees & monarchs. Evaluation criteria will be refined by the project team and include:

- Proximity to native remnant prairie habitats
- Proximity to other permanently protected lands
- Size of restoration and cost share of participating land manager or landowner
- Location in priority area for monarch butterfly
- Proximity to known apiaries
- Adoption of BWSR native vegetation and enhancement guidelines
- Opportunity for additional habitat enhancement

Existing sites will be enhanced by seeding a portion (50:50 is desired) of the field to diverse mixes to provide high quality foraging habitat for native bees and honey bees (funded through partners) and the remainder (likely a larger portion) of the field to diverse mixes that provide high quality breeding habitat for monarch butterflies. The goal is to demonstrate how designed mixes and active re-seeding can provide high quality forage and breeding habitat for honey bees and monarch butterflies. Projects will be solicited by PF and project partners through a sign-up period and project request to SWCD’s, the Farm Bill Assistance Partnership (LCCMR Funded), and other private land partners in the agricultural region of Minnesota (please see map for 63-county project area). One of the innovative approaches this proposal takes is to solicit the support of Minnesota Beekeepers in the promotion of the program to the landowners they house their honey bee hives on. By connecting this effort to the Honey Bee & Monarch Butterfly Partnership and the National Fish & Wildlife Foundation’s Monarch Conservation Fund, the partners believe this effort provides the programmatic focus and incentives to make real progress towards addressing the habitat needs to improve conditions for monarch butterflies, native bees, and honey bees.

III. OVERALL PROJECT STATUS UPDATES:

- Project Status as of March 30, 2018:**
- Project Status as of March 30, 2019:**
- Project Status as of March 30, 2020:**
- Project Status as of March 30, 2021:**

Overall Project Outcomes and Results:

IV. PROJECT ACTIVITIES AND OUTCOMES:

ACTIVITY 1: Design & conduct sign-up, do outreach to eligible land managers and landowners, select projects.

Description: Reach out to public land managers and private landowners who own permanently protected habitat to gauge interest, engage in the plight of grassland wildlife including monarch butterfly, native pollinators and grassland birds and provide opportunity to enhance habitat. Engage SWCDs to assist in the development of quality pollinator plot enhancement project proposals for consideration. Engage beekeepers (via Minnesota Honey Producers Association) in the promotion of the program. Design, implement and administer the program.

Summary Budget Information for Activity 1:

ENRTF Budget: \$ 85,625
Amount Spent: \$ 0
Balance: \$ 85,625

Outcome	Completion Date
1. <i>Develop and distribute project solicitation, including pollinator project requirements, eligibility, scoring factors, and information about project implementation.</i>	8/01/2017 & 2018
2. <i>Outreach to landowners through SWCDs, Farm Bill Assistance Partnership, MN Department of Agriculture, MN Honey Producer’s Association, US Fish & Wildlife Service, MN BWSR, MN DNR, PF, University of Minnesota, and other partners.</i>	9/01/2017 & 2018
3. <i>Develop requests for proposal to implement habitat enhancement deliverables following PF’s procurement policy and following newly updated RIM Conservation Plans.</i>	10/01/2017 & 2018
4. <i>Rank & award projects, determine if another sign-up is required. This will be done in collaboration with the project team.</i>	10/01/2017 & 2018

Activity 1 Status as of March 30, 2018:
Activity 1 Status as of March 30, 2019:
Activity 1 Status as of March 30, 2020:
Activity 1 Status as of March 30, 2021:
Final Report Summary:

ACTIVITY 2: Enhance 800-acres on approximately 75-100 sites with native plantings designed to benefit monarch butterflies & pollinators.

Description: Release RFP’s to accomplish the habitat enhancements. This includes all site preparation (mechanical, herbicide, packing), seed, seeding, clipping, or other professional services required to achieve the habitat enhancement objective. Estimated average cost for the establishment of 4-acre monarch/pollinator plots is \$800/acre. BWSR’s Native Vegetation Establishment and Enhancement Guidelines will be used to help guide the successful planting and management of restoration and conservation projects. Associated enhancement activities include 500-acres of diversity seeding (e.g. brome conversion) at an estimated average cost of \$400/acre. Award contracts, communicate with landowners and partners, & ensure project fulfillment.

Summary Budget Information for Activity 2:

ENRTF Budget: \$ 439,838
Amount Spent: \$ 0
Balance: \$ 439,838

Outcome	Completion Date
1. <i>Develop work specific RFPs & award contracts to complete pollinator plots (300-acres).</i>	2/01/2018
2. <i>Develop work specific RFPs & award contracts to complete associated diversity seeding (500-acres).</i>	2/01/2019

Activity 2 Status as of March 30, 2018:
Activity 2 Status as of March 30, 2019:

Activity 2 Status as of March 30, 2020:

Activity 2 Status as of March 30, 2021:

Final Report Summary:

ACTIVITY 3: Assess, monitor, and report results of enhancement activities.

Description: Conduct an assessment of enhancement activities with the University of Minnesota. Assess enhancements for pollinator and plant responses under the direction of Dr. Daniel P. Cariveau. Conduct three habitat tours/workshops that highlight Pollinator & Habitat Enhancement program projects, provide the latest and best science, & best practices for enhancements.

Summary Budget Information for Activity 3:

ENRTF Budget: \$ 206,537

Amount Spent: \$ 0

Balance: \$ 206,537

Outcome	Completion Date
1. Assess plant establishment and insect responses to enhancement activities via graduate student over final three years of project	6/30/2021
2. Conduct four habitat tours/workshops	6/30/2021
3. Identify and catalog bees for vouchering specimens at U of M insect collection	6/30/2021

Activity 3 Status as of March 30, 2018:

Activity 3 Status as of March 30, 2019:

Activity 3 Status as of March 30, 2020:

Activity 3 Status as of March 30, 2021:

Final Report Summary:

V. DISSEMINATION:

Description: The work and results of this project will be shared in a number of ways including direct outreach to landowners, press releases distributed by Pheasants Forever or partners, print or electronic newsletters, or through Pheasants Forever’s current communication methods that reach out and publicize projects. Social media will be used and coordinated with LCCMR social media efforts. Partners will also be relied upon to disseminate projects, results, and outreach to their respective client bases.

Status as of March 30, 2018:

Status as of March 30, 2019:

Status as of March 30, 2020:

Status as of March 30, 2021:

Final Report Summary:

VI. PROJECT BUDGET SUMMARY:

A. Preliminary ENRTF Budget Overview:

***This section represents an overview of the preliminary budget at the start of the project. It will be reconciled with actual expenditures at the time of the final report.**

Budget Category	\$ Amount	Overview Explanation
Personnel:	\$ 50,625	Position funding for Project Manager and Habitat Restoration Specialist to coordinate deliverables and fulfill habitat enhancements.
Professional/Technical/Service Contracts:	\$ 650,875	Sub contracts for Graduate Student \$123,049 (97% salary, tuition, and health, 3% COLA); 100% FTE each year for 3 years, Graduate

		Advisor \$13,011 (63.2% salary, 33.8% fringe benefits, 3% COLA) 100% FTE for 2 weeks, and Seasonal Field Technician with University of MN \$37,477 (70.7% salary, 26.3% fringe benefits, 3% COLA) 100% FTE each year for 3 years. Service contracts following PF procurement policy for Monarch Butterfly Enhancements, \$240,000 (75 plots, 4 acre average, \$800/acre), and Grassland Enhancements, \$200,000 (contract 500 acres of enhancements @ \$400/acre), including but not limited to seed, seeding, site preparation, herbicide, clipping and other site preparation techniques. Professional services for bee identification from University of MN, \$7,500, \$2,500 each year for 3 years, and RIM conservation plan and updates to provide guidance on future management and care, \$30,000 (100 plans @ \$300 for participating SWCDs).
Service Contracts - Equipment/Tools/Supplies:	\$ 6,000	University of MN monitoring equipment, data collection equipment, and data collection equipment such as drawers and cabinets for vouchering specimens.
Travel Expenses in MN:	\$ 20,000	In-state travel for Habitat Restoration Specialist, Graduate Student, and Field Technician to design, procure, fulfill, and research habitat projects.
Other:	\$ 4,500	Conduct 4 landowner/practitioner tours and workshops with expected outreach of 30+ landowners, practitioners, and/or researchers.
TOTAL ENRTF BUDGET: \$ 732,000		

Explanation of Use of Classified Staff: N/A

Explanation of Capital Expenditures Greater Than \$5,000: N/A

Total Number of Full-time Equivalent (FTE) Directly Funded with this ENRTF Appropriation:

0.75 FTE

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

4.50 FTE

B. Other Funds:

Source of Funds	\$ Amount Proposed	\$ Amount Spent	Use of Other Funds
Non-state			
USFWS Partners for Wildlife-Cash	\$ 100,000	\$ 0	Assist in delivering private land projects
Pheasants Forever- Cash	\$ 200,000	\$ 0	Honey Bee & Monarch Butterfly Partnership

Participating Landowners- Cash	\$ 74,500	\$ 0	5% of habitat enhancement project, in-kind support
Pheasants Forever - Cash	\$ 20,000	\$ 0	Support for enhancement activities and outreach
MN Honey Bee Producer's Association – In-kind	\$ 1,500	\$ 0	Donated time of beekeepers to promote the program and results
MN Department of Agriculture- In-kind	\$ 1,750	\$ 0	Donated time to advise and promote the program and results
Pheasants Forever- In-kind	\$ 12,192	\$ 0	Donated indirect costs
MN BWSR	\$ 25,920	\$ 0	Donated staff time for promotion and implementation with SWCDs and other partners
State			
Minnesota BWSR- Cash	\$ 100,000	\$ 0	Cost share to improve RIM lands
TOTAL OTHER FUNDS:	\$ 494,500	\$ 0	

VII. PROJECT STRATEGY:

A. Project Partners:

Partners receiving ENRTF funding

- *University of Minnesota, \$202,037, Research, field work, supplies, travel, and other services.*
- *Pheasants Forever, \$500,125, coordinate outreach, travel, deliverables, restorations, and enhancements*
- *Participating SWCDs, \$30,000, deliver updated conservation plans*

Partners NOT receiving ENRTF funding

- *MN Department of Agriculture, Advisor and promotional efforts*
- *MN Honey Producers, Advisor and member promotion to landowners*
- *MN Department of Natural Resources, Advisor*
- *MN Association of Soil & Water Districts, Advisor and liaison with SWCDs*
- *MN Board of Water and Soil Resources, Advisor & RIM administrator*
- *US Fish and Wildlife Service, Advisor and assist in seed costs and seed mixes*

B. Project Impact and Long-term Strategy: This proposal catalyzes programmatic focus to deliver objectives of the North American Monarch Conservation Plan and deliver high quality honey bee forage in conjunction with Minnesota beekeepers. Specifically, this proposal aims to plant 800-acres and 30 million milkweed seeds for breeding monarchs, contributing directly to the goals outlined by President Obama's Pollinator Health Task Force (May 2015). Goals outlined in the recently released Pollinator Action Plan call for 7 million acres of restored and enhanced high quality habitat and 1.4 billion milkweed stems by 2020. By providing programmatic focus and demonstrations, a functional enhancement program that lives beyond the 4-year life of the project will be built.

C. Funding History:

Funding Source and Use of Funds	Funding Timeframe	\$ Amount
N/A	N/A	\$ N/A
		\$
		\$

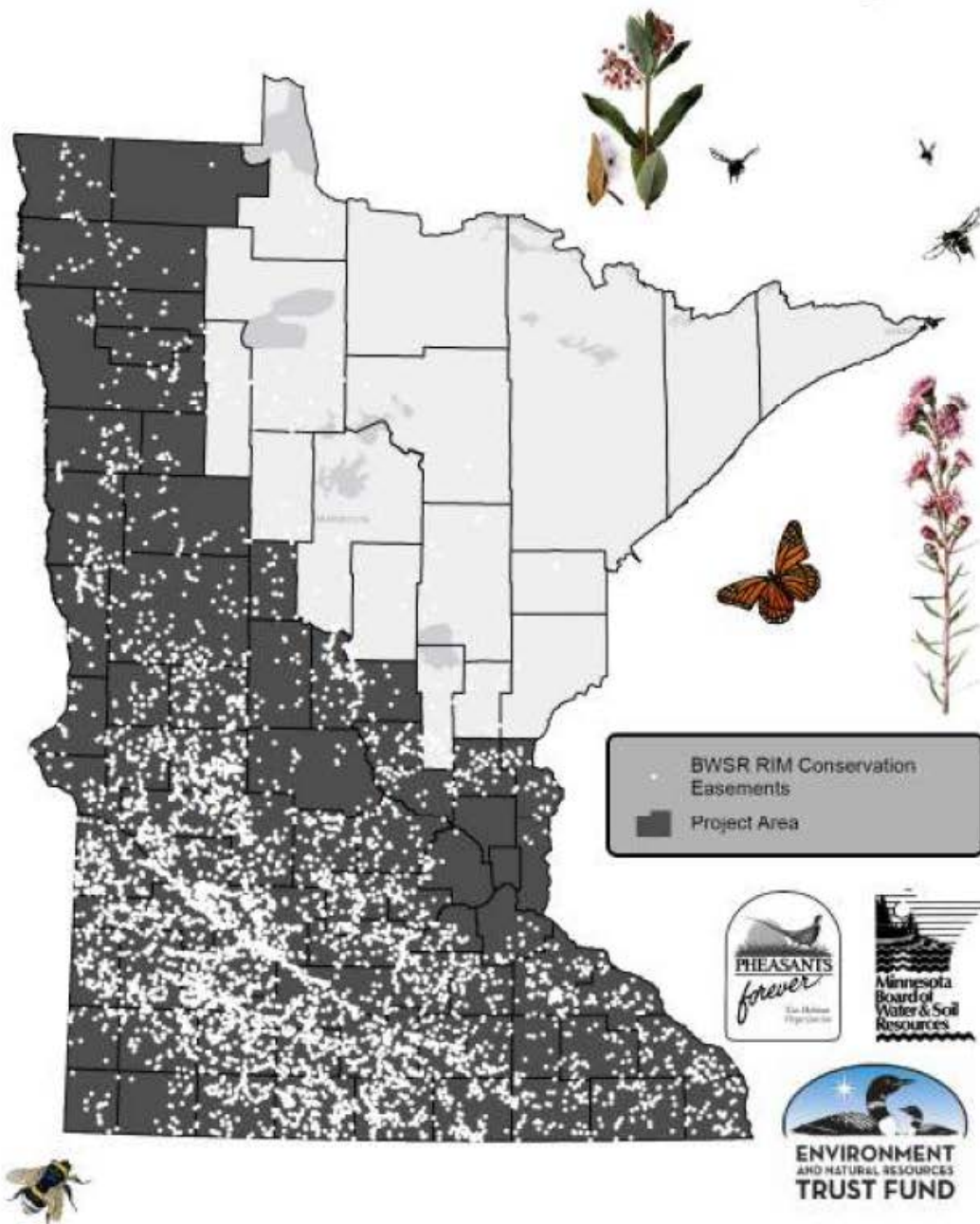
VIII. REPORTING REQUIREMENTS:

- The project is for 4 years, will begin on 07/01/2017, and end on 06/30/2021.
- Periodic project status update reports will be submitted March 30, 2018 of each year.
- A final report and associated products will be submitted between June 30 and August 15, 2021.

IX. VISUAL COMPONENT or MAP(S):



The MN Honey Bee & Monarch Butterfly Partnership will enhance 75-100 sites and 800-acres of the state's existing habitat investments (e.g. State Parks, RIM, WMA, etc.) for the benefit of monarch butterflies and native pollinators. Potential project sites include RIM easements in the 63-county project area that includes the farmland region of Minnesota.



X. FEE TITLE ACQUISITION/CONSERVATION EASEMENT/RESTORATION REQUIREMENTS:

A. Parcel List:

Restoration

- 1. Provide a statement confirming that all restoration activities completed with these funds will occur on land permanently protected by a conservation easement or public ownership.**

All restoration activities with these funds will occur on land permanently protected by a conservation easement or in public ownership.

- 2. Summarize the components and expected outcomes of restoration and management plans for the parcels to be restored by your organization, how these plans are kept on file by your organization, and overall strategies for long-term plan implementation.**

Restoration and management plans will include short and long term maintenance strategies, timeline of proposed management, and site specific management considerations. These management plans will be written and delivered by participating SWCD's and will be kept on file within the SWCD.

- 3. Describe how restoration efforts will utilize and follow the Board of Soil and Water Resources "Native Vegetation Establishment and Enhancement Guidelines" in order to ensure ecological integrity and pollinator enhancement.**

BWSR's Native Vegetation Establishment and Enhancement Guidelines will be used to help guide the successful planting and management of restoration and conservation projects.

- 4. Describe how the long-term maintenance and management needs of the parcel being restored with these funds will be met and financed into the future.**

Participating SWCD's will deliver an updated conservation plan to the landowner and provide technical assistance as needed to assist the landowner in successful long-term management of the tract.

- 5. Describe how consideration will be given to contracting with Conservation Corps of Minnesota for any restoration activities.**

Conservation Corps of Minnesota will be give consideration for opportunities per our procurement policy.

- 6. Provide a statement indicating that evaluations will be completed on parcels where activities were implemented both 1) initially after activity completion and 2) three years later as a follow-up. Evaluations should analyze improvements to the parcel and whether goals have been met, identify any problems with the implementation, and identify any findings that can be used to improve implementation of future restoration efforts at the site or elsewhere.**

We propose to monitor these enhancements in collaboration with the University of Minnesota in an effort to evaluate enhancements, inform practitioners of best practices and provide a path to future habitat enhancements for native pollinators across Minnesota's farmland region. The University of Minnesota will be a sub-contractor to assess, monitor, and report results of enhancement activities. They will conduct an assessment of enhancement activities and assess enhancements for pollinator and plant responses under the direction of Dr. Daniel P. Cariveau. University of MN will also use this monitoring along with the latest and best science to provide guidance on best practices for future enhancements.

Environment and Natural Resources Trust Fund

M.L. 2017 Project Budget

Project Title: Minnesota Bee and Beneficial Species Habitat Restoration

Legal Citation: M.L. 2017, Chp. 96, Sec. 2, Subd. 08g

Project Manager: Steven Burdick

Organization: Pheasants Forever

M.L. 2017 ENRTF Appropriation: \$732,000

Project Length and Completion Date: 4 Years, June 30, 2021

Date of Report: 10/21/2016



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	TOTAL BUDGET	TOTAL BALANCE
BUDGET ITEM											
	<i>Design & conduct sign-up, do outreach to eligible land managers and landowners, select projects</i>			<i>Enhance 800 acres on approximately 7500 sites with native plantings designed to benefit monarch butterflies & pollinators.</i>			<i>Assess, monitor, and report results of enhancement activities.</i>				
Personnel (Wages and Benefits)	\$50,625	\$0	\$50,625							\$50,625	\$50,625
Project Manager: \$20,250 (74% salary, 26% benefits); 10% FTE each year for 3 years											
Habitat Restoration Specialist: \$30,375 (74% salary, 26% benefits), 15% FTE each year for 3 years											
Professional/Technical/Service Contracts											
University of Minnesota Graduate Student: \$123,049 (97% salary, tuition, and health, 3% COLA); 100% FTE each year for 3 years							\$123,049	\$0	\$123,049	\$123,049	\$123,049
University of Minnesota Seasonal Field Technician: \$37,477 (70.7% salary, 26.3% fringe benefits, 3% COLA) 100% FTE each year for 3 years							\$37,477	\$0	\$37,477	\$37,477	\$37,477
University of Minnesota Graduate Advisor: \$13,011 (63.2% salary, 33.8% fringe benefits, 3% COLA) 100% FTE for 2 weeks							\$13,011	\$0	\$13,011	\$13,011	\$13,011
Monarch Butterfly Enhancements: \$240,000 (75 plots, 4 acre average, \$800/acre) includes all items for establishment such as site preparation, herbicide, seed, seeding, and clipping. Projects will go out for a competitive bidding process as described in Pheasants Forever's procurement policy.				\$239,838	\$0	\$239,838				\$239,838	\$239,838
Grasslands Enhancements: \$200,000 (contract 500 acres of enhancements @ \$400/acre) includes all items for establishment such as site preparation, tree removal, herbicide, seed, seeding, and clipping				\$200,000	\$0	\$200,000				\$200,000	\$200,000
RIM Conservation Plan Updating: \$30,000 (100 plans @ \$300 for participating SWCDs) includes updating management plans to provide guidance on keeping easements highly productive and caring for pollinator plots properly.	\$30,000	\$0	\$30,000							\$30,000	\$30,000
University of Minnesota Bee Identification; \$7,500, \$2,500 each year for 3 years.							\$7,500	\$0	\$7,500	\$7,500	\$7,500
University of Minnesota monitoring equipment, data collection equipment, and equipment for vouchering specimens.							\$6,000	\$0	\$6,000	\$6,000	\$6,000
Landowner/ Practitioner tours and workshop \$4,500, (3 @ \$1,500 per workshop/ tour.							\$4,500	\$0	\$4,500	\$4,500	\$4,500
Travel expenses in Minnesota											
Travel to projects by Habitat Specialist for project design, procurement, and fulfillment; \$5,000, (100 projects @ 100 mile round trip @ \$0.50 per mile.	\$5,000	\$0	\$5,000							\$5,000	\$5,000
Travel to projects by graduate student and technician; \$15,000, (9,260 miles/year for 3 years @ \$0.55 per mile							\$15,000	\$0	\$15,000	\$15,000	\$15,000

Environment and Natural Resources Trust Fund

M.L. 2017 Parcel List

Project Title: Minnesota Bee and Beneficial Species Habitat Restoration

Legal Citation: M.L. 2017, Chp. 96, Sec. 2, Subd. 08g

Project Manager: Steven Burdick

Organization: Pheasants Forever

M.L. 2017 ENRTF Appropriation: \$732,000

Project Length and Completion Date: 4 Years, June 30, 2021

Date of Report: 10/21/2016

#	Acquisition or Restoration Parcel Name	Geographic Coordinates Format: [Deg.]° [Min.]' [Sec.]" [Hemis.]		Estimated Cost	Estimated Annual PILT Liabilities	County	Site Significance	Activity Description	# of Acres	# of Shoreline Miles	Type of Landowner	Proposed Fee Title or Easement Holder (if applicable)	Status
		Latitude	Longitude										
1	TBD- PROJECTS WILL BE SOLICITED, RANKED AND SELECTED IN A COMPETITIVE BIDDING PROCESS PER PHEASANTS FOREVER PROCUREMENT POLICY												
2													
3													
4													
5													
6													
7													
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9													
10													
NOTES:													

