

Lessard-Sams Outdoor Heritage Council

ML 2022 Request for Funding

General Information

Date: 06/21/2021

Proposal Title: Minnesota Forest Recovery Project: Phase II

Funds Requested: \$9,579,900

Manager Information

Manager's Name: Jim Manolis Title: Forest Conservation Program Director Organization: The Nature Conservancy Address: 1101 West River Parkway City: Minneapolis, MN 55415 Email: jim.manolis@tnc.org Office Number: 612-331-0796 Mobile Number: 612-331-0796 Fax Number: 612-331-0770 Website: nature.org/minnesota

Location Information

County Location(s): Koochiching, Cook, St. Louis, Lake, Itasca, Beltrami and Cass.

Eco regions in which work will take place:

Northern Forest

Activity types:

- Enhance
- Protect in Easement

Priority resources addressed by activity:

• Forest

Narrative

Abstract

Northern Minnesota's forests are increasingly challenged by invasive species, insect pests, a changing climate, and fragmentation. Some habitats have declined substantially, including long-lived-conifers, young-forest, and large-

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patch habitats. These habitats are critical for numerous game and non-game species of concern. This project seeks to protect 7,830 acres of intact forest habitat through conservation easements and enhance 23,780 acres of degraded forests. The enhancements will increase long-lived conifers, young forest gaps, riparian forest complexity, and patch-size diversity. By acting today, we can improve the connectivity, health, and resilience of our forests for all the benefits they provide.

Design and Scope of Work

In northern Minnesota, vast expanses of forest are now in poor condition with diminished value for wildlife. Large tracts of private lands remain vulnerable to development. Long-lived conifers and diverse young forest habitats have declined. Threats such as invasive species, a warming climate, fragmentation, and habitat loss pose great challenges for forest and wildlife managers. Over time, forest health issues tend to become more difficult and expensive to reverse. Significant investments in Minnesota's forests are urgently needed now to improve forest health for wildlife, clean water, cultural values, and local economies.

Goals of this project are to:

- Protect large tracts of contiguous forest through conservation easements
- Enhance forest productivity in degraded stands to benefit wildlife
- Enhance riparian forests to improve water quality and fish habitat
- Enhance tree species, age-class, and patch size diversity to improve habitat and increase forest resilience

Phase I of the project built on a long history of enhancement and protection partnerships in northern Minnesota. Prior to Phase I, TNC led over 12,000 acres of enhancements and worked with partners to conserve over 300,000 acres of forests with conservation easements.

Since Phase I of this project began in 2019, we completed 2100 enhancement acres and will exceed enhancement goals by the closing date in 2022.

Phase II seeks to enhance 23,780 acres and will add an easement component that will protect 7,830 acres.

Enhancements will include:

- Site preparation including shearing, brush cutting, and removal of trees damaged by spruce budworm
- Tree planting and tending
- Coordinating across multiple landowners to maintain or increase young and mature forest patch size
- Prescribed burning
- Black Ash stand diversification

We used a collaborative approach to identify enhancement sites across DNR, Leech Lake Band of Ojibwe, US Forest Service, and Beltrami, Lake, and St. Louis County lands, and we will seek additional landowner partners. Advisory partners include the American Bird Conservancy, the 1854 Treaty Authority, The Minnesota Land Trust, and the Ruffed Grouse Society. We also partner with groups including the Arrowhead, North Shore, and Manitou collaboratives and Minnesota Forest Resource Council Landscape Committees.

Conservation easements will be acquired from willing sellers. In collaboration with the MN DNR Forests for the Future Program and Minnesota Land Trust, we are purposefully keeping options open to match the top landowners and properties to the conservation easement option that works best for them. We will work closely with MN DNR and MLT to prioritize properties for outreach, rank opportunities, and find the best conservation easement solution on a property-by-property basis (DNR, MLT, or TNC).

FA02

Properties will be prioritized based on factors including tract size, Minnesota Biological Survey data, aquatic features, contribution to larger complexes of protected forest land, forest condition, and relevance to the Resilient and Connected Network data (developed by TNC scientists and partners). We seek to conserve the largest and most important gaps in the Resilient and Connected Network.

During implementation, TNC will strengthen local partnerships, seek and coordinate easement acquisitions, coordinate habitat enhancements with landowners, and supervise contractors.

How does the proposal address habitats that have significant value for wildlife species of greatest conservation need, and/or threatened or endangered species, and list targeted species?

This proposal addresses Species of Greatest Conservation Need in two main ways. First, it clearly addresses Objective 1 of the State Wildlife Action Plan: "Within the Wildlife Acton Network, maintain and enhance the resilience of the habitats upon which Species in Greatest Conservation Need (SGCN) and other wildlife depend." The proposed habitat projects increase forest diversity and thus maintain or enhance resilience. The majority of proposed sites fall within higher ranking areas of the Wildlife Action Network. Second, specific treatments carried out by this project will benefit at least 20 SGCNs. For example, treatments that increase long-lived conifer abundance will benefit:

- Evening Grosbeak
- Olive-sided Flycatcher
- Spruce Grouse
- Purple Finch
- Connecticut Warbler
- Black-backed Woodpecker
- Winter Wren
- Moose
- Boreal Owl
- Canada Lynx

Treatments that create young forest conditions will benefit:

- Veery
- Wood Thrush
- Golden-winged Warbler
- American Woodcock
- Moose

Gap creation and planting in riparian areas will benefit:

- Veery
- Black-billed Cuckoo
- Olive-sided Flycatcher
- Common Merganser
- Winter Wren
- Four-toed salamander
- Eastern red-backed salamander
- Coaster Brook Trout
- Lake Sturgeon

FA02

FA02 What is the degree of timing/opportunistic urgency and why it is necessary to spend public money for this work as soon as possible?

Minnesota's forests are in trouble. Fragmentation of habitat continues to expand and appears to be increasing in the wake of COVID-19. We will target some of the largest and most strategically located properties for landowner outreach and conservation easement acquisition. Urgent action is also needed to address increasing forest health issues that degrade wildlife habitat. A recent analysis conducted by The Nature Conservancy found that about 30% of forests in Northern Minnesota need enhancement to improve habitat and resilience. Forest fragmentation and habitat loss, combined with large-scale perturbations such as climate change and forest pests further exacerbate the threats posed to our forested systems and the game and non-game species that depend on them. Over time, forest health issues tend to become more difficult and expensive to reverse. Significant investments are urgently needed now to improve northern Minnesota's forests for wildlife and all the benefits forests provide.

Describe how the proposal uses science-based targeting that leverages or expands corridors and complexes, reduces fragmentation or protects areas identified in the MN County Biological Survey:

For prioritizing lands for conservation easements, we are explicitly seeking to build conservation complexes and protect habitat corridors. We are targeting some of the larger private holdings in otherwise conserved areas to help ensure landscape contiguity and prevent habitat fragmentation. We are using The Nature Conservancy's Resilient and Connected Network data, developed in collaboration with 100's of state, federal, and academic scientists to create a continental network of lands and waters that are resilient and will allow nature to adapt to a changing climate. Northern Minnesota, and Great Lakes forests in general, are a key continental priority in that network. We will prioritize among those parcels with the other data mentioned above including MN Biological Survey data.

For our enhancement work, we drew from a pool of over 70,000 acres of sites that partners identified as in need of habitat enhancement. To narrow this pool to the set of submitted parcels, we used a coarse-filter approach that considered partner priorities, geographic distribution across landscapes, distribution across partners, and overlap with the Resilient and Connected Network (which incorporates MN Biological Survey Data and the Minnesota Wildlife Action Network). Upon initiation of Phase II of this project assuming funding in July 2022, we will revisit the parcel list to take a more refined GIS approach and consider new, pertinent information. This information will include GIS Lidar-based data on forest complexity, information on insect damage, and analysis of corridors. It will also allow substitution of sites to adjust for environmental change or new opportunities (e.g., changes in site conditions from natural disturbance, parcels submitted by new partners to create larger, cross-ownership management units).

Which two sections of the Minnesota Statewide Conservation and Preservation Plan are most applicable to this project?

- LU10 Support and expand sustainable practices on working forested lands
- LU8 Protect large blocks of forest land

Which two other plans are addressed in this proposal?

- Minnesota Forest Resource Council Landscape Plans
- Minnesota's Wildlife Action Plan 2015-2025

Describe how your program will advance the indicators identified in the plans selected:

This project will advance goals from several plans:

Minnesota Forest Resources Council Landscape Plans:

Northeast Landscape Plan, Goal 2: Maintain, Restore, and Enhance Native Biodiversity, Including Wildlife Habitat and Populations. Promote forest management practices that ensure the protection, restoration, and enhancement of terrestrial habitats.

North-Central Landscape Plan, Goal 1: Enhance the ability of the forest ecosystems to adapt and respond to current and future threats by fostering ecosystem resilience, resistance, and adaptability.

State Wildlife Action Plan:

Goal 1: Ensure the long-term health and viability of Minnesota's wildlife, with a focus on species that are rare, declining, or vulnerable to decline.

Objective 1.1. Sustain and enhance species, habitat, and landscape biological diversity within the Wildlife Action Network, giving priority to the following communities, which are thought to be most vulnerable to changing climate: . . .peatlands, priority cold-water cisco lakes, cool-/cold-water streams, lowland conifer forests, and mesic hardwood forests.

Which LSOHC section priorities are addressed in this proposal?

Northern Forest

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

Describe how your program will produce and demonstrate a significant and permanent conservation legacy and/or outcomes for fish, game, and wildlife as indicated in the LSOHC priorities:

The Nature Conservancy is committed to conserving a dynamic mosaic of healthy lands and waters that will sustain and enhance a broad diversity of species and local communities. From protecting discrete parcels of land to conserving entire ecosystems through strategic planning and mobilizing policy initiatives, we seek to make tangible, lasting, and measurable results in critical places. We have been actively protecting and managing forests in Minnesota for more than 50 years. Investment in site preparation, tree planting for diversity enhancement, brush removal, browse protection, and implementing controlled burns is costly up-front, but becomes more sustainable once those investments have been made. All conservation easements will be permanent and stewardship funds will ensure ongoing funding for annual monitoring. The Nature Conservancy has a strong track record of finding a wide array of funds and garnering partner resources to mobilize ongoing enhancement and restoration. We are committed to sustaining the long-term legacy of investments made through our work.

What other fund may contribute to this proposal?

• Other

Does this proposal include leveraged funding?

Yes

Explain the leverage:

To support our ongoing forest enhancement work, we continually seek and acquire private foundation grants, public funds, and donations from corporations and individuals. Leverage sources and amounts for this proposal include:

- TNC Private Donations
- In-kind labor provided by National Forests

For our conservation easement work, we will seek 'bargain sales' wherever possible where landowners reduce a portion of the purchase price as a charitable donation.

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.

This proposal does not substitute or supplant previous funding that was not from a legacy fund.

Non-OHF Appropriations

Year	Source	Amount
2020	TNC Private Donations	33,000

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

This project will strengthen and support the many collaborative efforts across the forested region by mobilizing efforts to increase the pace and scale of forest protection, restoration and enhancement. Through this effort, we are developing consistent methodologies and approaches that can be institutionalized through a collaborative process, thus ensuring a long-term commitment that follows ecological need and urgency. When possible, Outdoor Heritage funds will be used to leverage federal and private funds to expand restoration and enhancement efforts to the most critically needed locations.

Actions to Maintain Project Outcomes

Year	Source of Funds	Step 1	Step 2	Step 3
1-7	We will seek a mix of private and public	Install browse protection on planted	Monitor seedling survival, fuel, burn	-
	funds	seedlings, remove fuel	success	
		loads or burn on appropriate sites		
5	We will seek a mix of private and public funds	Release/cut competing brush around seedlings	-	-
7, 10	We will seek a mix of private and public funds	Check sapling condition, repeat burns on appropriate sites	Prune white pines for blister rust	-
20, 40, 60	Landowner responsibility	Check stand condition	Treat as appropriate	-

Identify indicator species and associated quantities this habitat will typically support:

The following forest indicator species have been identified by the Minnesota DNR.

Ovenbirds (Seiurus aurocapilla) are found in upland forests statewide; typically in relatively mature forest but can also be found in younger forests. While territories vary in size and may overlap, an average of 10 pairs for every 10 hectares may be translated to roughly 16 pairs for every 40 acres.

Golden-winged Warblers (Vermivora chrysoptera) are often associated with shrubland habitat and regenerating forests. However, recent current research indicates a variety of forest habitats are required, including a matrix of shrubby wetlands and uplands, regenerating forests, and mature forests. While territories vary in size, an average of 4 pairs for every 10 hectares may be translated to roughly 6 pairs for every 40 acres.

White-tailed deer (Odocoileus virginianus) use a wide variety of forested habitats, are found throughout Minnesota, and are an important game species in the state. In the 33 forested deer permit areas for which deer densities are estimated, covering most of the LSOHC Northern Forest section, the six-year average (2010-2015) for pre-fawn deer densities across all deer permit areas is 13 deer per square mile of land (excluding water). This translates to 0.02 deer (pre-fawning) per acre of forest land habitat or roughly 1 deer (pre-fawning) for every 50 acres of land.

How will the program directly involve, engage, and benefit BIPOC (Black, Indigenous, People of Color) and diverse communities:

Phase I of the project already includes the Leech Lake Band of the Ojibwe as a partner through their Division of Resource Management (DRM), with several projects emphasizing interests of the band within the Leech Lake Reservation and its overlap with the Chippewa National Forest. These include prescribed fire to enhance pine woodland systems, blueberry regeneration and associated open habitats, and enhancing diversity in black ash stands. These are reservation interests that were initiated by the Leech Lake DRM. The Nature Conservancy is also beginning a partnership with the Leech Lake Tribal College, with Tribal interns gaining natural resource field experience jointly with TNC, Leech Lake Band of Ojibwe, The Chippewa National Forest, and other organizations. Interns will help conduct site-level reconnaissance, project planning, and monitoring on a range of project sites, including those funded by OHF.

In Northeast Minnesota, 1854 Treaty Authority staff will serve as an advisory partner, to refine how the natural resource and cultural interests of their member bands can be enhanced through engagement with the project. Initial conversations suggest substantial common ground on interests and goals of this proposal, and we will deepen this conversation over the next year before Phase II begins, also including specific input from Fon du Lac, Grant Portage, and Bois Forte members and natural resource staff.

These efforts aim to benefit Indigenous nations through enhancing wildlife habitats that are culturally important to them, and by increasing training and education opportunities that could lead to natural resource employment for Indigenous people.

The Nature Conservancy is also initiating a new program to increase diversity, equity, and inclusion in all of our work, and we will look for ways to engage and benefit other BIPOC communities in aspects of this project.

Activity Details

Requirements

Yes

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

Is the land you plan to acquire (easement) free of any other permanent protection? 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?

Where does the activity take place?

- WMA
- Permanently Protected Conservation Easements
- County/Municipal
- State Forests
- Other : US Forest Service Lands
- AMA

Land Use

Will there be planting of any crop on OHF land purchased or restored in this program? No

Will the eased land be open for public use?

No

Are there currently trails or roads on any of the proposed acquisitions? No

Will new trails or roads be developed or improved as a result of the OHF acquisition? No

Will the land that you acquire (fee or easement) be restored or enhanced within this proposal's funding and availability?

No

Explain how, when, and source of the R/E work:

Enhancement work in this project emphasizes lands that are already protected. Restoration and enhancement on acquired easements may be considered in future phases of this project, if needed.

Other OHF Appropriation Awards

Have you received OHF dollars in the past through LSOHC?

Yes

Approp Year	Approp Amount Received	Amount Spent to Date	Leverage Reported in AP	Leverage Realized to Date	Acres Affected in AP	Acres Affected to Date	Complete/Final Report Approved?
2019	\$1,058,000	\$313,982	\$250,600	\$33,000	2,465	2,100	No

Timeline

Activity Name	Estimated Completion Date
Complete first season of site preparation	July-December 2022
Complete first season of planting	May 2023
Complete first season of browse protection	November 2023
Complete second season of site preparation	July-December 2023
Complete second season of planting	May 2024
Complete second season of browse protection	November 2024
Complete third season of site preparation	July-December 2024
Complete third season of planting	May 2025
Complete final prescribed burns	June 2027
Conservation easements: Landowner outreach and due	July 2022-June 2026
diligence	
Acquire conservation easements	June 2026

Budget

Totals

Item	Funding Request	Antic. Leverage	Leverage Source	Total
Personnel	\$631,000	\$15,000	-	\$646,000
Contracts	\$3,680,000	\$194,000	USFS In-kind labor	\$3,874,000
Fee Acquisition w/ PILT	-	-	-	-
Fee Acquisition w/o PILT	-	-	-	-
Easement Acquisition	\$2,350,000	-	-	\$2,350,000
Easement Stewardship	\$335,700	-	-	\$335,700
Travel	\$22,900	-	-	\$22,900
Professional Services	\$223,800	-	-	\$223,800
Direct Support Services	\$481,000	-	-	\$481,000
DNR Land Acquisition Costs	-	-	-	-
Capital Equipment	-	-	-	-
Other	-	-	-	-
Equipment/Tools				
Supplies/Materials	\$1,855,500	\$15,000	TNC Private Donations	\$1,870,500
DNR IDP	-	-	-	-
Grand Total	\$9,579,900	\$224,000	-	\$9,803,900

Personnel

Position	Annual FTE	Years Working	Funding Request	Antic. Leverage	Leverage Source	Total
Forester, Coordination Support, Protection, Grants admin.	2.85	3.0	\$631,000	\$15,000	TNC Private Donations	\$646,000

Amount of Request: \$9,579,900 Amount of Leverage: \$224,000 Leverage as a percent of the Request: 2.34% DSS + Personnel: \$1,112,000 As a % of the total request: 11.61% Easement Stewardship: \$335,700 As a % of the Easement Acquisition: 14.29%

Describe and explain leverage source and confirmation of funds:

Leverage sources include conservative estimates of US Forest Services In-kind labor and TNC Private donations that contribute to supplies and staff time.

Does this proposal have the ability to be scalable?

Yes

If the project received 70% of the requested funding

Describe how the scaling would affect acres/activities and if not proportionately reduced, why? For the easement portion, we estimate that 70% of requested funding would result in 69% of original

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

Staff costs are estimated to be reduced to 80% with 70% funding due to some fixed costs of managing the project. This would increase the proportion of DSS + Personnel/out of total request slightly, by about 1% over the fully funded request.

If the project received 50% of the requested funding

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

For the easement portion, we estimate that 50% of requested funding would result in 49% of original results (3,838 vs. 7,830 acres) due to fixed project management costs. For the enhancement portion, we estimate that 50% of requested funding would result in 49% of enhancements (11,652 acres).

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

Staff costs are estimated to be reduced to 60% with 50% funding due to some fixed costs of managing the project. This would increase the proportion of DSS + Personnel/out of total request slightly, by about 1% over the fully funded request.

Personnel

Has funding for these positions been requested in the past?

Yes

Please explain the overlap of past and future staffing and position levels previously received and how that is coordinated over multiple years?

Phase II builds on and expands upon Phase I. In Phase I, OHF funds covered 0.60 FTEs, split across several positions for program coordination, and on-the-ground implementation. Phase II adds to this capacity to 2.5 FTEs, to accelerate work on the ground and support easement acquisitions. Continuity of funding across multiple phases allows us flexibility when prioritizing parcels for protection or enhancement. Further, it ensures stability in our staffing model and provides the ability to plan and prioritize projects over multiple years. The flexibility provided by stable funding is critically important to achieving conservation goals given the uncertainty and variability of field season weather conditions.

Contracts

What is included in the contracts line?

The entire contract line item is dedicated to enhancement work as well as work by partners that may acquire some or all of the conservation easements. Because we anticipate collaboratively evaluating the best conservation easement holder on a case-by-case basis, we have not sought direct appropriations for individual partners.

Easement Stewardship

What is the number of easements anticipated, cost per easement for stewardship, and explain how that amount is calculated?

We anticipate 11 conservation easement acquisitions and have budgeted \$30,000 per easement for stewardship based on rates used by the Minnesota Land Trust and Minnesota Forests for the Future program.

Travel

Does the amount in the travel line include equipment/vehicle rental?

Yes

Explain the amount in the travel line outside of traditional travel costs of mileage, food, and lodging Where it is more cost-effective than paying mileage reimbursement, we have budgeted for car rental and fuel reimbursement.

I understand and agree that lodging, meals, and mileage must comply with the current MMB Commissioner Plan:

Yes

Direct Support Services

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

DSS is based on The Nature Conservancy's Federal Negotiated Rate (FNR) as proposed and approved by the US Dept. of Interior on an annual basis. In this proposal we are requesting reimbursement of 7.5% of eligible base costs as determined by our annual FNR and based on suggestions from the Council in prior years' hearings. The amount requested for reimbursement represents less than one-third of the total reimbursable costs allowed under the FNR. Examples of expenses included in the FNR include services from in-house legal counsel; finance, human resources; and information technology support, all of which contribute directly to the implementation of the project. The FNR is not applied to capital equipment over \$50,000 or land acquisition.

Federal Funds

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

No

Output Tables

Acres by Resource Type (Table 1)

Туре	Wetland	Prairie	Forest	Habitat	Total Acres
Restore	0	0	0	0	0
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	7,830	0	7,830
Enhance	0	0	23,780	0	23,780
Total	0	0	31,610	0	31,610

Total Requested Funding by Resource Type (Table 2)

Туре	Wetland	Prairie	Forest	Habitat	Total Funding
Restore	-	-	-	-	-
Protect in Fee with State PILT Liability	-	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-	-
Protect in Easement	-	-	\$3,317,600	-	\$3,317,600
Enhance	-	-	\$6,262,300	-	\$6,262,300
Total	-	-	\$9,579,900	-	\$9,579,900

Acres within each Ecological Section (Table 3)

Туре	Metro/Urban	Forest/Prairie	SE Forest	Prairie	N. Forest	Total Acres
Restore	0	0	0	0	0	0
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	7,830	7,830
Enhance	0	0	0	0	23,780	23,780
Total	0	0	0	0	31,610	31,610

Total Requested Funding within each Ecological Section (Table 4)

Туре	Metro/Urban	Forest/Prairie	SE Forest	Prairie	N. Forest	Total Funding
Restore	-	-	-	-	-	-
Protect in Fee with State PILT Liability	-	-	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-	-	-
Protect in Easement	-	-	-	-	\$3,317,600	\$3,317,600
Enhance	-	-	-	-	\$6,262,300	\$6,262,300
Total	-	-	-	-	\$9,579,900	\$9,579,900

Average Cost per Acre by Resource Type (Table 5)

Туре	Wetland	Prairie	Forest	Habitat
Restore	-	-	-	-
Protect in Fee with State PILT Liability	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-
Protect in Easement	-	-	\$423	-
Enhance	-	-	\$263	-

Average Cost per Acre by Ecological Section (Table 6)

Туре	Metro/Urban	Forest/Prairie	SE Forest	Prairie	N. Forest
Restore	-	-	-	-	-
Protect in Fee with State PILT Liability	-	-	-	-	-
Protect in Fee w/o State	-	-	-	-	-

					FA02
PILT Liability					
Protect in Easement	-	-	-	-	\$423
Enhance	-	-	-	-	\$263

Target Lake/Stream/River Feet or Miles

Outcomes

Programs in the northern forest region:

• Improved availability and improved condition of habitats that have experienced substantial decline ~ *We* will seek and leverage funds to measure regeneration success, structural variables, and other measures of stand condition of treated sites. We will encourage landowner partners to do the same.

Parcels

Sign-up Criteria? No

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

For prioritizing lands for conservation easements, we are targeting some of the larger private holdings in otherwise conserved areas to help ensure landscape contiguity and prevent habitat fragmentation. We are using The Nature Conservancy's Resilient and Connected Network data, developed in collaboration with hundreds of state, federal, and academic scientists to create a continental network of lands and waters that are resilient and will allow nature to adapt to a changing climate. We will prioritize among those parcels with the other data mentioned above including MN Biological Survey data.

For our enhancement work, we drew from a pool of over 70,000 acres of sites that partners identified as in need of habitat enhancement. To narrow this pool to the set of submitted parcels, we used a coarse-filter approach that considered partner priorities, geographic distribution across landscapes, distribution across partners, and overlap with the Resilient and Connected Network (which incorporates MN Biological Survey Data and the Minnesota Wildlife Action Network). Upon initiation of Phase II of this project assuming funding in July 2022, we will revisit the parcel list to take a more refined GIS approach and consider new, pertinent information. This information will include GIS Lidar-based data on forest complexity, information on insect damage, and analysis of corridors. It will also allow substitution of sites to adjust for environmental change or new opportunities (e.g., changes in site conditions from natural disturbance, parcels submitted by new partners to create larger, cross-ownership management units).

Name	County	TRDS	Acres	Est Cost	Existing
149352144	Beltrami	14935221	2	\$378	Protection Yes
			10	•	
149352143	Beltrami	14935221		\$1,386	Yes
147350367	Beltrami	14735203	13	\$546	Yes
147350366	Beltrami	14735203	12	\$1,638	Yes
147352508	Beltrami	14735225	12	\$525	Yes
147350379	Beltrami	14735203	28	\$4,704	Yes
148352966	Beltrami	14835229	7	\$1,008	Yes
146352399	Beltrami	14635223	19	\$798	Yes
146353370	Beltrami	14635233	7	\$1,008	Yes
146352131	Beltrami	14635221	6	\$882	Yes
146352022	Beltrami	14635220	30	\$6,300	Yes
146351409	Beltrami	14635214	19	\$3,990	Yes
147352589	Beltrami	14735225	16	\$1,428	Yes
147351028	Beltrami	14735210	13	\$2,835	Yes
148351962	Beltrami	14835219	17	\$3,696	Yes
148331044, 59, 67, 71	Beltrami	14833210	14	\$2,352	Yes
147323044, 45	Beltrami	14732230	5	\$420	Yes
147322150	Beltrami	14732221	25	\$2,100	Yes
147320961,63	Beltrami	14732209	26	\$4,368	Yes
150353141, 43	Beltrami	15035231	13	\$1,638	Yes
150352046	Beltrami	15035220	12	\$1,512	Yes
150351965, 66,	Beltrami	15035219	25	\$3,150	Yes
150352128	Beltrami	15035221	10	\$1,680	Yes
150352110	Beltrami	15035221	17	\$1,428	Yes
150352963	Beltrami	15035229	16	\$2,016	Yes
150320166	Beltrami	15032201	1	\$84	Yes

Restore / Enhance Parcels

					FA02
150320165	Beltrami	15032201	3	\$252	Yes
T146N R30W Sec 28	Beltrami	14630228	450	\$90,000	Yes
T147N, R31W, S31 NW1/4	Beltrami	14731231	80	\$16,000	Yes
150322046	Beltrami	15032220	49	\$8,232	Yes
150322049	Beltrami	15032220	7	\$1,176	Yes
150322810	Beltrami	15032228	7	\$882	Yes
150322823	Beltrami	15032228	1	\$126	Yes
150322905	Beltrami	15032229	19	\$2,394	Yes
150342760	Beltrami	15034227	4	\$336	Yes
150321255	Beltrami	15032212	4	\$336	Yes
150320167	Beltrami	15032201	7	\$588	Yes
151311562	Beltrami	15131215	4	\$672	Yes
151322409 NP	Beltrami	15132224	6	\$1,008	Yes
151322409 WP	Beltrami	15132224	6	\$1,008	Yes
151322946	Beltrami	15132229	6	\$504	Yes
147342020	Beltrami	14734220	17	\$2,142	Yes
147342130	Beltrami	14734221	40	\$5,040	Yes
147341025	Beltrami	14734210	7	\$882	Yes
147342206	Beltrami	14734222	5	\$840	Yes
147341727	Beltrami	14734217	4	\$672	Yes
1473407	Beltrami	14734207	5	\$630	Yes
147341574	Beltrami	14734215	5	\$630	Yes
147340903	Beltrami	14734209	16	\$2,016	Yes
147342125	Beltrami	14734221	2	\$336	Yes
147341865	Beltrami	14734218	14	\$1,764	Yes
148342240	Beltrami	14834222	43	\$7,224	Yes
148341049	Beltrami	14834210	10	\$840	Yes
149352279, 78, 76	Beltrami	14935222	10	\$2,268	Yes
149352705	Beltrami	14935227	2	\$252	Yes
149352354, 57, 58, 59	Beltrami	14935223	34	\$5,712	Yes
149352409, 17, 16, 61	Beltrami	14935224	74	\$9,324	Yes
150353174, 68	Beltrami	15035231	11	\$1,386	Yes
150353214	Beltrami	15035232	9	\$1,380	Yes
149351759	Beltrami	14935217	12	\$1,512	Yes
146341945	Beltrami	14634219	3	\$378	Yes
146352631	Beltrami	14635226	5	\$630	Yes
147350408	Beltrami	14735204	11	\$2,520	Yes
146353444	Beltrami	14635234	20	\$2,520	Yes
147351180	Beltrami	14735211	10	\$1,260	Yes
147350223	Beltrami	14735202	26	\$5,670	Yes
149352972	Beltrami	14935229	20	\$105	Yes
149352903	Beltrami	14935229	20	\$882	Yes
149352823	Beltrami	14935228	11	\$462	Yes
149353001	Beltrami	14935230	7	\$1,008	Yes
T141N R27W Sec 22	Cass	14933230	150	\$30,000	Yes
T141N R27W Sec 22					
	Cass	14428234	837	\$16,740	Yes
T145N R30W S24	Cass	14530224	100	\$20,000	Yes
T141N R29W Sec 26 & 35	Cass	14129226	367	\$73,400	Yes
T145N R29W Sec 8	Cass	14529208	130	\$26,000	Yes
T146N R29W Sec 30	Cass	14629230	500	\$100,000	Yes
T 144 R31 Sec 3	Cass	14431203	181	\$36,200	Yes
T144N R26W Section 32	Cass	14426232	1,255	\$25,100	Yes
T144N R26W Section 32	Cass	14426232	1,740	\$34,800	Yes
T145N R29W Sec. 16,17	Cass	14529216	134	\$26,800	Yes
T141N R30W Sec: 19,20,29 & 30	Cass	14130219	238	\$47,600	Yes
T145 R28 S36 & T144 R28 S1	Cass	14528236	213	\$42,600	Yes
T142N R30W Sec 29	Cass	14230229	400	\$40,000	Yes
t06304e1220387	Cook	06304122	165	\$29,700	Yes

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t06302e1160053	Cook	06302116	120	\$12,000	Yes
t06302e1160053	Cook	06302116	120	\$36,600	Yes
t06302e1160053	Cook	06302116	120	\$33,000	Yes
t06302e1160053	Cook	06302116	120	\$21,600	Yes
t06204e1080038	Cook	06204108	120	\$21,600	Yes
t06204e1080037	Cook	06204108	120	\$8,400	Yes
t06204e1080036	Cook	06204108	120	\$36,600	Yes
pathological pruning - 13	Cook	06101215	106	\$18,656	Yes
Gunflint North Shore Collaborative - 6	Cook	06101219	22	\$1,320	Yes
Gunflint North Shore Collaborative - 9	Cook	06101220	17	\$1,020	Yes
t06204e1080035	Cook	06204108	120	\$33,000	Yes
Gunflint North Shore Collaborative - 12	Cook	06101233	22	\$1,320	Yes
Gunflint North Shore Collaborative p- 20	Cook	06102203	53	\$3,180	Yes
Gunflint North Shore Collaborative - 1	Cook	06002201	24	\$1,440	Yes
Gunflint North Shore Collaborative - 2	Cook	06002202	23	\$1,380	Yes
Gunflint North Shore Collaborative - 3	Cook	06002203	31	\$1,860	Yes
Gunflint North Shore Collaborative 4	Cook	06002204	1	\$60	Yes
Gunflint North Shore Collaborative - 5	Cook	06002218	12	\$720	Yes
Gunflint North Shore Collaborative - 8	Cook	06101213	12	\$720	Yes
t06304e1220387	Cook	06304122	165	\$11,550	Yes
t06304e1220387	Cook	06304122	165	\$50,325	Yes
t06304e1220387	Cook	06304122	165	\$45,375	Yes
Gunflint North Shore Collaborative - 10	Cook	06101228	22	\$1,320	Yes
Gunflint North Shore Collaborative - 11	Cook	06101220	13	\$780	Yes
Gunflint North Shore Collaborative Project	Cook	06204212	5	\$300	Yes
maintenance - 30	COOK	00201212	5	4500	105
Gunflint North Shore Collaborative project	Cook	06204209	18	\$1,080	Yes
maintenance - 31					
Gunflint North Shore Collaborative - 21	Cook	06102209	15	\$900	Yes
Gunflint North Shore Collaborative - 13	Cook	06102225	3	\$180	Yes
Gunflint North Shore Collaborative - 14	Cook	06102234	8	\$480	Yes
Gunflint North Shore Collaborative - 15	Cook	06102235	8	\$480	Yes
Gunflint Pine Understory Pilot - 1	Cook	06201226	70	\$39,200	Yes
Gunflint Pine Understory Pilot - 2	Cook	06201227	70	\$39,200	Yes
Browse Protection (Bud-capping) - 9	Cook	05904215	1,120	\$100,800	Yes
Gunflint Pine Understory Pilot - 3	Cook	06201234	70	\$39,200	Yes
Gunflint North Shore Collaborative - 29	Cook	06202235	8	\$480	Yes
Gunflint North Shore Collaborative- 28	Cook	06202234	65	\$3,900	Yes
Gunflint North Shore Collaborative- 27	Cook	06202233	167	\$10,020	Yes
Gunflint North Shore Collaborative - 22	Cook	06202224	9	\$540	Yes
tree release - 23	Cook	06003215	82	\$23,780	Yes
tree release - 22	Cook	06002215	10	\$2,900	Yes
Gunflint North Shore Collaborative - 23	Cook	06202225	26	\$1,560	Yes
Gunflint North Shore Collaborative - 26	Cook	06202232	80	\$4,800	Yes
Gunflint North Shore Collaborative - 25	Cook	06202228	60	\$3,600	Yes
Gunflint North Shore Collaborative - 24	Cook	06202227	4	\$240	Yes
t05521w1280127	Itasca	05521228	18	\$4,500	Yes
t05723w1160069	Itasca	05723216	27	\$4,050	Yes
t05723w1160069	Itasca	05723216	27	\$8,100	Yes
t05723w1160069	Itasca	05723216	27	\$6,750	Yes
t05723w1160069	Itasca	05723216	27	\$1,620	Yes
t06223w1350258	Itasca	06223235	21	\$3,780	Yes
t05521w1280127	Itasca	05521228	18	\$1,080	Yes
t06223w1350258	Itasca	06223235	21	\$5,250	Yes
t06223w1350258	Itasca	06223235	21	\$6,405	Yes
t06223w1350258	Itasca	06223235	21	\$1,470	Yes
T148N R29W Sec 22	Itasca	14829222	90	\$18,000	Yes
T147N R27W Sec 3	Itasca	14727203	85	\$17,000	Yes
				. ,	

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T147N R27W Sec. 1	Itasca	14727201	110	\$22,000	Yes
t05522w1340211	Itasca	05522234	42	\$16,800	Yes
t05522w1340211	Itasca	05522234	42	\$6,300	Yes
t05522w1220089	Itasca	05522222	32	\$12,800	Yes
t05522w1220089	Itasca	05522222	32	\$4,800	Yes
t05522w1200112	Itasca	05522220	30	\$12,000	Yes
t05522w1200112	Itasca	05522220	30	\$4,500	Yes
T148N R25W Sec 14	Itasca	14825214	400	\$80,000	Yes
t05923w1300964	Itasca	05923230	9	\$630	Yes
t05923w1300964	Itasca	05923230	9	\$2,250	Yes
t05923w1300964	Itasca	05923230	9	\$2,700	Yes
t05923w1300964	Itasca	05923230	9	\$1,350	Yes
t05923w1300562	Itasca	05923230	13	\$780	Yes
t05923w1300562	Itasca	05923230	13	\$3,250	Yes
t05923w1300562	Itasca	05923230	13	\$3,900	Yes
t05522w1340211	Itasca	05522234	42	\$6,300	Yes
T 146 R 29 Sec 27, 34, 35	Itasca	14629227	241	\$48,200	Yes
t05521w1280127	Itasca	05521228	18	\$2,700	Yes
t05521w1280127	Itasca	05521228	18	\$5,400	Yes
T 147 R 27 Sec 9 & 16	Itasca	14727209	454	\$90,800	Yes
T148N R25W Sec 9	Itasca	14825209	350	\$70,000	Yes
t05923w1300562	Itasca	05923230	13	\$1,950	Yes
Tofte Stoney reforestation - 5	Lake	05907218	50	\$86,500	Yes
NS Budworm	Lake	05409220	400	\$400,000	Yes
t05909w1360283	Lake	05909236	26	\$400,000	Yes
t05909w1360283	Lake	05909236	26	\$1,820	Yes
t05909w1360283	Lake	05909236	26		Yes
			26	\$26,000	
t05909w1360283	Lake	05909236		\$7,150	Yes
t05909w1360283	Lake	05909236	26 58	\$4,680	Yes
t05811w1360210	Lake	05811236		\$4,060	Yes
t05811w1360210	Lake	05811236	58	\$17,690	Yes
t05811w1360210	Lake	05811236	58	\$58,000	Yes
t05811w1360210	Lake	05811236	58	\$15,950	Yes
t05811w1360210	Lake	05811236	58	\$10,440	Yes
t05809w1350717/577	Lake	05809235	38	\$2,660	Yes
t05809w1350717/577	Lake	05809235	38	\$11,590	Yes
t05809w1350717/577	Lake	05809235	38	\$38,000	Yes
t05809w1350717/577	Lake	05809235	38	\$10,450	Yes
t05809w1350717/577	Lake	05809235	38	\$6,840	Yes
t05809w1340564	Lake	05809234	70	\$4,900	Yes
t05809w1340564	Lake	05809234	70	\$21,350	Yes
t05809w1340564	Lake	05809234	70	\$19,250	Yes
t05809w1340564	Lake	05809234	70	\$12,600	Yes
t05808w1080194	Lake	05808208	54	\$3,780	Yes
t05808w1080194	Lake	05808208	54	\$16,470	Yes
t05808w1080194	Lake	05808208	54	\$54,000	Yes
t05808w1080194	Lake	05808208	54	\$14,850	Yes
t05808w1080194	Lake	05808208	54	\$9,720	Yes
t05806w1170394	Lake	05806217	38	\$2,660	Yes
t05806w1170394	Lake	05806217	38	\$11,590	Yes
t05806w1170394	Lake	05806217	38	\$10,450	Yes
t05806w1170394	Lake	05806217	38	\$6,840	Yes
t05806w1160202	Lake	05806216	96	\$6,720	Yes
t05806w1160202	Lake	05806216	96	\$29,280	Yes
t05806w1160202	Lake	05806216	96	\$96,000	Yes
t05806w1160202	Lake	05806216	96	\$26,400	Yes
t05806w1160202	Lake	05806216	96	\$17,280	Yes
t05712w1160031	Lake	05712216	52	\$3,640	Yes

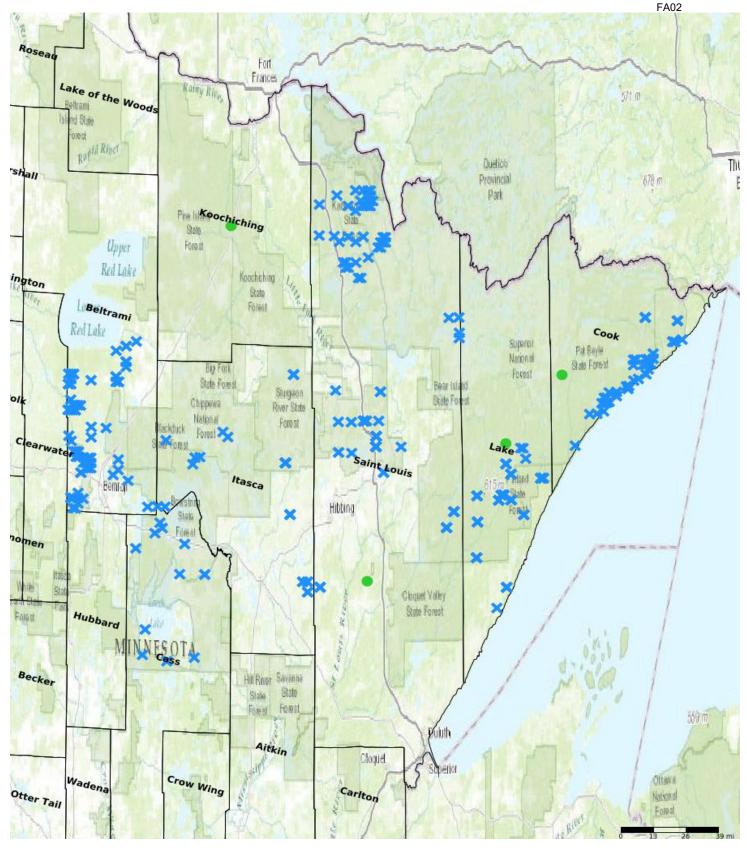
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t05712w1160031	Lake	05712216	52	\$15,860	Yes
t05712w1160031	Lake	05712216	52	\$52,000	Yes
t05712w1160031	Lake	05712216	52	\$14,300	Yes
t05712w1160031	Lake	05712216	52	\$9,360	Yes
t05711w1250292	Lake	05711225	54	\$3,780	Yes
t05711w1250292	Lake	05711225	54	\$16,470	Yes
t05711w1250292	Lake	05711225	54	\$54,000	Yes
t05711w1250292	Lake	05711225	54	\$14,850	Yes
t05711w1250292	Lake	05711225	54	\$9,720	Yes
t05709w1040024, 0028,0026	Lake	05709204	65	\$4,550	Yes
t05709w1040024,0028,0026	Lake	05709204	65	\$19,825	Yes
t05709w1040024, 0028,0026	Lake	05709204	65	\$17,875	Yes
t05709w1040024, 0028,0026	Lake	05709204	65	\$11,700	Yes
t05708w1050062	Lake	05708205	26	\$1,820	Yes
t05708w1050062	Lake	05708205	26	\$7,930	Yes
t05708w1050062	Lake	05708205	26	\$26,000	Yes
t05708w1050062	Lake	05708205	26	\$7,150	Yes
t05708w1050062	Lake	05708205	26	\$4,680	Yes
t05707w1190151	Lake	05707219	32	\$2,240	Yes
t05707w1190151	Lake	05707219	32	\$9,760	Yes
t05707w1190151	Lake	05707219	32	\$32,000	Yes
t05707w1190151	Lake	05707219	32	\$8,800	Yes
t05707w1190151	Lake	05707219	32	\$5,760	Yes
t05611w1360043	Lake	05611236	52	\$3,640	Yes
t05611w1360043	Lake	05611236	52	\$15,860	Yes
t05611w1360043	Lake	05611236	52	\$52,000	Yes
t05611w1360043	Lake	05611236	52	\$14,300	Yes
t05611w1360043	Lake	05611236	52	\$9,360	Yes
t05509w1360141	Lake	05509236	100	\$7,000	Yes
t05509w1360141	Lake	05509236	100	\$30,500	Yes
t05509w1360141	Lake	05509236	100	\$100,000	Yes
t05509w1360141	Lake	05509236	100	\$27,500	Yes
t05509w1360141	Lake	05509236	100	\$18,000	Yes
Tofte Stoney reforestation - 7	Lake	05908213	50	\$86,500	Yes
Tofte Stoney reforestation - 6	Lake	05907229	50	\$86,500	Yes
tree release - 44		06117215	116	\$33,640	Yes
Browse Protection (Bud-capping) - 19	St. Louis St. Louis		569		
Browse Protection (Bud-capping) - 19	St. Louis	05919215 06120215	330	\$51,210	Yes Yes
Browse Protection (Bud-capping) - 15			178	\$29,700	Yes
Browse Protection (Bud-capping) - 15 Browse Protection (Bud-capping) - 14	St. Louis	06117215 06020215	534	\$16,020 \$48,060	Yes
Browse Protection (Bud-capping) - 14 Browse Protection (Bud-capping) - 13	St. Louis	06020213	266		Yes
l Browse Protection (Bud-capping) - 13	St. Louis St. Louis	06019215	56	\$23,940 \$5,040	Yes
		05920215	164	\$14,760	Yes
Browse Protection (Bud-capping) - 11 tree release - 58	St. Louis				
	St. Louis St. Louis	06519215	13	\$3,770	Yes
SNF Arrowhead- 59		06618215	6	\$1,740	Yes
SNF_Arrowhead- 60	St. Louis	06619215	20	\$5,800	Yes
SLC arrrowhead1	St. Louis	06620224	300	\$90,000	Yes
SNF_Arrowhead - 61	St. Louis	06620215	55	\$15,950	Yes
LaCroix North Echo - 5	St. Louis	06617224	34	\$10,200	Yes
LaCroix North Echo- 4	St. Louis	06617223	34	\$10,200	Yes
LaCroix North Echo - 3	St. Louis	06617213	34	\$10,200	Yes
LaCroix North Echo - 2	St. Louis	06616219	34	\$10,200	Yes
LaCroix North Echo 1	St. Louis	06616218	34	\$10,200	Yes
LaCroix Echo Refo- 2	St. Louis	06617227	30	\$51,900	Yes
LaCroix Echo Refo- 1	St. Louis	06617226	30	\$51,900	Yes
LaCroix Arrowhead (Tungstun)	St. Louis	06720202	8	\$13,840	Yes
LaCroix Arrowhead reforestation (Dogleg)	St. Louis	06518201	18	\$31,140	Yes
LaCroix Arrowhead-horton	St. Louis	06618219	45	\$77,850	Yes

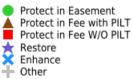
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Laurentian Giant's Ridge Patch Restoration - 1	St. Louis	05916212	10	\$13,400	Yes
SNF_Arrowhead- 62	St. Louis	06621215	258	\$74,820	Yes
SNF Arrowhead 63	St. Louis	06718215	43	\$12,470	Yes
SNF Arrowhead 64	St. Louis	06719215	153	\$44,370	Yes
SNF Arrowhead- 65	St. Louis	06721215	86	\$24,940	Yes
t05817w1020016	St. Louis	05817202	14	\$7,050	Yes
t05817w1020018	St. Louis	05817202	3	\$1,800	Yes
t05817w1020245	St. Louis	05817202	3	\$1,800	Yes
t06017w1160119	St. Louis	06017216	33	\$16,550	Yes
t05917w1080059	St. Louis	05917208	5	\$918	Yes
t05917w1080059	St. Louis	05917208	5	-	Yes
t05917w1080059	St. Louis	05917208	5	-	Yes
t05917w1080059	St. Louis	05917208	5	\$357	Yes
t05917w1080065	St. Louis	05917208	5	\$990	Yes
t05917w1080065	St. Louis	05917208	5	-	Yes
t05917w1080065	St. Louis	05917208	5	-	Yes
t05917w1080065	St. Louis	05917208	5	\$385	Yes
t05917w1080068	St. Louis	05917208	6	\$1,152	Yes
Kawishiwi Bass Lake - 9	St. Louis	06312225	29	\$34,800	Yes
Kawishiwi Bass Lake - 8	St. Louis	06312224	26	\$31,200	Yes
Kawishiwi Bass Lake 5	St. Louis	06312205	14	\$16,800	Yes
Kawishiwi Bass Lake 1	St. Louis	06312201	24	\$28,800	Yes
Arrowhead Pollinator planting 5	St. Louis	06818234	20	\$20,000	Yes
Arrowhead Pollinator planting 4	St. Louis	06818231	20	\$20,000	Yes
Arrowhead Pollinator Planting 3	St. Louis	06718219	20	\$20,000	Yes
Arrowhead Pollinator Planting 2	St. Louis	06718214	20	\$20,000	Yes
Arrowhead Pollinator Planting1	St. Louis	06718209	20	\$20,000	Yes
Arrowhead Oak Blue 15	St. Louis	06818236	66	\$16,500	Yes
Arrowhead Oak Blue 14	St. Louis	06817231	66	\$16,500	Yes
Arrrowhead Oak blue13	St. Louis	06718213	66	\$16,500	Yes
Arrrowhead Oak blue12	St. Louis	06718212	66	\$16,500	Yes
Arrrowhead Oak blue11	St. Louis	06718201	66	\$16,500	Yes
Arrrowhead Oak blue10	St. Louis	06717218	67	\$16,750	Yes
Arrrowhead Oak blue9	St. Louis	06717208	67	\$16,750	Yes
Arrrowhead Oak blue8	St. Louis	06717207	67	\$16,750	Yes
Arrowhead Oak Blue7	St. Louis	06717206	67	\$16,750	Yes
Arrrowhead Oak blue6	St. Louis	06519216	67	\$16,750	Yes
Arrrowhead Oak blue5	St. Louis	06519209	67	\$16,750	Yes
Arrrowhead Oak blue4	St. Louis	06519208	67	\$16,750	Yes
Arrrowhead Oak blue3	St. Louis	06518229	67	\$16,750	Yes
Arrowhead Oak blue2	St. Louis	06518228	67	\$16,750	Yes
Arrrowhead Oak blue1	St. Louis	06518207	67	\$16,750	Yes
t05917w1080068	St. Louis	05917208	6	\$1,760	Yes
t05917w1080068	St. Louis	05917208	6	\$1,952	Yes
t05917w1080068	St. Louis	05917208	6	\$448	Yes
t06017w1320430	St. Louis	06017232	15	\$2,250	Yes
t06017w1320430		06017232	15	\$3,750	Yes
t06017w1320430	St. Louis St. Louis	06017232	15	\$3,750	Yes
	St. Louis	06017232	7	\$900	Yes
t06017w1320573 t06017w1320573	St. Louis	06017232	7	\$1,260	Yes
			7		
t06017w1320573	St. Louis	06017232	7	\$2,135	Yes
t06017w1320573	St. Louis	06017232		\$490	Yes
t06018w1160221	St. Louis	06018216	18	\$3,240	Yes
t06018w1160221	St. Louis	06018216	18	\$4,950	Yes
t06018w1160221	St. Louis	06018216	18	\$5,490	Yes
t06018w1160221	St. Louis	06018216	18	\$1,260	Yes
t06018w1160223	St. Louis	06018216	10	\$1,800	Yes
t06018w1160223	St. Louis	06018216	10	\$2,750	Yes

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t06018w1160223	St. Louis	06018216	10	\$3,050	Yes
t06018w1160223	St. Louis	06018216	10	\$700	Yes
t06018w1160225	St. Louis	06018216	3	\$540	Yes
t06018w1160225	St. Louis	06018216	3	\$825	Yes
t06018w1160225	St. Louis	06018216	3	\$915	Yes
t06018w1160225	St. Louis	06018216	3	\$210	Yes
t05713w1360250	St. Louis	05713236	26	\$4,680	Yes
t05713w1360250	St. Louis	05713236	26	\$15,600	Yes
t05713w1360250	St. Louis	05713236	26	\$4,680	Yes
t05713w1360250	St. Louis	05713236	26	\$7,150	Yes
t05713w1360250	St. Louis	05713236	26	\$7,930	Yes
t06018w1160309	St. Louis	06018216	13	\$7,800	Yes
tree release - 21	St. Louis	05920215	513	\$148,770	Yes
tree release - 32	St. Louis	06018215	56	\$16,240	Yes

Protect Parcels

Name	County	TRDS	Acres	Est Cost	Existing Protection
NA	Cook	06105202	99	\$1,000	No
NA	Koochiching	15525224	99	\$1,000	No
NA	Lake	05909212	99	\$1,000	No
NA	St. Louis	05518222	99	\$1,000	No





Parcel Map Minnesota Forest Recovery Project: Phase II (Data Generated From Parcel List)

THE MINNESOTA FOREST RECOVERY PROJECT – PHASE II



STRENGTHENING PARTNERSHIPS TO ENHANCE AND PROTECT FORESTS FOR WILDLIFE

The Need

Protecting, restoring and enhancing Minnesota's forests is critical for the long-term viability of both game and non-game species. From the ovenbird to the ruffed grouse, maintaining well-connected and diverse forest habitats will ensure our forests remain healthy and resilient for wildlife.





- Enhanced 2,100+ acres of degraded forests to increase habitat value for diverse species; on track to exceed 2,465 acre target by Phase I close.
- Built stronger collaborations among many partners; now poised to increase pace and scale of enhancement for greater impact and add a conservation easement component.

Phase II Goals—Acceleration

Main goals of the project are to:

- **Protect :** 7300 acres of forests through conservation easements in key locations to conserve habitat and critical corridors in northern Minnesota.
- *Enhance:* 23,780 acres of degraded forests in priority locations in northern Minnesota.





This project benefits a wide diversity of species that rely on healthy, connected, functioning forests (from top left clockwise: brook trout, fisher, white-tailed deer, ruffed grouse, and evening grosbeak).



Details-Protection

Forest Protection activities will:

- Acquire conservation easements to fill protection gaps within large expanses of conserved forest in northern Minnesota.
- Focus on the largest and most important gaps in the <u>Resilient and Connected Lands Network</u>.
- Conserve areas identified by the Minnesota Biological Survey, surface water features, and the like.
- Avoid forest fragmentation and the costly extension of services to remote areas.
- Keep private lands on the tax rolls.

Details-Enhancement

Enhancement Treatments and Strategies include:

- Site prep. including shearing, brush cutting, and removal of trees killed by spruce budworm.
- Tree planting and browse protection.
- Coordinating activities across multiple landowners to maintain or increase both young and mature forest patches.
- Prescribed burning.
- Black ash stand diversification to prepare for emerald ash borer.



Enhancements such as brushsaw shrub removal, prescribed burning, or winter shearing create young forest and open habitats, and can serve as site prep. for planting. This prescribed burn also encourages culturally important blueberries. Photo credit: Lane Johnson.



Planting adds species and structural diversity, recovers forest conditions where it is "stuck" in brushy conditions, and improves resilience. TNC and partners planted 1.1 million trees in 2021, in part with Forest Recovery Project—Phase I funds. Photo credit: Jim Manolis.