



Lessard-Sams Outdoor Heritage Council

DNR Forest Enhancement and Restoration-Phase 4

ML 2024 Request for Funding

General Information

Date: 06/23/2023

Proposal Title: DNR Forest Enhancement and Restoration-Phase 4

Funds Requested: \$6,482,600

Confirmed Leverage Funds: -

Is this proposal Scalable?: Yes

Manager Information

Manager's Name: Ted Dick

Title: Forest Habitat Supervisor

Organization: DNR

Address: 1201 East Highway 2

City: Grand Rapids, MN 55744-3296

Email: ted.dick@state.mn.us

Office Number: 218-328-8869

Mobile Number: 218-395-3577

Fax Number:

Website: www.dnr.state.mn.us

Location Information

County Location(s): St. Louis, Aitkin, Wabasha, Koochiching, Cass, Wadena, Itasca, Lake, Crow Wing, Hubbard, Fillmore, Winona, Olmsted, Goodhue, Waseca, Le Sueur, Meeker, Sibley, Washington, Chisago, Todd, Kittson, Marshall and Pennington.

Eco regions in which work will take place:

- Northern Forest
- Forest / Prairie Transition
- Metro / Urban
- Southeast Forest
- Prairie

Activity types:

- Restore

- Enhance

Priority resources addressed by activity:

- Wetlands
- Forest
- Habitat

Narrative

Abstract

Minnesota's iconic forests and brushland habitats require enhancement beyond DNR timber harvest practices. Enhancements, such as brushland shearing provide critical wildlife habitat but are not achieved through timber harvest practices. These additional habitat benefits improve the quality of the forests for wildlife, water quality and outdoor recreation. DNR's Conservation Agenda, Wildlife Action Plan, Forest Action Plan, SNA Strategic Land Protection, Fish Habitat Plan, will guide habitat enhancements in this proposal to meet the objectives put forth in these plans.

Design and Scope of Work

Minnesota's forest habitats include many different native plant communities in different growth stages. Forests also includes rivers, lakes, sedge meadows, bogs, and brushland. Each of these habitats are home to a wide array with game and non-game species, including multiple Species of Greatest Conservation Need (SGCN). Forests provide outdoor recreation, timber products, and support local communities. Forests protect water quality and sequester carbon. However, forests face increasing stress from invasive species, climate change, critical habitat loss, forest conversion, and fragmentation. While timber harvest is an important tool providing habitats in the forest, additional or different enhancements are needed to maximize the diversity for fish and wildlife. For example timber harvest can create a wildlife opening, however other management such as periodic mowing is needed to maintain the opening.

We will accomplish strategic and targeted enhancements through contractors to conduct activities which support healthy, diverse and resilient habitats. Activities may include:

- 1) control invasive species
- 2) assist with oak regeneration through seeding and tree planting
- 3) firebreak development and maintenance as well as prescribed burns in fire-dependent forests, brushlands and wetlands
- 4) remove trees, mow and shear brush
- 5) maintain/restore open lands and brushland habitats
- 6) regenerate forests through site preparation, seed procurement/harvest, seeding, and planting
- 7) plant trees to reforest and restore habitats, add conifer to the landscape, provide thermal cover, diversify forests, and address ash stand management
- 8) restore floodplain and savanna forest habitat with tree planting, burning and mowing

DNR managers collaborate with other State, Federal, County agencies and many conservation organizations to take a landscape view of forests and manage across administrative units. For example, DNR managers are working together with USFS managers to maintain and enhance rock outcrops that provide spring forage and mast for a variety of wildlife.

This request seeks funding to restore 308 acres and enhance over 9174 acres of habitat on public lands open to

hunting, primarily but not limited to, WMA, AMA, SNA and State Forests. Strategic and targeted work will be accomplished through the added capacity of contractors hired to conduct activities that support healthy, diverse and resilient habitats.

Explain how the proposal addresses habitat protection, restoration, and/or enhancement for fish, game & wildlife, including threatened or endangered species conservation

Both young forests and mature forests require management other than DNR timber harvest methods to maximize habitat benefits for wildlife. Prescribed fire in mature forests helps clear underbrush and open up the understory. Fire is especially important in oak and pine forests. Shearing brushlands creates open lands that provide critical habitat for American woodcock, yellow rails and sharp-tailed grouse that are SGCN species. Planting conifers along north shore trout streams provides shade and infiltration of ground water to native brook trout streams that are threatened by climate change. Young forests and small forest openings are critical to many species of birds, including golden-winged warblers. Young forests provide critical habitat for moose to maintain and enhance the existing population.

Each of the practices mentioned in the design and scope will benefit a wide range of game and non-game species, including mammals, birds, reptiles and amphibians, as well as pollinating insects.

What are the elements of this proposal that are critical from a timing perspective?

Pressures on Minnesota forests are increasing. It is crucial to keep critical habitat for wildlife species and conserve SGCN species now than to address habitat needs in the future. Current DNR plans provide the opportunity to address these habitat needs, funding will accelerate implementation of these plans. Increased management of brushland habitats is a particularly urgent need in east-central Minnesota where sharp-tailed grouse depend upon them and have declined significantly in the past 10 years. Early detection and swift control of invasive species is also urgent.

Describe how the proposal expands habitat corridors or complexes and/or addresses habitat fragmentation:

DNR's Conservation Agenda, Wildlife Action Plan, Forest Action Plan, SNA Strategic Land Protection Plan (along with specific site management plans), Fish Habitat Plan, which will guide activities, were developed using the best information and science to identify goals and strategies. DNR habitat management is always based on science. Restoring and enhancing habitat expands corridors and complexes reduces fragmentation, and directly applies research to on the ground projects. Habitat projects that occur on SNA will enhance critical habitats identified by MCBS.

The habitat needs of many forest species, including mature forest species such as marten and fisher, and young forest species like woodcock and golden-winged warblers are well documented. Many wildlife species require mature forests during some point in their lives. Research conducted in Minnesota will be used to apply these funds to enhance and restore habitats in the forested areas of the state.

Which Conservation Plans referenced in MS97A.056, subd. 3a are most applicable to this project?

- Minnesota's Wildlife Action Plan 2015-2025
- Outdoor Heritage Fund: A 25 Year Framework

Explain how this proposal will uniquely address habitat resilience to climate change and its anticipated effects on game, fish & wildlife species utilizing the protected or restored/enhanced habitat this proposal targets.

The forest enhancement projects (e.g. diversifying ash forests) build resiliency in the forest by diversifying the tree species and allowing a forest to be retained after Emerald Ash borer moves into our forest. Diversifying forests in general and matching the native plant communities build resiliency against direct climate changes and increases in forest pests that are more abundant given changes in climate. Changes in climate are increasing invasive species in forests and degrading fish and wildlife habitat. The projects in this proposal work to mitigate against increases in invasive species to provide habitat resilience.

Which LSOHC section priorities are addressed in this proposal?

Forest / Prairie Transition

- Protect, restore, and enhance habitat for waterfowl, upland birds, and species of greatest conservation need

Metro / Urban

- Protect from long-term or permanent endangerment from invasive species

Northern Forest

- Restore forest-based wildlife habitat that has experienced substantial decline in area in recent decades

Prairie

- Protect, enhance, and restore remnant native prairie, Big Woods forests, and oak savanna

Southeast Forest

- Restore forest-based wildlife habitat that has experienced substantial decline in area in recent decades

Describe how this project/program will produce and demonstrate a significant and permanent conservation legacy and/or outcomes for fish, game, and wildlife, and if not permanent outcomes, why it is important to undertake at this time:

Forests are always maturing and changing, enhancement work, by its very nature, is not permanent. It is significant because the enhancements described above will make the forest more diverse and wildlife more abundant. This is all compatible with a sustainable timber harvest and the ecosystem services these habitats provide. A sustainable harvest and ecosystem services are a permanent legacy.

Outcomes

Programs in forest-prairie transition region:

- Protected, restored, and enhanced nesting and migratory habitat for waterfowl, upland birds, and species of greatest conservation need ~ *A number of species are tied to brushland and young aspen forests in these region, including elk, golden-winged warblers, and sharp-tailed grouse. Ongoing surveys and research on these species will allow the DNR to track local and regional responses to these and related efforts.*

Programs in metropolitan urbanizing region:

- A forest land base that contributes to the habitat picture ~ *These efforts will help manage forests in this region to benefit a range of wildlife species, both game and non-game. Ongoing surveys, especially among songbirds, will track long-term changes in bird populations in this region.*

Programs in the northern forest region:

- Healthy populations of endangered, threatened, and special concern species as well as more common species ~ *The DNR and partner agencies conduct a number of wildlife surveys, including moose, deer, ruffed grouse, sharp-tailed grouse, woodcock, and songbird surveys.*

Programs in prairie region:

- Improved condition of habitat on public lands ~ *These efforts will help manage forests in this region to benefit a range of wildlife species, both game and non-game. Ongoing surveys, especially among songbirds, will track long-term changes in bird populations in this region.*

Programs in southeast forest region:

- Large corridors and complexes of biologically diverse wildlife habitat typical of the unglaciated region are restored and protected ~ *The non-game program is very active in this region with projects assessing wildlife populations. And there are the same ongoing wildlife surveys as in the other regions of the state.*

What other dedicated funds may collaborate with or contribute to this proposal?

- N/A

Per MS 97A.056, Subd. 24, Please explain whether the request is supplanting or is a substitution for any previous funding that was not from a legacy fund and was used for the same purpose.

These funds are for additional enhance/restoration work beyond what the DNR is already conducting. These funds are not supplanting or substituting any funds.

How will you sustain and/or maintain this work after the Outdoor Heritage Funds are expended?

We will select and implement projects to achieve high quality and enduring benefits. Projects have variable lifespans depending on project type, weather and other environmental conditions. Many of the projects are meant to endure for decades, at which point, regular forest management activity through harvest. DNR staff and staff from partner agencies/NGOs will monitor them to if and when additional enhancement are needed. Work will be sustained through internal DNR funds, DNR timber harvest practices, and future requests from the OHF and related external funding.

Actions to Maintain Project Outcomes

Year	Source of Funds	Step 1	Step 2	Step 3
2024	listed above and future OHF requests	monitor results	document results	develop budget for additional work with internal and external funds
2026 and beyond	listed above and future OHF requests	continue monitoring	adapt results	seek additional funding

Provide an assessment of how your program may celebrate cultural diversity or reach diverse communities in Minnesota, including reaching low- and moderate-income households:

We have in the past and will continue to consult and coordinate with diverse communities and tribal partners into the project planning and work we do to enhance fish and wildlife habitats for all citizens of the state of Minnesota.

Activity Details

Requirements

If funded, this proposal will meet all applicable criteria set forth in MS 97A.056?

Yes

Will restoration and enhancement work follow best management practices including MS 84.973 Pollinator Habitat Program?

Yes

Is the restoration and enhancement activity on permanently protected land per 97A.056, Subd 13(f), tribal lands, and/or public waters per MS 103G.005, Subd. 15 or on lands to be acquired in this program?

Yes

Where does the activity take place?

- WMA
- SNA
- AMA
- State Forests
- Other : national forest, Con-Con lands, school trust lands.

Land Use

Will there be planting of any crop on OHF land purchased or restored in this program?

No

Will neonicotinoid pesticide products be used within any activities of this proposal?

No

Other OHF Appropriation Awards

Have you received OHF dollars in the past through LSOHC that are current OPEN appropriations?

Yes

Approp Year	Funding Amount Received	Amount Spent to Date	Funding Remaining	% Spent to Date
2024	\$1,496,000	-	-	-
2023	\$1,000,000	\$27,836	\$972,164	2.78%
2022	\$2,172,000	\$117,412	\$2,054,588	5.41%
2021	\$1,338,000	\$562,200	\$775,800	42.02%
Totals	\$6,006,000	\$707,448	\$5,298,552	11.78%

Timeline

Activity Name	Estimated Completion Date
implement enhancements	spring 2028
continued monitoring and follow-up management and	ongoing

enhancements	
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Budget

Totals

Item	Funding Request	Total Leverage	Leverage Source	Total
Personnel	-	-	-	-
Contracts	\$5,472,100	-	-	\$5,472,100
Fee Acquisition w/ PILT	-	-	-	-
Fee Acquisition w/o PILT	-	-	-	-
Easement Acquisition	-	-	-	-
Easement Stewardship	-	-	-	-
Travel	-	-	-	-
Professional Services	-	-	-	-
Direct Support Services	\$106,900	-	-	\$106,900
DNR Land Acquisition Costs	-	-	-	-
Capital Equipment	-	-	-	-
Other Equipment/Tools	-	-	-	-
Supplies/Materials	\$903,600	-	-	\$903,600
DNR IDP	-	-	-	-
Grand Total	\$6,482,600	-	-	\$6,482,600

Amount of Request: \$6,482,600

Amount of Leverage: -

Leverage as a percent of the Request: 0.0%

DSS + Personnel: \$106,900

As a % of the total request: 1.65%

Easement Stewardship: -

As a % of the Easement Acquisition: -

Does this proposal have the ability to be scalable?

Yes

If the project received 50% of the requested funding

Describe how the scaling would affect acres/activities and if not proportionately reduced, why?
fewer acres could be accomplished, the majority of these projects are scalable.

Describe how personnel and DSS expenses would be adjusted and if not proportionately reduced, why?

All costs including contracts/supplies/materials for the majority of the projects can be proportionally reduced.

If the project received 30% of the requested funding

Describe how the scaling would affect acres/activities and if not proportionately reduced, why?

Number of projects and acres accomplished can be reduced accordingly to meet a 30% funding level. Fund smaller projects that do not need to be scaled down to meet funding.

Describe how personnel and DSS expenses would be adjusted and if not proportionately reduced, why?

All costs including contracts/supplies/materials etc. for the majority of the projects can be proportionally reduced.

Contracts

What is included in the contracts line?

This line includes contracts for restoration and enhancement work that the DNR or Roving Crews don't have the specialized equipment or staff to conduct. Contracts increase our capacity to impact acres beyond what staff alone are capable of.

Direct Support Services

How did you determine which portions of the Direct Support Services of your shared support services is direct to this program?

We used the standard DNR calculator for proposals to the OHF and ENRTF.

Federal Funds

Do you anticipate federal funds as a match for this program?

No

Output Tables

Acres by Resource Type (Table 1)

Type	Wetland	Prairie	Forest	Habitat	Total Acres
Restore	0	0	308	0	308
Protect in Fee with State PILT Liability	0	0	0	0	0
Protect in Fee w/o State PILT Liability	0	0	0	0	0
Protect in Easement	0	0	0	0	0
Enhance	0	0	9,174	0	9,174
Total	0	0	9,482	0	9,482

Total Requested Funding by Resource Type (Table 2)

Type	Wetland	Prairie	Forest	Habitat	Total Funding
Restore	-	-	\$454,800	-	\$454,800
Protect in Fee with State PILT Liability	-	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-	-
Protect in Easement	-	-	-	-	-
Enhance	-	-	\$6,027,800	-	\$6,027,800
Total	-	-	\$6,482,600	-	\$6,482,600

Acres within each Ecological Section (Table 3)

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	N. Forest	Total Acres
Restore	86	0	222	0	0	308
Protect in Fee with State PILT Liability	0	0	0	0	0	0
Protect in Fee w/o State PILT Liability	0	0	0	0	0	0
Protect in Easement	0	0	0	0	0	0
Enhance	154	1,840	1,395	364	5,421	9,174
Total	240	1,840	1,617	364	5,421	9,482

Total Requested Funding within each Ecological Section (Table 4)

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	N. Forest	Total Funding
Restore	\$167,300	-	\$287,500	-	-	\$454,800
Protect in Fee with State PILT Liability	-	-	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-	-	-
Protect in Easement	-	-	-	-	-	-
Enhance	\$314,500	\$815,600	\$1,423,100	\$222,000	\$3,252,600	\$6,027,800
Total	\$481,800	\$815,600	\$1,710,600	\$222,000	\$3,252,600	\$6,482,600

Average Cost per Acre by Resource Type (Table 5)

Type	Wetland	Prairie	Forest	Habitat
Restore	-	-	\$1,476	-
Protect in Fee with State PILT Liability	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-
Protect in Easement	-	-	-	-
Enhance	-	-	\$657	-

Average Cost per Acre by Ecological Section (Table 6)

Type	Metro/Urban	Forest/Prairie	SE Forest	Prairie	N. Forest
Restore	\$1,945	-	\$1,295	-	-
Protect in Fee with State PILT Liability	-	-	-	-	-

Protect in Fee w/o State PILT Liability	-	-	-	-	-
Protect in Easement	-	-	-	-	-
Enhance	\$2,042	\$443	\$1,020	\$609	\$600

Target Lake/Stream/River Feet or Miles

Parcels

Sign-up Criteria?

No

Explain the process used to identify, prioritize, and select the parcels on your list:

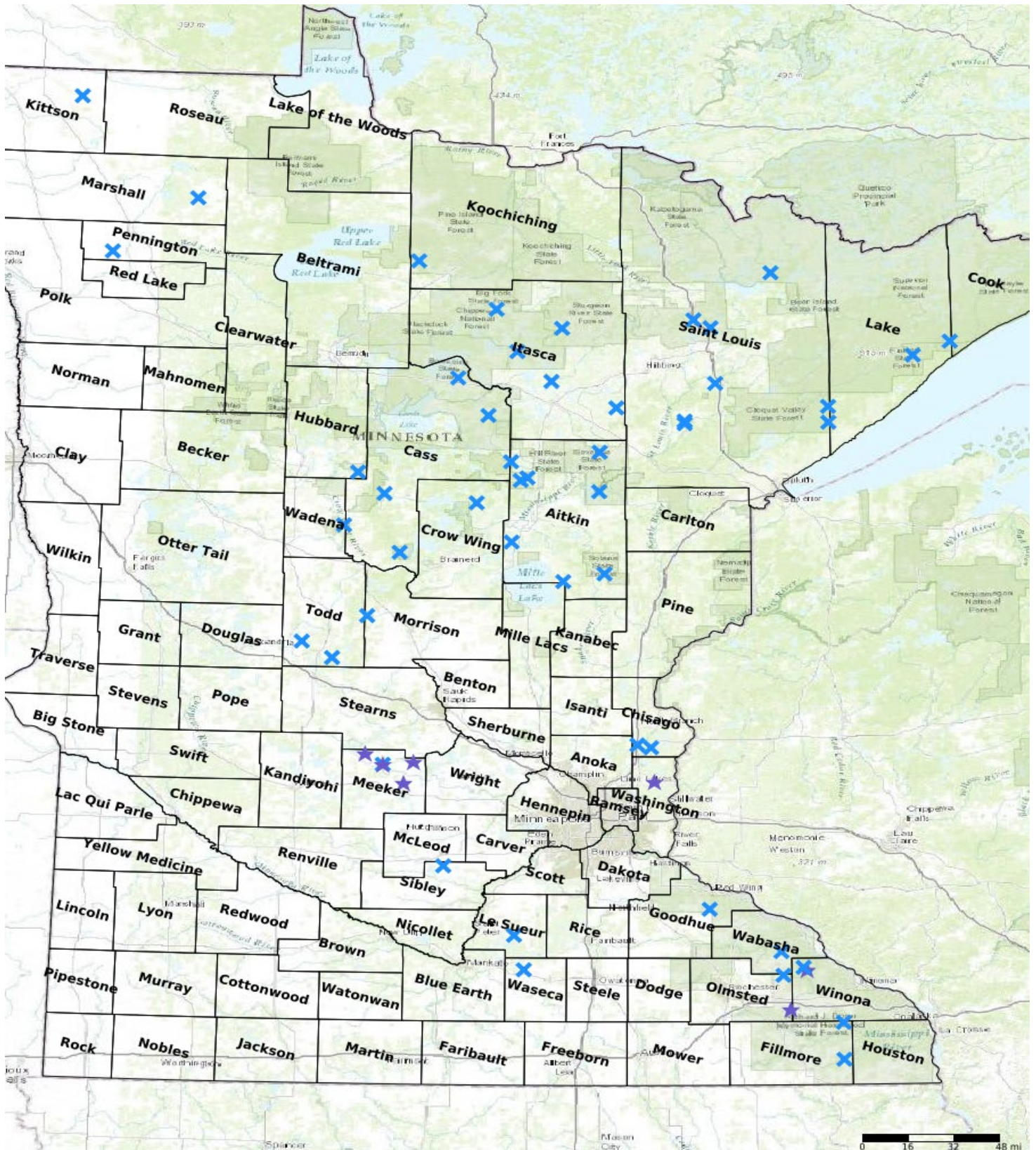
We evaluated forest habitat needs not funded through other sources, considering staff capacity from DNR Fish and Wildlife/Forestry divisions to implement and complete within grant timeline.

Restore / Enhance Parcels

Name	County	TRDS	Acres	Est Cost	Existing Protection
Land O' Lakes State Forest	Aitkin	05127216	19	\$6,790	Yes
Solana State Forest	Aitkin	04425236	77	\$26,950	Yes
Savanna State Forest	Aitkin	04923211	64	\$22,400	Yes
Solana State Forest	Aitkin	04627216	7	\$2,760	Yes
Solana State Forest	Aitkin	04423213	30	\$18,000	Yes
Savanna State Forest	Aitkin	05223226	23	\$13,800	Yes
Hill River State Forest	Aitkin	05027224	35	\$21,000	Yes
Hill River State Forest	Aitkin	05026217	143	\$50,015	Yes
Pillsbury State Forest	Cass	13430222	28	\$5,660	Yes
Bowstring State Forest	Cass	14527221	141	\$99,163	Yes
Foot Hills State Forest	Cass	13831236	28	\$5,680	Yes
Bowstring State Forest	Cass	14326236	59	\$29,500	Yes
Carlos Avery WMA	Chisago	03321208	21	\$40,000	Yes
Carlos Avery WMA	Chisago	03321213	30	\$88,000	Yes
Crow Wing State Forest	Crow Wing	13726216	29	\$5,780	Yes
Schueler WMA	Fillmore	10408203	50	\$25,000	Yes
Choice WMA	Fillmore	10208215	500	\$500,000	Yes
John Murtaugh Memorial WMA	Goodhue	11215236	60	\$40,500	Yes
Badoura State Forest	Hubbard	13932222	21	\$4,140	Yes
Golden Anniversary State Forest	Itasca	06025236	712	\$533,780	Yes
Golden Anniversary State Forest	Itasca	05522234	134	\$40,176	Yes
Bowstring State Forest	Itasca	05827214	168	\$100,619	Yes
Big Fork State Forest	Itasca	14925208	15	\$10,456	Yes
Prairie Lake Deer Yard WMA	Itasca	05625209	150	\$48,000	Yes
Beaches Lake WMA	Kittson	16246213	500	\$150,000	Yes
Pine Island State Forest	Koochiching	15229209	38	\$22,782	Yes
Finland State Forest	Lake	05807230	2,157	\$1,617,375	Yes
Finland State Forest	Lake	05906236	190	\$38,000	Yes
Cloquet Valley State Forest	Lake	05512236	30	\$18,000	Yes
Chadderdon WMA	Le Sueur	11024221	204	\$102,000	Yes
Eckvoll WMA	Marshall	15640222	500	\$125,000	Yes
Little Elk WMA	Meeker	13031219	231	\$109,000	Yes
Teal Scurry WMA	Meeker	12131207	14	\$28,000	Yes
Powers Lake WMA	Meeker	11930201	12	\$26,000	Yes
Manannah WMA	Meeker	12131236	5	\$10,000	Yes
Kingston WMA	Meeker	12129228	14	\$28,000	Yes
Manannah WMA	Meeker	12131236	40	\$155,000	Yes
Whitewater WMA	Olmsted	10711203	400	\$500,000	Yes
Vermilya WMA	Olmsted	10511212	22	\$62,500	Yes
Higinbotham WMA	Pennington	15244204	100	\$110,000	Yes
Proehl's Woods WMA	Sibley	11428212	63	\$31,500	Yes
Cloquet Valley State Forest	St. Louis	05617216	20	\$12,000	Yes
Sturgeon River State Forest	St. Louis	06017232	70	\$28,000	Yes
Sturgeon River State Forest	St. Louis	06018216	21	\$4,280	Yes

Cloquet Valley State Forest	St. Louis	05412236	268	\$201,300	Yes
Burntside State Forest	St. Louis	06314217	400	\$100,000	Yes
Whiteface River State Forest	St. Louis	05419236	138	\$37,950	Yes
Whiteface River State Forest	St. Louis	05419225	183	\$50,325	Yes
Owen-Hinz WMA	Todd	12835212	27	\$21,600	Yes
Grey Eagle WMA	Todd	12733209	482	\$300,000	Yes
Richard J. Dorer Memorial Hardwood State Forest	Wabasha	10911221	160	\$96,000	Yes
Lyons State Forest	Wadena	13633236	23	\$4,500	Yes
Linde WMA	Waseca	10824225	160	\$120,000	Yes
Keystone Woods WMA	Washington	03120219	40	\$75,300	Yes
Whitewater WMA	Winona	10810222	225	\$225,000	Yes
Whitewater WMA	Winona	10810226	200	\$225,000	Yes

Parcel Map



- Protect in Easement
- ▲ Protect in Fee with PILT
- Protect in Fee W/O PILT
- ★ Restore
- ✕ Enhance
- ⊕ Other

DNR Statewide Forest Enhancement and Restoration- Phase 4

This project will:

- **Proactively restore 308 acres and enhance 9,174 acres of forest habitat on public lands open to hunting or fishing; primarily Wildlife Management Areas and State Forests.**
- **Hire contractors to increase capacity to achieve large scale habitat improvements, such as tree planting and seeding; threatened/endangered species habitat improvement; invasive species control; prescribed burns; regenerating brushlands; and enhancing habitat affected by forest pests.**
- **Sustain and grow healthy, diverse, and resilient habitats for Minnesota's future, benefitting wildlife populations and citizens.**



Habitat management activities will:

- Address stressors in our forest such as impacts from invasive species, forest pests such as emerald ash borer and spruce budworm, climate change, loss of oak and winter cover, and lack of management.
- Enhance habitat for threatened or endangered species.
- Focus on larger projects that require unique equipment, and/or are more cost effective for contractors to conduct.
- Benefit an array of native fish and wildlife, including game and non-game, and several species in greatest conservation need.

