

Lessard-Sams Outdoor Heritage Council

Anoka Sand Plain Habitat Conservation - Phase 8

ML 2023 Request for Funding

General Information

Date: 06/16/2022

Proposal Title: Anoka Sand Plain Habitat Conservation - Phase 8

Funds Requested: \$8,921,300

Manager Information

Manager's Name: Wiley Buck Title: Senior Program Manager Organization: Great River Greening Address: 251 Starkey Street Ste 2200 City: Saint Paul, MN 55107 Email: wbuck@greatrivergreening.org Office Number: 651-272-3981 Mobile Number: 651-318-8667 Fax Number: Website: greatrivergreening.org

Location Information

County Location(s): Anoka, Chisago, Sherburne and Crow Wing.

Eco regions in which work will take place:

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

Activity types:

- Protect in Easement
- Restore
- Enhance

Priority resources addressed by activity:

- Wetlands
- Prairie
- Forest

• Habitat

Narrative

Abstract

The Anoka Sand Plain (ASP) Partnership will protect 540 acres through conservation easement, and restore/enhance 1736 acres of Prairie/Oak Savanna, Wetland including rescue of 30,000 rare plants to protected areas, Woodland/Forest, and 2200' of shoreline within the ASP ecoregion. These actions will increase biodiversity, habitat connectivity, recreational opportunities, and landscape resilience, which align with the ASP Partnership's strategic plan, DNR Wildlife Action Plan and LSOHC Section priorities. GRG, ACD, MLT, NWTF, and SherCo Parks are direct recipients, with significant match from NWTF, Trust Fund, landowner donation, volunteers, federal (to be applied), and private donations.

Design and Scope of Work

The Anoka Sand Plain Ecoregion watershed, capturing portions of the Metropolitan Urbanizing, Forest/Prairie Transition, and Northern Forest sections, is a marvelously complex mosaic of habitats, home to quality prairie and savanna, wetlands, fire-dependent forests and woodlands, designated wild and scenic rivers, and a high concentration of rare species. The amount of high quality remnant habitat in the ASP is remarkable given its proximity to Twin Cities and St. Cloud urban areas. While the location of the ASP provides easy access for the majority of Minnesotans, the associated stressors- invasive species, development pressure, and conversionthreaten its sustainability.

The diversity in this rich and important habitat mosaic, complemented by its close proximity to most Minnesotans, is reflected in the number and diversity of organizations that identify the area as a priority, combining our specific knowledge and stakeholder engagement to join forces for its conservation. The robust ASP Partnership is committed to protecting, restoring and enhancing this spectacular region so it can continue to provide vital habitat, invaluable ecological services, and high-quality recreational and engagement opportunities. Bringing clarity and focus to our Phase 8 and all of our work in this complex area is the ASP Partnership's 10-year strategic plan, which aligns with other important plans to identify priority habitats, opportunities, centers of biodiversity, and a plan of action with measurable goals.

With this funding, Great River Greening (GRG), Anoka Conservation District (ACD), Minnesota Land Trust (MLT), and National Wild Turkey Federation (NWTF), Sherburne County Parks (SherCo Parks), will secure conservation easements on 540 acres to expand habitat cores and corridors, and complete restoration and enhancement (R/E) on 1736 protected acres and 2200' of shoreline. Habitats include prairie/savanna grasslands, woodland, and nonforested and peat wetlands.

Results will be achieved by easement protetion of ecologically significant habitats and by conducting invasive species and woody encroachment removal, prescribed burning and conservation grazing, thinning, seeding, and planting. This includes the continuation of a Rare Plant Rescue program to transplant up to 30,000 rare plants that would otherwise be destroyed by development, and and conduct habitat enhancement on protected lands with rare species populations. Our program will create and improve critical habitat by increasing biodiversity and landscape resilience. It will also benefit water quality and quantity, improve community resiliency, and increase recreational opportunities including R/E engagement.

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?

The Anoka Sand Plain serves as a refuge for many globally unique species and rare plant communities, including roughly one-third of Minnesota's listed rare plant and animals, and 97 known or predicted Species of Greatest Conservation Need (SGCN), and 131 federally or state endangered, threatened, or special concern. The MN County Biological Survey ranks 72,000 acres in the ASP as Outstanding or High Biodiversity. This proposal addresses LSOHC priorities by protecting and restoring/enhancing oak savanna, prairie, riparian, woodlands, and non-forested wetlands.

We will complete 540 acres of easement protection on DNR Wildlife Action Plan Target Habitats and Target Species habitats and R/E on: 603 acres of prairie/savanna grasslands; 197 acres of non-forested wetlands/peatlands; 546 acres woodlands, and 2200' of shoreline.

STATE THREATENED/ENDANGERED/SPECIAL CONCERN (T/E/SC) SPECIES *

BIRDS: Red-shouldered Hawk, Lark Sparrow, Acadian Flycatcher, Cerulean Warbler, Hooded Warbler

MAMMALS: Northern Long-eared Bat, Plains Pocket Mouse

REPTILES: Blanding's Turtle, Plains Hog-nosed Snake, Gophersnake

INVERTEBRATES: Rusty-patched Bumble Bee, Northern Barrens Tiger Beetle, Leonard's Skipper, Uncas Skipper, Pelegrina arizonensis (A Jumping Spider)

PLANTS: Small-leaved Pussytoes, Slimspike Three-awn, Yellow Bartonia, Kitten-tails**, Blunt Sedge, Hill's Thistle, Water-willow, Autumn Fimbry, Rhombic Evening Primrose, American Ginseng, Tubercled Rein Orchid**, Cross-leaved Milkwort**, Toothcup**, Swamp Blackberry**, Clinton's Bulrush, Lance-leaf Violet**, Twisted Yellow-eyed Grass**, Bristle-berry**, Cowbane (watchlist)

** 30,000 specimens total will be successfully translocated to protected habitats through RARE PLANT RESCUE PH2 program.

SGCN

BIRDS: American Bittern, Brown Thrasher, Eastern Meadowlark, Eastern Towhee, Eastern Whip-poor-will, Field Sparrow, Golden-winged Warbler, Grasshopper Sparrow, Red-headed Woodpecker

MAMMALS: American Badger

REPTILES: Eastern Hog-nosed Snake, Smooth Greensnake

INVERTEBRATES: Dusted Skipper

* All state Threatened/Endangered/Special Concern animal species are also designated as SGCN.

Proposal #: HA02

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

The amount of high quality remnant habitat in the ASP is remarkable given its proximity to Twin Cities Metropolitan and St. Cloud areas. While the location of the ASP provides easy access for the majority of Minnesotans, the associated stressors threaten the ASP's sustainability. The ecological diversity of the ASP is threatened by invasive species and development pressure. State-wide growth through 2045 is projected at 7% while projected growth in Anoka and Sherburne counties is 14% and 24% respectively. Land protection will protect remaining remnant habitats, buffer high quality habitat cores and increase habitat corridors and landscape resiliency. Restoration and enhancement efforts will prevent habitat degradation and increase biodiversity. The Rare Plant Rescue Program will transplant thousands of rare plants from sites slated for permitted development.

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:

The ASP Partnership 10 - Year Strategic Conservation Action Plan utilizes multiple-criteria GIS analyses to identify and prioritize critical areas for habitat connectivity, SGCN, biodiversity, and native plant communities. Data layers include: 1. Top 95% of SGCN population composite 2. Good or excellent populations of state or federally endangered and threatened species 3. Richness hotspots falling outside the top 95 percent of populations 4. Marxan outputs from the Scientific and Natural Area strategic plan 5. Sites of Biodiversity Significance that intersect with Marxan outputs 6. Native plant communities: Minnesota Department of Natural Resources – Division of Ecological and Water Resources – Biological Survey. MNDNR Native Plant Communities. 2014.

The sites and actions included in this proposal will combat the threats of habitat fragmentation, degradation and invasive species. These were identified in Minnesota's Wildlife Action Plan and LSOHC: 25-year framework as the priority actions needed to address significant challenges facing SGCN and landscape resilience in the ASP region. A total of 450 acres of R/E are on MCBS areas identifies as High or Outstanding Biodiversity, and an estimated 200 additional acres protected.

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

- H1 Protect priority land habitats
- H5 Restore land, wetlands and wetland-associated watersheds

Which two other plans are addressed in this proposal?

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

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

The sites and actions included in this proposal will combat the threats of habitat fragmentation, degradation and invasive species, with a preference for habitat for listed and other rare species and high diversity sites. These were identified in Minnesota's Wildlife Action Plan and LSOHC: 25-year framework as the priority actions needed to address significant challenges facing SGCN and landscape resilience in the ASP watershed and ecoregion.

Which LSOHC section priorities are addressed in this proposal?

Forest / Prairie Transition

• Protect, enhance, and restore wild rice wetlands, shallow lakes, wetland/grassland complexes, aspen parklands, and shoreland that provide critical habitat for game and nongame wildlife

Metro / Urban

• Protect, enhance, and restore remnant native prairie, Big Woods forests, and oak savanna with an emphasis on areas with high biological diversity

Northern Forest

• Restore and enhance habitat on existing protected properties, with preference to habitat for rare, endangered, or threatened species identified by the Minnesota County Biological Survey

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 Anoka Sand Plain partnership has worked to protect and restore key areas to ensure that, along with growth, this region continues to be a resilient, functioning landscape that can provide high-quality habitat for fish, game and other wildlife. With past funds, our partnership has protected 218 acres and restored/enhanced 10,849 acres in this unique ecological region, and has buffered high quality habitat cores and expanded habitat corridors. With this funding we will continue to increase the number of acres of enhanced, restored, and protected key habitats to reduce habitat fragmentation, degradation and invasive species which threaten SGCN, landscape resilience, and outdoor recreation opportunities.

What other fund may contribute to this proposal?

• Environment and Natural Resource Trust Fund

Does this proposal include leveraged funding?

Yes

Explain the leverage:

\$100k, USDA Partnerships for Climate-Smart Commodities (PC-SC), cash towards capital equipment. To be applied for 6/10/22

\$30K, USFS Landscape Scale Restoration (LSR) Grant, cash toward subcontract. To be be applied for September, 2022.

\$10K, NWTF Super Fund, cash toward subcontract

\$10K, City of Lindstrom, cash

\$5K, LGU to be determined, cash

- \$12K, Anoka County Parks, in-kind staff time
- \$5K, Cedar Creek Ecosystem Science Reserve, in-kind staff time
- \$2K, Critical Connections Ecological Servicves, in-kind staff time

\$42.5K, Environment and Natural Resources Trust Fund (recommended for ML22 funding by LCCMR and legislature), cash toward travel and supplies, in-kind labor

\$22.6K, Volunteers, in-kind

\$10K, Minnesota Landscape Arboretum, in-kind toward supplies and labor, for Rare Plant Rescue program.

\$25K, private foundations, in-kind toward labor

Through its market-based RFP process, the Minnesota Land Trust expects private landowners to donate at least \$360,000 in easement value toward the program, which is shown as leverage.

Non-realized portion of DSS from partner organizations, as in-kind from private funds.

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 to LSOHC for Outdoor Heritage Fund support does not supplant any other sources of funds. In all cases, this proposal and the projects to be completed accelerate regional habitat work in the Anoka Sand Plain.

Year	Source	Amount
various	State of Minnesota General Fund,	-
	Bonding, Trust Fund, etc for WMA and	
	SNA purchase, restoration,	
	enhancement, and management.	
2014	Morrison County - Belle Prairie Phase I	24000
	match	
various	City of Blaine (Rare Plant Rescue	9019000
	recipient site) Tax Levy, Park	
	Dedication Fees, Open Space	
	Referendum, Blaine Wetland Sanctuary	
	I and II match	
2017	Trust Fund leverage for Blaine Wetland	25000
	Sanctuary I and II match	

Non-OHF Appropriations

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

The ASP Partnership is committed to working with respective land management agencies and owners, and conservation organizations in an on-going basis to identify and procure financial resources for maintaining these improvements as needed.

Land protected through MLT conservation easements will be sustained through state-of-the-art standards and practices for conservation easement stewardship that includes annual property monitoring, effective records management, addressing inquiries and interpretations, tracking changes in ownership, investigating potential violations and defending the easement in case of a true violation. Funding for these easement stewardship activities is included in the project budget.

For R/E on existing protected land, site specific resource management plans will be developed/adopted to guide effective long-term management. All land managers benefitting from R/E and rare plant rescue sites must commit to the long-term maintenance of these sites. A principle management goal for each site is to elevate before grant

close, to a threshold where on-going management costs are diminished. For the sites and programs that use volunteers, community volunteer engagement promotes an increase in community stakeholders. The no-spray enhancement project at Sherburne NWR will promote long term management with the use of livestock, aligned with agency directives.

Year	Source of Funds	Step 1	Step 2	Step 3
2028	MLT Long Term	Annual Monitoring of	Enforcement as	-
	Stewardship and	Easements	Necessary	
	Enforcement Funds			
2029	GRG in-kind	Monitoring every 2-3	Landowner	-
		years	Engagement	
2029	DNR in-kind	Rx Burning	Spot herbicide	-
			treatment	
2029	ACD Anoka	Monitor every 2-3	Followup treatment	-
	Agriculture Preserves	years		
2029	Anoka County Parks	Prescribed burn	Spot herbicide	-
			treatment	
2029	City of Blaine (Rare	Prescribed burn	Spot herbicide	Spot herbicide
	Plant Recipient Site)		treatment	treatments
2029	Sherburne County	Prescribed burn	Mechanical Cutting as	Prescribed burn
			needed	

Actions to Maintain Project Outcomes

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

Mallard: The biological model used in the Upper Mississippi River and Great Lakes Region Joint Venture (UMRGLRJV) to estimate habitat needs to support mallard population growth uses an accepted rate of 1 mallard pair per per 2.47 acres of wetland habitat. At 650 acres, 263 pairs

Trumpeter Swan: Though reported territories can range in size from 1.5 - >100 hectares, a reasonable expectation is that 1 trumpeter swan pair would be supported by each 150 acres of wetlands protected, restored, or enhanced. At 650 acres, 4 pairs

Monarch Butterfly: Xerces and Monarch Joint Venture report research is indicating a wide range of milkweed stems needed to support one migrating monarch butterfly. Using the minimum of 30 milkweed needed to support one migrating monarch butterfly, and the conservative 100 stems/acre (of the 100-600 range), these prairie, savanna, and wetland fringe habitats will contribute 3.33 monarchs/acre to the population. At 620 acres , a total of 2066 adult monarchs.

Wild Turkey: Researcher Dr. Bret Collier, of Louisiana State University has suggested that habitat management such as the restoration activities proposed in the northern forest and forest/prairie transition regions may increase wild turkey use of the parcels by up to 20%. This number was generated based on restoration activities in Texas. Turkey nesting densities are relatively unknown but based on recent research, nesting density may be in the 1 hen/100-200 acres of restored habitat (B. A. Collier, Louisiana State University, unpublished). At 560 acres, 4 hens.

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

Sherburne County Parks is partnering with Mille Lacs Band of Ojibwe, Upper Sioux Community, and Lower Sioux Indian Community at Big Elk Lake, a sacred Native American site, elevating site reverence through restoration of native vegetation and planning.

ASP Partners have existing DEIJ initiatives including: Future Stewards Program (GRG); partnership with All Nations Program at Minneapolis South High School (GRG); Ambassador Lands Program (MLT); and partnership with the Fond du Lac Band of Ojibwe (MLT). Partners have secured DEIJ related funding including: No Child Left Inside (GRG); internal staff funding for DEIJ pursuits (MLT); and ML22 Trust Fund/legislature-recommended Engaging a Diverse Public in Environmental Stewardship (GRG). Partners will continue to connect all our DEIJ programs and resources to ASP8 during the grant period when appropriate opportunities arise.

ASP ecoregion provides close-to-home recreation opportunities for the majority of Minnesotans, including urban core and rural populations. The MPCA environmental justice tool illustrates that ASP8 program boundary encompasses large BIPOC and low-income population areas. However, barriers exist in some communities to access these opportunities. As such, the ASP Partnership has been developing 1) a federal USFS Landscape Scale Restoration grant proposal, for September 2022 submission, to reduce barriers and promote recreational activities, one of which will be hands-on habitat R/E on our ASP8 sites in line with the binding federal Justice40 Initiative/Executive for otherwise underserved communities; and 2) a federal USDA Partnership for Climate-Smart Commodities small grant proposal, that will include biochar made from habitat R/E waste wood benefitting underserved producers while also reducing pile burn fire scars and helping to contain the cost of waste wood disposal on habitat projects.

ASP encompasses a priority DWSMA, attributable to groundwater recharge through sandy soils and the miles of Mississippi River upstream of Twin Cities intakes. Through the land-water connection of our projects, we will contribute to water quality, quantity, and security for all, including urban core and rural populations.

We welcome more conversations with the LSOHC and conservation community about how these values can be better manifested in all our shared work.

Activity Details

Requirements

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? Yes

Where does the activity take place?

- WMA
- Permanently Protected Conservation Easements
- Refuge Lands
- County/Municipal

• Other : 1) U of M's Cedar Creek Ecosystem Science Reserve and; 2) 'State of Minnesota', named National Guard Bridge Site in parcel list.

Land Use

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

Explain what will be planted:

Easement Acquisition:

The purpose of the Minnesota Land Trust's conservation easements is to protect existing high quality natural habitat and to preserve opportunities for future restoration. As such, we restrict any agricultural lands and use on the properties. In cases in which there are agricultural lands associated with the larger property, we will either carve the agricultural area out of the conservation easement, or in some limited cases, we may include a small percentage of agricultural lands if it is not feasible to carve those areas out. In such cases, however, we will not use OHF funds to pay the landowners for that portion of the conservation easement.

Restoration:

Short-term use of agricultural crops is an accepted best practice for preparing a site for prairie restoration, in order to reduce weed seedbeds prior to prairie planting. In some cases this necessitates the use of GMO treated products to facilitate herbicide use in order to control weeds present in the seedbank.

Will the eased land be open for public use?

No

Are there currently trails or roads on any of the proposed acquisitions? Yes

Describe the types of trails or roads and the allowable uses:

Most conservation easements are established on private lands, many of which have driveways, field roads and trails located on them. Often, the conservation easement permits the continued usage of established trails and roads so long as their use does not significantly impact the conservation values of the property. Creation of new roads/trails or expansion of existing ones is typically not allowed.

Will the trails or roads remain and uses continue to be allowed after OHF acquisition? Yes

How will maintenance and monitoring be accomplished?

The land protected through conservation easements will be sustained through state-of-the-art standards and practices for conservation easement stewardship that includes annual property monitoring, effective records management, addressing inquiries and interpretations, tracking changes in ownership, investigating potential violations and defending the easement in case of a true violation. Funding for these easement stewardship activities is included in the project budget.

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:

If the need for R/E on eased lands exists, MLT will budget to address this need in future proposals to LSOHC or through other sources.

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?
2021	\$2,651,000	\$35,000	\$270,300	\$22,691	692	0	No
2019	\$2,573,000	\$1,122,600	\$269,900	\$424,156	1,060	380	No
2017	\$1,130,000	\$1,049,300	\$128,500	\$145,903	342	496	No
2016	\$1,208,000	\$1,147,500	\$238,700	\$273,678	1,286	1,800	No
2014	\$1,190,000	\$1,047,100	\$135,200	\$126,300	2,947	3,714	Yes
2012	\$1,050,000	\$989,400	\$71,500	\$208,800	1,385	1,866	Yes
2010	\$747,000	\$747,000	-	\$127,100	1,919	4,179	Yes

Timeline

Activity Name	Estimated Completion Date
ACD: project planning, Contract agreements	12/31/2023
ACD: tree and shrub removal, prairie site prep, rare plant	12/31/2024
rescue	
ACD: tree and shrub removal, native seeding, rare plant	12/31/2025
rescue	
ACD: buckthorn foliar treatments, Rx burns, rare plant	12/31/2027
rescue and conservation plans	
GRG: Site prep, initial brushing, seeding, initial wave of	11/30/2024
buckthorn control	
GRG: Project planning, secure landowner agreements	12/31/2023
GRG: Initial tree and shrub planting	11/30/2024
GRG: 2nd wave tree and shrub planting	11/30/2025
GRG: First year goat/cattle browsing/trampling	12/31/24
GRG: Fourth year goat/cattle browsing/trampling and	12/31/27
underhoof seeding	
MLT: Protection of 540 acres of land through conservation	6/30/2027
easement	
NWTF: Have initial project list ranked and finalized	12/31/2023
NWTF: All R/E work completed and final report	6/30/2028
SherCo Parks - R & E Project Planning, Prairie chemical site	8/31/2023
prep, no-till drilling of native seed	
SherCo Parks - R & E mechanical and chemical site prep in	2/28/2024
degraded oak savanna, floodplain forest	
SherCo Parks - Prescribed burn site prep for shoreline	12/31/2025
restoration, prescribed burn through degraded oak savanna	
SherCo Parks - Assessment of native seed bank germination	12/31/2026
and planning for seed and plant installation in oak savanna,	
dry oak forest, and shoreline	
SherCo Parks - prescribed burn (2nd to control invasive	12/31/2026
cool-season grasses) in shore and native plant installation	
SherCo Parks - Native seed and plant installation per results	12/31/2027

	Proposal #: HA02
of native seed bank germination in shoreline, dry oak forest,	
floodplain and oak savanna. Prescribed burn in $1/2$ of	
restored prairie	
SherCo Parks - Prescribed burn in 2nd half of restored	12/31/2028
prairie	

Budget

Grand Totals Across All Partnerships

Item	Funding Request	Antic. Leverage	Leverage Source	Total
Personnel	\$1,170,500	\$119,700	Sherburne County,	\$1,290,200
			Anoka Parks, Cedar	
			Creek Ecosystem	
			Science Reserve staff,	
			Volunteers,	
			Lindstrom, LGU, Pvt	
			Foundations,	
			Volunteers,Trust Fund	
Contracts	\$3,855,900	\$40,000	NWTF Super Fund,	\$3,895,900
			USFS-LSR (to be	
			applied for)	
Fee Acquisition w/	-	-	-	-
PILT				
Fee Acquisition w/o	-	-	-	-
PILT				
Easement Acquisition	\$2,250,000	\$450,000	-, Landowners	\$2,700,000
Easement	\$288,000	-	-	\$288,000
Stewardship				
Travel	\$21,400	\$1,500	-, Trust Fund	\$22,900
Professional Services	\$625,000	\$28,000	MN Landscape	\$653,000
			Arboretum	
Direct Support	\$241,000	\$305,000	-, ACD DSS, unrealized	\$546,000
Services			DSS, Unrealized DSS	
DNR Land Acquisition	-	-	-	-
Costs				
Capital Equipment	\$35,000	\$100,000	-, USDA PC-SC (to be	\$135,000
			applied for)	
Other	\$8,000	-	-	\$8,000
Equipment/Tools				
Supplies/Materials	\$426,500	\$25,000	-, MN Landscape	\$451,500
			Arboretum, Critical	
			Connections	
			Ecological Services,	
			Anoka Parks, Trust	
			Fund	
DNR IDP	-	-	-	-
Grand Total	\$8,921,300	\$1,069,200	-	\$9,990,500

Partner: Anoka Conservation District

Totals

Item	Funding Request	Antic. Leverage	Leverage Source	Total
Personnel	\$550,000	\$30,000	Anoka Parks, Cedar	\$580,000
			Creek Ecosystem	
			Science Reserve staff,	
			Volunteers	
Contracts	\$1,093,900	-	-	\$1,093,900
Fee Acquisition w/	-	-	-	-
PILT				
Fee Acquisition w/o	-	-	-	-
PILT				
Easement Acquisition	-	-	-	-
Easement	-	-	-	-
Stewardship				
Travel	-	-	-	-
Professional Services	\$280,000	\$28,000	MN Landscape	\$308,000
			Arboretum	
Direct Support	\$55,000	\$110,000	ACD DSS	\$165,000
Services				
DNR Land Acquisition	-	-	-	-
Costs				
Capital Equipment	-	-	-	-
Other	-	-	-	-
Equipment/Tools				
Supplies/Materials	\$174,500	\$5,000	MN Landscape	\$179,500
			Arboretum, Critical	
			Connections	
			Ecological Services,	
			Anoka Parks	
DNR IDP	-	-	-	-
Grand Total	\$2,153,400	\$173,000	-	\$2,326,400

Personnel

Position	Annual FTE	Years	Funding	Antic.	Leverage	Total
		Working	Request	Leverage	Source	
ACD Personnel	1.83	5.0	\$550,000	\$30,000	Anoka Parks,	\$580,000
					Cedar Creek	
					Ecosystem	
					Science	
					Reserve staff,	
					Volunteers	

Partner: Sherburne County Parks

Totals

Item	Funding Request	Antic. Leverage	Leverage Source	Total
Personnel	-	\$8,600	Sherburne County	\$8,600
Contracts	\$752,000	-	-	\$752,000
Fee Acquisition w/	-	-	-	-
PILT				
Fee Acquisition w/o	-	-	-	-
PILT				
Easement Acquisition	-	-	-	-
Easement	-	-	-	-
Stewardship				
Travel	-	-	-	-
Professional Services	-	-	-	-
Direct Support	-	-	-	-
Services				
DNR Land Acquisition	-	-	-	-
Costs				
Capital Equipment	-	-	-	-
Other	-	-	-	-
Equipment/Tools				
Supplies/Materials	-	-	-	-
DNR IDP	-	-	-	-
Grand Total	\$752,000	\$8,600	-	\$760,600

Personnel

Position	Annual FTE	Years Working	Funding Request	Antic. Leverage	Leverage Source	Total
Sherb Co Parks Personnel	0.0	-	-	\$8,600	Sherburne County	\$8,600

Partner: National Wild Turkey Federation

Totals

Item	Funding Request	Antic. Leverage	Leverage Source	Total
Personnel	\$25,000	-	-	\$25,000
Contracts	\$400,000	\$10,000	NWTF Super Fund	\$410,000
Fee Acquisition w/	-	-	-	-
PILT				
Fee Acquisition w/o	-	-	-	-
PILT				
Easement Acquisition	-	-	-	-
Easement	-	-	-	-
Stewardship				
Travel	-	-	-	-
Professional Services	-	-	-	-
Direct Support	\$25,000	\$25,000	unrealized DSS	\$50,000
Services				
DNR Land Acquisition	-	-	-	-
Costs				
Capital Equipment	-	-	-	-
Other	-	-	-	-
Equipment/Tools				
Supplies/Materials	\$25,000	-	-	\$25,000
DNR IDP	-	-	-	-
Grand Total	\$475,000	\$35,000	-	\$510,000

Personnel

Position	Annual FTE	Years Working	Funding Request	Antic. Leverage	Leverage Source	Total
NWTF Personnel	0.07	5.0	\$25,000	-	-	\$25,000

Partner: Great River Greening

Totals

Item	Funding Request	Antic. Leverage	Leverage Source	Total
Personnel	\$315,500	\$81,100	Lindstrom, LGU, Pvt	\$396,600
			Foundations,	
			Volunteers,Trust Fund	
Contracts	\$1,528,000	\$30,000	USFS-LSR (to be	\$1,558,000
			applied for)	
Fee Acquisition w/	-	-	-	-
PILT				
Fee Acquisition w/o	-	-	-	-
PILT				
Easement Acquisition	-	-	-	-
Easement	-	-	-	-
Stewardship				
Travel	\$11,400	\$1,500	Trust Fund	\$12,900
Professional Services	\$40,000	-	-	\$40,000
Direct Support	\$85,000	\$170,000	Unrealized DSS	\$255,000
Services				
DNR Land Acquisition	-	-	-	-
Costs				
Capital Equipment	\$35,000	\$100,000	USDA PC-SC (to be	\$135,000
			applied for)	
Other	\$7,000	-	-	\$7,000
Equipment/Tools				
Supplies/Materials	\$227,000	\$20,000	Trust Fund	\$247,000
DNR IDP	-	-	-	-
Grand Total	\$2,248,900	\$402,600	-	\$2,651,500

Personnel

Position	Annual FTE	Years Working	Funding Request	Antic. Leverage	Leverage Source	Total
GRG Staff	0.85	5.0	\$315,500	\$81,100	Lindstrom, LGU, Pvt Foundations, Volunteers,Trust Fund	\$396,600

Capital Equipment

Item	Funding Request	Antic. Leverage	Leverage Source	Total
Modified low rise roll-	\$35,000	\$100,000	USDA PC-SC (to be	\$135,000
off dumpster as			applied for)	
biochar kiln (OHF); air				
curtain burner as				
biochar kiln (USDA				
PC-SC leverage);				
equipment trailer				

Partner: Minnesota Land Trust

Totals

Item	Funding Request	Antic. Leverage	Leverage Source	Total
Personnel	\$280,000	-	-	\$280,000
Contracts	\$82,000	-	-	\$82,000
Fee Acquisition w/	-	-	-	-
PILT				
Fee Acquisition w/o	-	-	-	-
PILT				
Easement Acquisition	\$2,250,000	\$450,000	Landowners	\$2,700,000
Easement	\$288,000	-	-	\$288,000
Stewardship				
Travel	\$10,000	-	-	\$10,000
Professional Services	\$305,000	-	-	\$305,000
Direct Support	\$76,000	-	-	\$76,000
Services				
DNR Land Acquisition	-	-	-	-
Costs				
Capital Equipment	-	-	-	-
Other	\$1,000	-	-	\$1,000
Equipment/Tools				
Supplies/Materials	-	-	-	-
DNR IDP	-	-	-	-
Grand Total	\$3,292,000	\$450,000	-	\$3,742,000

Personnel

Position	Annual FTE	Years Working	Funding Request	Antic. Leverage	Leverage Source	Total
MLT Staff	0.7	4.0	\$280,000	-	-	\$280,000

Amount of Request: \$8,921,300 Amount of Leverage: \$1,069,200 Leverage as a percent of the Request: 11.98% DSS + Personnel: \$1,411,500 As a % of the total request: 15.82% Easement Stewardship: \$288,000 As a % of the Easement Acquisition: 12.8%

Describe and explain leverage source and confirmation of funds:

NWTF Super Fund anticipated Fall 2022. USDA/USFS to be applied for June/September 2022. Easement leverage is conservative estimate of landowner donation. Project Partners will provide match, including Lindstrom, Anoka Parks, Cedar Creek Ecosystem Science Reserve, MN Landscape Arboretum, Critical Connections Ecological Services, Volunteers @ \$24hr.

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 projects that are scaled down or split into phases, there is some loss of economy of scale in labor and

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travel. Larger discrepancies may occur due to determination of which parcels remain fully funded, as there is a wide range of \$/ac in our parcels. We commit to transparency.

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

For projects that are scaled down or split into phases, there is potential loss of economy of scale in labor and contracts. DSS expenses are highly proportional to labor and contracts.

If the project received 50% of the requested funding

Describe how the scaling would affect acres/activities and if not proportionately reduced, why? For projects that are scaled down or split into phases, there is some loss of economy of scale in labor and travel. Larger discrepancies may occur due to determination of which parcels remain fully funded, as there is a wide range of \$/ac in our parcels. We commit to transparency.

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

For projects that are scaled down or split into phases, there is potential loss of economy of scale in labor and contracts. DSS expenses are highly proportional to labor and contracts.

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?

ACD tracks personnel/ staff time with an hours log, where we record our time for each unique project and then uses pivot tables to sum staff hours each Quarter x their rate.

GRG: Each allocation is operationalized, budgeted, and tracked independently. Projects under each allocation are unique, and only actual personnel time is charged to these unique projects and allocations.

MLT: FTEs listed in the proposal are a coarse estimate of the personnel time required to produce the grant deliverables put forward in this proposal. An array of staff draw from these funds for legal work, negotiating with landowners, crafting of conservation easements, writing baseline reports and managing the grant. We use only those personnel funds necessary to achieve the goals of the grant.

NWTF tracks personnel time specific to an allocation via an internal Mission Management System. Projects are differentiated with unique project numbers and separately tracked.

Sherburne County Parks: This is Sherburne County Park's first application, no personnel overlap.

Contracts

What is included in the contracts line?

The bulk of R/E contracts are for CCM and/or for-profit firms to implement field activities.

For easement protection, contract amounts are for the writing of habitat management plans.

Easement Stewardship

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

The Land Trust's budget is built around the closing of 12 conservation easements. The average cost per easement to fund the MLT's perpetual monitoring and enforcement obligations is \$24,000. This figure is derived from MLT's detailed stewardship funding "cost analysis" which is consistent with Land Trust Accreditation standards. MLT shares periodic updates to this cost analysis with LSOHC staff.

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 Vehicle rental is occassionally necessary due to fleet or POV lack of availability. Vehicle rental can be competitive with the cost of mileage reimbursement, for longer trips.

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?

ACD: ACD is requesting 10% DSS and listing the remaining 20.25% as match. ACD calculated their rate following USDA guidelines and has submitted their methodology to DNR for review. DNR has no objections to their rate in their preliminary analysis.

GRG: In a process approved by DNR in September 2019, GRG's direct support services rate includes all allowable direct and necessary expenditures not captured in other line items in the budget. Our DSS request to LSOHC is less than half the amount allowed by the DNR approved rate, and less than or equal to 10% of the total allocation request.

MLT: In a process approved by DNR on March 17, 2017, Minnesota Land Trust determined our direct support services rate to include all of the allowable direct and necessary expenditures that are not captured in other line items in the budget, which is similar to the Land Trust's proposed federal indirect rate. We will apply this DNR-approved rate only to personnel expenses to determine the total amount of direct support services.

The NWTF has a federally approved indirect rate of 14.79%; adjusted down to 6% of the direct funds received.

Other Equipment/Tools

Give examples of the types of Equipment and Tools that will be purchased?

Loppers, trowels, shovels, chainsaws, brushcutters, sprayers, flagging, pin flags, PPE, GPS handheld.

Federal Funds

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

Yes

Are the funds confirmed?

No

What is the approximate date you anticipate receiving confirmation of the federal funds?

USDA Partnership for Climate-Smart Commodities (PC-SC) small grant (250k minimum) is due June 10, 2022, and indicates awards will be announced before end of current federal FY. USFS Landscape Scale Restoration (LSR) (~100k total) grant application is due in September 2022 with award available in next federal FY.

Output Tables

Acres by Resource Type (Table 1)

Туре	Wetland	Prairie	Forest	Habitat	Total Acres
Restore	0	160	0	0	160
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	540	540
Enhance	195	443	546	2	1,186
Total	195	603	546	542	1,886

How many of these Prairie acres are Native Prairie? (Table 1b)

Туре	Native Prairie (acres)
Restore	0
Protect in Fee with State PILT Liability	0
Protect in Fee w/o State PILT Liability	0
Protect in Easement	0
Enhance	443
Total	443

Total Requested Funding by Resource Type (Table 2)

Туре	Wetland	Prairie	Forest	Habitat	Total Funding
Restore	-	\$320,000	-	-	\$320,000
Protect in Fee with State PILT Liability	-	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-	-
Protect in Easement	-	-	-	\$3,292,000	\$3,292,000
Enhance	\$961,000	\$2,107,400	\$1,790,900	\$450,000	\$5,309,300
Total	\$961,000	\$2,427,400	\$1,790,900	\$3,742,000	\$8,921,300

Acres within each Ecological Section (Table 3)

Туре	Metro/Urban	Forest/Prairie	SE Forest	Prairie	N. Forest	Total Acres
Restore	160	0	0	0	0	160
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	300	240	0	0	0	540
Enhance	908	178	0	0	100	1,186
Total	1,368	418	0	0	100	1,886

Total Requested Funding within each Ecological Section (Table 4)

Туре	Metro/Urban	Forest/Prairie	SE Forest	Prairie	N. Forest	Total Funding
						rununig
Restore	\$320,000	-	-	-	-	\$320,000
Protect in Fee with State	-	-	-	-	-	-
PILT Liability						
Protect in Fee w/o State	-	-	-	-	-	-
PILT Liability						
Protect in Easement	\$2,000,000	\$1,292,000	-	-	-	\$3,292,000
Enhance	\$4,220,900	\$736,700	-	-	\$351,700	\$5,309,300
Total	\$6,540,900	\$2,028,700	-	-	\$351,700	\$8,921,300

Average Cost per Acre by Resource Type (Table 5)

	Туре	Wetland	Prairie	Forest	Habitat
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Restore	-	\$2,000	-	-
Protect in Fee with State PILT Liability	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-
Protect in Easement	-	-	-	\$6,096
Enhance	\$4,928	\$4,757	\$3,280	\$225,000

Average Cost per Acre by Ecological Section (Table 6)

Туре	Metro/Urban	Forest/Prairie	SE Forest	Prairie	N. Forest
Restore	\$2,000	-	-	-	-
Protect in Fee with State	-	-	-	-	-
PILT Liability					
Protect in Fee w/o State	-	-	-	-	-
PILT Liability					
Protect in Easement	\$6,666	\$5,383	-	-	-
Enhance	\$4,648	\$4,138	-	-	\$3,517

Target Lake/Stream/River Feet or Miles

2200 ft lakeshore

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 ~ *Perform ecological monitoring using DNR protocol and evaluate data; adapt management when and where needed.Record number of acres protected of high quality habitat on private lands, which buffer public lands and expand habitat cores and corridors; and number of acres of key habitat successfully restored / enhanced. Map project sites and periodically perform GIS analysis to help quantify impact on habitat complexes.*

Programs in metropolitan urbanizing region:

• Core areas protected with highly biologically diverse wetlands and plant communities, including native prairie, Big Woods, and oak savanna ~ *Perform ecological monitoring using DNR protocol and evaluate data; adapt management when and where needed. Record number of acres protected of high quality habitat on private lands, which buffer public lands and expand habitat cores and corridors; and number of acres of key habitat successfully restored / enhanced. Map project sites and periodically perform GIS analysis to help quantify impact on habitat cores and corridors.*

Programs in the northern forest region:

• Healthy populations of endangered, threatened, and special concern species as well as more common species ~ *Perform ecological monitoring using DNR protocol and evaluate data; adapt management when and where needed.Record number of acres protected of high quality habitat on private lands, which buffer public lands and expand habitat cores and corridors; and number of acres of key habitat successfully restored / enhanced. Map project sites and periodically perform GIS analysis to help quantify impact on habitat complexes.*

Parcels

Sign-up Criteria? Yes

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

The ASP Partnership 10 - Year Strategic Conservation Action Plan utilizes multiple-criteria GIS analyses to identify and prioritize critical areas for habitat connectivity, SGCN, biodiversity, and native plant communities. For the ASP partnership's strategic plan, multiple-criteria decision analyses in GIS were performed to identify and prioritize critical areas for habitat using data sources layers that capture habitat connectivity, habitats that support species in greatest conservation need, terrestrial and aquatic sites of biodiversity, potential locations of groundwater influenced shallow wetlands, and native plant communities.

Partners used their local expertise, knowledge, and landowner contacts to identify parcels and scope out the activities. DNR parcels were submitted to DNR for review. At multiples points in the process, the direct recipients reviewed the parcel list collectively and culled parcels that did not rank highly on the Strategic Plan criteria.

Note that in addition the parcels below, we have 4 programs included in this proposal: Rare Plant Rescue 2 led by ACD, Rare Plant Managment 1 led by GRG, MLT Easements, and Turkey Timber Enhancement led by NWTF. The criteria for parcel selection under these programs are included as attachments. At multiples points in the process, the direct recipients reviewed the program criteria collectively.

Name	County	TRDS	Acres	Est Cost	Existing
					Protection
ACD - City of Anoka Kings Island	Anoka	03225233	52	\$166,000	Yes
ACD - DNR Forest Lake Lamprey Pass	Anoka	03222213	107	\$356,000	Yes
ACD - Anoka County Parks	Anoka	03224236	185	\$659,400	Yes
ACD - CCESR Phase 2, Anoka and Isanti County	Anoka	03423227	152	\$522,000	Yes
GRG - Allemansratt Wilderness Park	Chisago	03420227	40	\$161,700	Yes
GRG -National Guard Bridge Site	Crow Wing	04332234	58	\$252,200	Yes
SherCo Parks - Big Elk Lake Restore	Sherburne	03529233	160	\$320,000	Yes
GRG - Sherburne NWR	Sherburne	03527216	176	\$1,190,000	Yes
GRG - Vietnam Veterans WMA	Sherburne	03526221	20	\$116,600	Yes
SherCo Parks - Big Elk Lake Enhance	Sherburne	03529233	144	\$432,000	Yes

Restore / Enhance Parcels

Parcel Map



Protect in Easement
Protect in Fee with PILT
Protect in Fee W/O PILT
Restore
Enhance
Other

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Anoka Sand Plain Habitat Conservation - Phase 8

- Protect 540 acres of high quality private lands in conservation easements.
- Restore/Enhance 1,346 acres of upland prairie, oak savanna, wetlands, and fire-dependent woodlands and 2,200 feet of shoreline.
- Rare Plant Rescue Program to transplant rare plants permitted for destruction to protected sites.

ASP Partnership Project Examples





Blaine Preserve SNA ASP6

Enhance 50 acres of oak

Big Elk Lake ASP8 Proposal

prairie.

savanna.

Restore 160 acres of

Invasive species and woody removal to restore wet prairie with multiple rare species.

Rum River Floodplain Forest

Tree planting, invasive species and erosion control to repair fragmented floodplain forest along the Rum River.

Priorities based on:

DNR's Wildlife Action Network

ASP Partnership Strategic Plan

MBS Biodiversity Significance

Habitat Connectivity

Native Plant Communities

Species in Greatest Conservation Need

Threatened/Endangered/Special Concern













ld Turkev

Anoka Sand Plain Partnership Accomplishments Phases 1 - 7

Acres Protected

Proposed: 530

Completed: 367

Additional acres in progress

Acres Restored/Enhanced Proposed: 9,083 Completed: 12,164 Additional acres in progress



VISION

Protection, restoration and enhancement to increase biological diversity, habitat connectivity and landscape resilience in the Anoka Sand Plain.



OPPORTUNITY

Over 72,000 acres in the ASP Ecoregion are ranked Outstanding or High Biodiversity by the Minnesota County Biological Survey.

The ASP provides habitat for 97 Species in Greatest Conservation Need.

131 MN Endangered, Threatened, Special Concern species in the ASP.

URGENCY

State-wide projected growth through 2045 is estimated at 7% while growth in Anoka and Sherburne counties is 14% and 24% respectively.



Rare Plant Management Program: Phase 1

This program will enhance shallow wetland peat habitat for the benefit of documented rare plant populations. A guild of rare species is known to occur in high concentration in specific habitats found primarily in the Anoka Sand Plain ecoregion, occurrences which have largely been documented within the past few years. These populations of rare species are threatened by excessive thatch and excessive shade due to lack of natural disturbance such as fire, and rank invasives species growth by reed canary grass.

These rare species tend to respond very well with removal of woody encroachment, followed by removal of thatch either through prescribed burning and/or mechanical de-thatching using heavy equipment. These populations are restricted to low wet habitat that can be difficult to access, and first burns have a high fuel load and produce a lot of smoke; some populations are found in areas that are not burnable due to shape and proximity to roads and structures.

Phase 1 of the Rare Plant Management program, will enhance 100 acres of rare plant wetland habitat, for an estimated cost of \$528,000. This program builds on and is a logical extension of the enhancement of two rare plant management parcels underway in ASP7/ML21. Potential projects will be scored using the scoring worksheet.

This program complements ACD's Rare Plant Rescue Program.



Ranking Criteria	Value	Score
Dava Dlant Danulation Circuitionnes		
	20	
High	20	
Medium-High	18	
Medium	12	
Habitat Management Options		
Proven Burn Unit	10	
Burnable	8	
Not Burnable but Accessible with Heavy Eqt	6	
Not Accessible with Heavy Equipment	2	
Minor Watershed Condition		
Good Not Threatened	10	
Decent, Stable	8	
Good But Threatened	4	
Decent but Threatened	2	
Landowner Match Commitment		
	15	
5 10K	13	
1-5K	6	
Project Scale		
>75 acres	10	
50-75 acres	8	
25-50 acres	4	
5-25 acres	2	
Landscape Habitat Suitability for Plant Diversity and	Pollinators	
High	15	
Medium	12	
Low	8	
Low	8	
Expense for Woody Encroachment Removal		
<\$1000/ac	10	
\$1000-\$3000/ac	8	
\$3000-\$5000/ac	6	
>\$5000/ac	4	
Score	max 90	

Table 1: Ranking Scoresheet



Anoka Sand Plain Habitat Conservation Program Decision Support Tool for Prioritizing Conservation Easement Opportunities

The Minnesota Land Trust often employs an RFP (Request for Proposals) model to both identify highquality projects and introduce a level of competition into the easement acquisition process. Below, we briefly discuss how the system works and the framework put in place to sort the varied opportunities that come before us.

How the Ranking System Works

The parcel ranking framework employed through the Minnesota Land Trust's RFP process is intended as a *decision support tool* to aid in identifying, among the slate of landowners submitting bids for conservation easements, the most ecologically significant opportunities for the price. Using this framework, the Land Trust and its partners use an array of weighted data sets tailored to the specific circumstances inherent in a program area to identify those projects worthy of consideration.

It is important to note that this parcel ranking framework enables the Land Trust to rank projects *relative* to one another. That's important to do, but it's also important to understand how a project (or suite of projects) relates to the ideal situation (i.e., a project that is of exceptional size, condition and superb landscape context). If, for example, an RFP generated 20 proposals in a program area, the framework would effectively sift among them and identify the relatively good from those relatively bad. However, this information alone would not determine whether any of those parcels were of sufficient quality to pursue for protection (all may be of insufficient quality to warrant expenditure of funds). To solve this problem and make sure ranked projects are high priorities for conservation, we step back and evaluate them relative to the ideal (i.e., is each project among the best opportunities for conservation we can expect to find in the program area?).

As part of its proposals to LSOHC, the Land Trust includes easement sign-up criteria that lay out at a general level the framework utilized by the organization. Below is a more detailed description of the process the Land Trust uses to rank potential parcels relative to one another and identify those we will seek to protect with a conservation easement. We also include a ranking form illustrating the representative weighting applied to each criterion. These weightings will be refined as we move forward in applying this approach in each program area.

The Framework

We evaluate potential projects based on two primary factors: ecological significance and cost. Both are assessed independent of one another.

Factor 1: Ecological Significance

The Ecological Significance score is determined by looking at 3 subfactors.

Subfactors:

- Habitat Size or Quantity the area of the parcel to be protected (how big is it?), length of shoreline, etc. The bigger the better.
- Habitat Condition or Quality the condition of the natural communities and/or target species found on a parcel. The higher quality the better.
- Landscape Context what's around the parcel, both ecologically and from a protected status standpoint. The more ecologically intact the surrounding landscape the better; the extent to which a parcel builds off other protected lands to form complexes or corridors, the better.

Note that we may emphasize one subfactor over another if the specific circumstances warrant it.

Indicators:

A suite of weighted indicators is used to score each parcel relative to each of the above subfactors. Indicators are selected based on their ability to effectively inform the scoring of parcels relative to each of the respective subfactors. Weightings for each criterion are assessed and vetted to ensure that a set of indicators for each subfactor produces meaningful results, then applied across each of the proposed parcels.

Data sets used for this purpose must offer wall-to-wall coverage across the program area to ensure that bias for or against parcels does not creep into the equation. Where gaps in such coverages exist, we attempt to fill them in to the extent feasible (via field inventory, etc.).

Finally, we vet and make improvements to the scoring matrix when we identify issues or circumstances where results seem erroneous.

Factor 2: Cost

Cost is a second major factor used in our consideration of parcels. Although ecological significance is *the* primary factor in determining the merits of a project, our RFP programs also strive to make the greatest conservation impact with the most efficient use of State funds. As such, we look at the overall cost of each project relative to its ecological significance; we also ask landowners to consider donating all or some of their easement value to the cause and to better position their proposals. Many landowners participate in that fashion.

Cost, as a primary factor, is assessed independently of the ecological factors. Given equal ecological significance, a project of lower cost will be elevated over those of higher cost in the ranking. That said, exceptionally high-quality projects are likely to be pursued even if no or modest landowner donation is

put forward. Alternatively, there are projects offered as full donations that are not moved forward because their ecological significance is not acceptable. The degree to which cost factors into the ranking of parcels relative to one another is made on a case-by-case basis.

Conservation Easement Selection Worksheet – Scoring and Criteria

1. Habitat Size or Quantity (30 points)

Parcels are scored based on acres of existing habitat or habitat to be restored that would be protected through the a given conservation easement, relative to the largest parcels available for protection in the program area. Shoreline length included in the parcel is also a consideration. Little information pertaining to the size of species populations on a given property typically exists, making any determination suspect. Habitat size is a valid indicator not only ecosystem health but has a direct correlation with species viability. Shoreline feet is an indicator of amount of riparian habitat as well as the water quality benefits that come from undeveloped land adjacent to waterbodies.

Habitat Size (20 points): Parcels are scored by how they fall relative to five size classes of habitat size, in acres:

Points	Acres
0	1-39
4	40-49
6	50-79
14	80-119
20	120 or more

Shoreline (10 points): Parcels are scored based on the number of feet of shoreline on the parcel. Rivers perennial stream shoreline lengths include both banks if they are within the parcel, while intermittent stream lengths are measured using the centerline of the stream. Parcels are scored based on five classes, in feet:

Points	Feet
0	0
4	1-499
6	500-999
8	2000-4,999
10	5,000 or more

2. Habitat Condition or Quality (25 points):

Parcels are scored based on the quality or condition of occurrences of ecological communities (habitat), imperiled species if known, and water quality (level of impairments). As with Habitat Size above, population data for imperiled species is often minimal on private lands. As such, the condition of score is heavily influenced by the condition of natural communities on a property. However, we do allocate a modest level of points to the presence of imperiled species if they have been documented.

<u>The Nature Conservancy's Resilient Sites for Terrestrial Conservation project</u> identifies areas estimated to be the most climate resilient for characteristic environments of North America. All parcels that come through the RFP process with generally acceptable scores in ecological significance have average or above average climate resiliency scores. The inclusion of climate resiliency scoring did not appreciable change the overall ranking, so was not explicitly included in the ranking framework.

Habitat Quality (18 points): The Minnesota Biological Survey (MBS) natural community element occurrence (EO) ranking framework and the <u>MBS Biodiversity Significance Ranks</u> are used to score habitat quality on parcels in five classes:

	Site Evaluation	
Points	Score	Description
0	0	The only native community present on parcel has a D ranking; all of site is ranked "below threshold" for biodiversity significance
		Less than 50% of the parcel is C-ranked native plant communities, and the rest is ranked lower than C OR
6	1-5	About half of the parcel is composed of C-ranked native plant communities, the rest is D-ranked or lower; part of the parcel is identified as Moderate Biodiversity Significance, the rest of the parcel is lower than "Moderate"
12	6-10	About half of the parcel is composed of C-ranked native plant communities, the rest is D-ranked or lower; all of the parcel is identified as Moderate Biodiversity Significance or higher
16	11-15	About half of the parcel consists of C-ranked communities and the rest is ranked higher than C; Part of parcel is identified as an MBS site of Outstanding Biodiversity Significance; parcel or part of parcel is identified as an MBS site of High Biodiversity Significance; the parcel includes one or more "lakes of biodiversity significance" as identified by MBS
18	16-20	More than half of the parcel consists of a natural community with an A, B, AB, or BC element occurrence ranking; all of the parcel is identified as MBS site of Outstanding Biodiversity Significance

Imperiled Species (2 points): The <u>Natural Heritage Information System</u> data is used to identify rare plants, animals, native plant communities, and other rare features noted on the parcel. Scoring of the parcel is based on species abundance, using counts of species:

Points	Occurrences
0	0
1	1
2	2 or more

Water Quality (5 points): The Watershed Health Assessment Framework (WHAF), among other

analyses, identifies the percentage of water quality assessments completed by the Minnesota Pollution Control Agency that documents percentage of assessments evidencing a waterbody's failure to meet water quality standards. This scoring framework focuses on the state's aquatic life designated use. This percentage is collected at the subwatershed scale. Parcels are scored based on the percentage of assessments within the catchment that show a failure of waterbodies ability to support aquatic life, in three categories:

Points	Percent
0	67-100
3	34-66
5	0-33

3. Landscape Context (45 points)

Parcels are scored based current ecological context of the property and protected lands surrounding it; in addition, points are also allocated based on the likelihood that lands around a parcel will be protected going forward based on the identification of these adjacent lands in respective conservation lands.

Habitat Cores/Corridors (10 points): Parcels scored based on their distance from protected area(s) of interest/habitat cores for the Anoka Sand Plain Partnership or the Land Trust: Crane Meadows National Wildlife Refuge, Sherburne National Wildlife Refuge, Carlos Avery Wildlife Management Area *OR* their distance from habitat corridors between cores, as defined by the Wildlife Action Plan, the Metro Conservation Corridors, or other relevant plan.

Points	Miles
0	5 or more
6	2-4.9
8	0.5-1.9
10	0-0.49

Habitat Core – Adjacent (4 points): Parcel is directly adjacent to one of the above priority habitat cores.

Points	Adjacent
0	No
4	Yes

Riparian Corridors (12 points): Parcels scored based on whether they are located on or near a high-priority riparian corridor within the Anoka Sand Plain, as measured by the Anoka Sand Plain Partnership and other federal, state, and local plans. These priority riparian corridors include the Rum River and its tributaries (for example, the Sunrise River and Stanchfield Creek) and the Mississippi River and its tributaries (for example, the Elk River).

Points	Location
0	Not within HUC7 watershed of or on a high priority corridor
6	Within HUC7 watershed of high priority corridor
12	On high priority corridor

Drinking Water Supply Management Area (4 points): <u>Drinking Water Supply Management Areas</u> have been identified by the Minnesota Department of Health and show surface and subsurface areas surrounding public water supply intakes that contain the scientifically calculated surface water protection area and is managed by the entity identified in a surface water protection plan. Using this as an indicator helps the Land Trust protect land that not only provides habitat, but as a secondary additional consideration, protects drinking water (ground and surface).

Points	Within
0	No
4	Yes

Conservation Priority (15 points): The degree to which the area within which a parcel has been identified as a priority for conservation action and the degree to which action is being implemented in that area is a direct indicator of the long-term potential for maintenance of biodiversity associated with a parcel. Lands affiliated with priority areas are more likely to be complemented with additional levels of nearby protected lands than those outside of priority areas. In areas of the southern Anoka Sand Plain ecoregion that are located in the Twin Cities Metro and experiencing high levels of development, this factor may carry a significant amount of weight in setting protection priorities.

The parcel is given six points for each of the below criteria that are true, up to a score of 15:

- The parcel is a priority for the Anoka Sand Plain Partnership or other conservation partners, such as non-governmental organizations and federal, state, or local government units (soil and water conservation districts, watershed districts)
- The parcel is a priority for the Anoka Sand Plain Partnership or federal, state, or local conservation partner(s) for water quality conservation
- The parcel is adjacent or near to a Land Trust conservation easement or other protected land not identified as a Habitat Core above
- The parcel is a conservation priority of the community
- The parcel has restoration or enhancement potential that was not identified in any of the other portions of the scoring framework

Minnesota Land Trust Anoka Sand Plain Ranking Sheet

		TEMPLATE		Tract 1		Tract 2	
	County						
TOTAL SCORE	100	100		0		0	
SIZE/QUANTITY	Points						
Size: Acres of exisiting habitat to be protected by an easement	20	120	20		0		0
Shoreline: Feet of shoreline protected	10	5000	10		0		0
	30	30		0		0	
CONDITION/QUALITY	Points						
Terrestrial Habitat Quality: Quality of existing ecological systems	18	20	18		0		0
Imperiled Species: Presence of documented rare features	2	2	2		0		0
Water Quality - Priority Water Resources: Level of impairment(s) to water bodies	5	5	5		0		0
	25	25		0		0	
LANDSCAPE CONTEXT	Points						
Habitat Cores/Corridors: Distance from protected area(s) of interest/habitat cores (Crane Meadows NWR, Sherburne NWR, Carlos Avery WMA) OR distance from habitat corridors between cores, as defined by the Wildlife Action Plan or other plan	10	0	10		0		0
Habitat Core - Adiacent: Directly adiacent to habitat cores listed above	4	4	4		0		0
Riparian Corridors: Project protects high priority riparian corridors (Rum River or tributary-Sunrise?, Stanchfield Creek or tributary, Elk River or tributary, Mississippir River or tributary)	12	12	12		0		0
Drinking Water Supply Management Area: Is/is not located in one	4	4	4		0		0
Conservation Priority: Is a prioirty for habitat or water quality for ASP partnership or other partners (e.g., local govt unit); adjacent to MLT CE or other protected land not identified above; community priority; etc.	15	15					
	45	45		0		0	
COST							
Bid amount (\$/per acre)							
Donative value (\$/acre)							
PROJECT COST							

Anoka Sand Plain Rare Plant Rescue Program

Goal 1: Rescue rare plants that would otherwise be destroyed.

Goal 2: Advance our understanding of rare plant species and their conservation and management needs.

ASP Rare Plant Rescue Program • ML 2023 Request for Funding • \$450,000

- Rescue additional 30,000 rare plants that would otherwise be destroyed from permitted developments.
- Continue to expand the Rare Plant Rescue Program network to ensure rescues.
- Identify permanently protected sites to provide refuge for rescued plants. Conduct habitat enhancement in priority areas for priority rare species.
- Protect rare plant genetics through seed banking.
- Develop species-specific rescue protocols and conservation plans.
- Monitor transplants and continue to update the rare plant rescue database.
- Share and disseminate program findings.





Accomplishments from ASP7

- Formed collaboration and Partnership with landowners, land managers, municipalities, permit authorities, developers, conservation professionals, and volunteers.
- Program outreach and field tour.
- Identified ecologically appropriate recipient sites.
- Salvaged plants and/or seeds from 7 development sites.
- Transplanted ~10,000 rescued rare plants to 5 protected sites. Conducted various propagation/planting methods for rescue.
- Collected seed from 22 E/T/SC ASP species.
- Developed Database. Monitored transplants.











Turkey Timber Enhancement Program

This program will restore and/or enhance upland and riparian woodlands that provide critical habitat to many wildlife species in the Anoka Sand Plain (ASP) ecoregion including the wild turkey. Projects selected by this program will demonstrate direct and indirect benefits to woodlands and their surrounding habitats. From oak savanna stands to cottonwood galleries, these woodlands support a multitude of species including species of greatest conservation need (SGCN) like the northern long-eared bat or the eastern meadowlark. In woodlands across much of the state, the wild turkey is an indicator species representing healthy management of woodlands. By managing woodlands for the wild turkey, you subsequently promote forest health, water quality, and habitat improvement for a wide range of species.

Oak Savanna habitat is of particular concern within the Minnesota Wildlife Action Plan (WAP) and is a high priority in many of the Conservation Focus Areas within the WAP, the Anoka Sand Plain included. Much of the Anoka Sand Plain ecoregion and intersecting minor watersheds woodlands are dominated with oaks, a critical species to a countless number of wildlife. Projects done in this portion of the state will also contribute to larger landscape levels programs that the NWTF is working on like the White Oak Initiative.

Selected projects will have a timber stand and habitat improvement focus to include thinning/releasing, invasive species work, tree planting, prescribed burning, etc. Selected projects will also have secondary benefits like erosion control, water quality, forest health improvements, among others. With this program we would be looking to restore/enhance roughly 150-acres of woodlands within the ASP ecoregion. Typical costs to do this type of habitat work correctly averages around \$3,000 an acre.



The National Wild Turkey Federation (NWTF) District Biologist will review and select

projects based on the following ranking criteria:

R	anking Criteria	Value	Score
1.	Wildlife Action Network Significance		
	High	15	
	Medium-High	12	
	Medium	8	
	Low-Medium	6	
2.	Project Scale		
	Project will improve 51+ acres	15	
	Project will improve 11-50 acres	10	
	Project will improve 1-10 acres	5	
3.	Matching Funds		
	Project has greater than 3:1 match	10	
	Project match is 3:1 or less	5	
5.	Longevity of Project Benefits		
	Long term benefits (ten or more years)	10	
	Moderate term benefits (five to nine years)	5	
6.	Species of Greatest Conservation Need		
	Project has the potential to benefit many SGCN	15	
	Project has the potential to benefit one SGCN	10	
7.	Recreational Access		
	Project is open to the public (hunting and or fishing allowed)	10	
	Project is open to the public with restrictions (no hunting or fishing allowed)	7	
9.	Benefit to Wild Turkeys	1 10	
	Turkeys are currently utilizing the property	10	
_	Project could result in use by wild turkeys	/	
10	. Biological Merit (chance of success)		
	Very Good / results attainable	15	
	Good / results attainable	10	
	Total Pro	oject Score	0
M	aximum score possible = 100		