



Lessard-Sams Outdoor Heritage Council

Minnesota Moose Habitat Collaborative - Phase III

Laws of Minnesota 2018 Final Report

General Information

Date: 12/27/2021

Project Title: Minnesota Moose Habitat Collaborative - Phase III

Funds Recommended: \$1,938,000

Legislative Citation: ML 2018, Ch. 208, Art. 1, Sec. 2, subd 3(f)

Appropriation Language: \$1,938,000 the second year is to the commissioner of natural resources for an agreement with the Minnesota Deer Hunters Association to restore and enhance public forest lands in the northern forest region for moose habitat. A list of proposed land restoration and enhancements must be provided as part of the required accomplishment plan.

Manager Information

Manager's Name: Craig Engwall

Title: Executive Director

Organization: MN Deer Hunters Association

Address: 460 Peterson Road

City: Grand Rapids, MN 55744

Email: craig.engwall@mndeerhunters.com

Office Number: 218-327-1103

Mobile Number: 218-244-6822

Fax Number: 218-327-1349

Website: www.mndeerhunters.com

Location Information

County Location(s): Lake, Cook and St. Louis.

Eco regions in which work will take place:

- Northern Forest

Activity types:

- Enhance

Priority resources addressed by activity:

- Forest
- Habitat

Narrative

Summary of Accomplishments

The Minnesota Moose Habitat Collaborative has enhanced 17,440 acres in the Northeastern moose range (Cook, Lake, St. Louis Counties) since 2013. There were 11,466 acres accomplished in phase 3. These are “unique” acres where any follow up maintenance treatments are not double counted. Total “treatment” acres where acres are counted each time a treatment is accomplished since 2013 totals 40,320 acres.

Process & Methods

The Minnesota Moose Collaborative has implemented a variety of habitat enhancement treatments across the core of moose range in Northeast Minnesota on County, State, Federal, and Tribal lands since 2013. Improving moose browse calls for treatments that regenerate preferred brush and tree species. In some places this happens through natural or human disturbance. Natural disturbances like wildfires provide excellent moose browse according to biologists. Most logging on uplands results in some regeneration of moose browse. However, there are tens of thousands of acres in moose range that will not see a natural browse regenerating event like fire or do not have enough volume of merchantable wood to make an economical timber sale. In these areas the collaborative used bulldozers, brush saw crews, and prescribed fires to shear, cut, and burn the old decadent brush and stimulate re-growth that is more palatable, nutritious, and easy to reach for moose. Cover for hiding from predators and protection from the elements is another part of the habitat equation. Research has shown that moose prefer forests with mixed conifer and deciduous trees. The pre-settlement forest in Northeast MN was 70% conifers and 30% deciduous trees. Today that ratio is completely reversed with 70% deciduous and only 30% conifers. Improving cover habitat for moose means restoring conifers on the landscape. The Minnesota Moose Habitat Collaborative has planted over 4 million trees including white spruce, white pine, jack pine, and white cedar. The pine and cedar must be protected from browsing by deer and hare using budcaps or tree shelters. By the third year after planting, the seedlings need to be released from competition from surrounding trees and brush. The collaborative accomplished this “release” with brush saws which both helps the trees get established and produces another flush of future moose browse. A look at plat books for counties in Northeast Minnesota quickly emphasizes the need for inter-agency partnerships to produce habitat results at a meaningful scale. The ownership pattern looks like a patchwork quilt of County, Federal, and State lands. There is not an acre that gets worked on without some level of collaboration and cooperation between partner staff. With time and experience, collaborative partners have refined the search for good moose habitat projects and added and dropped stands as field visits were conducted. Proposals for specific work plans at each site are shared with wildlife biologists for their approval as beneficial to moose. Partners decided who will manage the bidding and contracting, order necessary supplies, supervise the work, complete the documentation needed for invoicing, track the specifics of what was done at each site, and summarize accomplishments for grant reporting and other communication about the project as a whole. Field sampling and aerial surveys conducted by the 1854 Treaty Authority, U of M's Natural Resources Research Institute, the Fond Du Lac Band, and other agency and tribal biologists are showing that moose are preferentially using the sites that were treated through this project.

How did the program address habitats of significant value for wildlife species of greatest conservation need, threatened or endangered species, and/or list targeted species?

The habitat enhancement actions described in this proposal reflect a goal of managing for healthy northern forests with an emphasis on moose habitat. Prescribed fire, brush removal, selective restoration planting and timber harvest were implemented to help restore the natural variability of northern forests over time. The project likely provided benefits to several other Species of Greatest Conservation Need (SGCN). Another mammal SGCN species that likely benefited from this project is the Canada Lynx. Lynx prey mainly on snowshoe hare. The completed habitat management with interspersed conifer and hardwood species in an earlier stage of succession will

benefit snowshoe hare. Other mammal species that also prey on snowshoe hare include bobcat, marten and fisher. Wolves prey primarily on deer, moose, and beaver, and thus would also benefit from a healthier moose population. Bats are another set of species that could benefit. All seven bat species in Minnesota are SGCN species. Initial indications from an ongoing northern long-eared bat project funded by the ENRTF are that roost trees are not limiting to bats in summer. This could mean that enhancing foraging habitat for insects with openings would benefit bats, just as we are enhancing foraging habitat for moose in this project. This idea needs to be tested experimentally, but if it did result in increased success in raising young, there would be clear benefits for northern long-eared bats, which will likely have over 95% mortality from White Nose Syndrome. Finally, there are several bird SGCN species that will benefit from the conifer component of this project. Among the bird species are Evening Grosbeak, Olive-sided Flycatcher, Spruce Grouse, Purple Finch, Connecticut Warbler, Black-backed Woodpecker, Winter Wren, and the Boreal Owl.

How did the program use science-based targeting that leveraged or expanded corridors and complexes, reduced fragmentation, or protected areas in the MN County Biological Survey.

Biologists, foresters, ecologists and GIS specialists from governmental and NGO partners utilized GIS modeling analysis as well as their expertise and field knowledge to select parcels that had the best potential to achieve project goals and enhance moose habitat as well as habitat for other species. Collaborative partners quantified the outcomes of different treatments and assessed the success of restoration efforts with regard to vegetative response and use by moose and other species. The moose range includes some of the least fragmented areas of the state and some of the best areas for corridors and complexes. This work has helped sustain and enhance the biological diversity in those corridors and complexes through enhancement of tree species diversity and returning disturbance to the landscape.

Explain Partners, Supporters, & Opposition

The Moose Habitat Collaborative is made up of the following partners: Minnesota Deer Hunters Association, Superior National Forest, The Nature Conservancy, 1854 Treaty Authority, Fond du Lac Band, Grand Portage Band, Cook County, Lake County, St. Louis County, and University of Minnesota Duluth, Natural Resources Research Institute. There has not been any opposition to this project.

Exceptional challenges, expectations, failures, opportunities, or unique aspects of program

A unique aspect of this project is the large number of parcels spread across a wide geography on a mix of ownerships. This requires a high degree of coordination between partners through all phases of planning, work and reporting. The LSOHC funding has made an important contribution to landscape scale cross boundary collaboration that will serve the state well as we anticipate future large scale habitat issues. A huge obstacle to completing work on this project were challenges created by the Covid-19 situation. The challenges included the inability to have contractors and collaborators working in the field and in some cases not in the office. There were no prescribed burns permitted and required substituting other treatments to achieve our goals. In spite of the challenges the Covid-19 situation presented we were able to strategize ways to overcome the challenges and accomplished more acres than what we anticipated.

What other fund may contribute to this program?

- N/A

What is the plan to sustain and/or maintain this work after the Outdoor Heritage Funds are expended?

Moose Habitat Collaborative Partners are working with other sources of funding that allow additional moose habitat projects to be accomplished outside of LSOHC funding. Working together through this LSOHC funded

project has made us all more competitive for other funds and more collaborative in getting enhancement work done on the ground. CPL funds have been used by the partners for work that benefits moose. The Nature Conservancy has secured funds from private foundations and corporations that have contributed to expanding this program. Working together through this LSOHC funded project has made the partners more competitive for other funds and more collaborative in getting enhancement work done on the ground. We will continue to submit proposals for public and private funds to maintain the work.

Budget

Totals

Item	Requested	AP Amount	Spent	Antic. Leverage	Received Leverage	Leverage Source	Original Total	Final Total
Personnel	\$18,000	\$18,000	\$6,700	\$4,000	-	MDHA	\$22,000	\$6,700
Contracts	\$1,916,000	\$1,916,000	\$1,914,000	\$150,000	\$45,700	Partners	\$2,066,000	\$1,959,700
Fee Acquisition w/ PILT	-	-	-	-	-	-	-	-
Fee Acquisition w/o PILT	-	-	-	-	-	-	-	-
Easement Acquisition	-	-	-	-	-	-	-	-
Easement Stewardship	-	-	-	-	-	-	-	-
Travel	\$4,000	\$4,000	-	-	-	-	\$4,000	-
Professional Services	-	-	-	-	-	-	-	-
Direct Support Services	-	-	-	-	-	-	-	-
DNR Land Acquisition Costs	-	-	-	-	-	-	-	-
Capital Equipment	-	-	-	-	-	-	-	-
Other Equipment/Tools	-	-	-	-	-	-	-	-
Supplies/Materials	-	-	-	-	-	-	-	-
DNR IDP	-	-	-	-	-	-	-	-
Grand Total	\$1,938,000	\$1,938,000	\$1,920,700	\$154,000	\$45,700	-	\$2,092,000	\$1,966,400

Personnel

Position	Annual FTE	Years Working	Funding Request	Antic. Leverage	Leverage Source	Total
MDHA Grant Manager	0.35	3.0	\$6,700	-	MDHA	\$6,700

Explain any budget challenges or successes:

MDHA anticipated having more personnel time to include towards the leverage, however, we did not incur as much expense as we expected. Leverage of \$45,740.00 was provided by USFS and we had anticipated a higher amount based on previous projects, however due to the Covid-19 Situation we did not do we did not do the prescribed burns with the USFS as anticipated.

Total Revenue: \$0

Revenue Spent: \$0

Revenue Balance: \$0

Of the money disclosed above, what are the appropriate uses of the money:

- E. This is not applicable as there was no revenue generated.

Output Tables

Acres by Resource Type (Table 1)

Type	Wetland (AP)	Wetland (Final)	Prairie (AP)	Prairie (Final)	Forest (AP)	Forest (Final)	Habitat (AP)	Habitat (Final)	Total Acres (AP)	Total Acres (Final)
Restore	0	0	0	0	0	0	0	0	0	0
Protect in Fee with State PILT Liability	0	0	0	0	0	0	0	0	0	0
Protect in Fee w/o State PILT Liability	0	0	0	0	0	0	0	0	0	0
Protect in Easement	0	0	0	0	0	0	0	0	0	0
Enhance	0	0	0	0	0	11,466	10,000	0	10,000	11,466
Total	0	0	0	0	0	11,466	10,000	0	10,000	11,466

Total Requested Funding by Resource Type (Table 2)

Type	Wetland (AP)	Wetland (Final)	Prairie (AP)	Prairie (Final)	Forest (AP)	Forest (Final)	Habitat (AP)	Habitat (Final)	Total Funding (AP)	Total Funding (Final)
Restore	-	-	-	-	-	-	-	-	-	-
Protect in Fee with State PILT Liability	-	-	-	-	-	-	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-	-	-	-	-	-	-
Protect in Easement	-	-	-	-	-	-	-	-	-	-
Enhance	-	-	-	-	-	\$1,920,700	\$1,938,000	-	\$1,938,000	\$1,920,700
Total	-	-	-	-	-	\$1,920,700	\$1,938,000	-	\$1,938,000	\$1,920,700

Acres within each Ecological Section (Table 3)

Type	Metro / Urban (AP)	Metro / Urban (Final)	Forest / Prairie (AP)	Forest / Prairie (Final)	SE Forest (AP)	SE Forest (Final)	Prairie (AP)	Prairie (Final)	N. Forest (AP)	N. Forest (Final)	Total (AP)	Total (Final)
Restore	0	0	0	0	0	0	0	0	0	0	0	0
Protect in Fee with State PILT Liability	0	0	0	0	0	0	0	0	0	0	0	0
Protect in	0	0	0	0	0	0	0	0	0	0	0	0

Fee w/o State PILT Liability												
Protect in Easement	0	0	0	0	0	0	0	0	0	0	0	0
Enhance	0	0	0	0	0	0	0	0	10,000	11,466	10,000	11,466
Total	0	0	0	0	0	0	0	0	10,000	11,466	10,000	11,466

Total Requested Funding within each Ecological Section (Table 4)

Type	Metro / Urban (AP)	Metro / Urban (Final)	Forest / Prairie (AP)	Forest / Prairie (Final)	SE Forest (AP)	SE Forest (Final)	Prairie (AP)	Prairie (Final)	N. Forest (AP)	N. Forest (Final)	Total (AP)	Total (Final)
Restore	-	-	-	-	-	-	-	-	-	-	-	-
Protect in Fee with State PILT Liability	-	-	-	-	-	-	-	-	-	-	-	-
Protect in Fee w/o State PILT Liability	-	-	-	-	-	-	-	-	-	-	-	-
Protect in Easement	-	-	-	-	-	-	-	-	-	-	-	-
Enhance	-	-	-	-	-	-	-	-	\$1,938,000	\$1,920,700	\$1,938,000	\$1,920,700
Total	-	-	-	-	-	-	-	-	\$1,938,000	\$1,920,700	\$1,938,000	\$1,920,700

Target Lake/Stream/River Feet or Miles

0

Outcomes

Programs in the northern forest region:

- Healthy populations of endangered, threatened, and special concern species as well as more common species ~ *Each year, the size of the moose population in northeastern Minnesota is estimated via an aerial survey. This survey is a collaboration between the Minnesota Department of Natural Resources (MN DNR), the Fond du Lac Band of Lake Superior Chippewa, and the 1854 Treaty Authority. The 1854 Treaty Authority and University of Minnesota Duluth have performed surveys for moose use of specific project sites.*

Parcels

Sign-up Criteria?

No

Restore / Enhance Parcels

Name	County	TRDS	Acres	Est Cost	Existing Protection
USFS272	Cook	06105204	19	-	Yes
Waffle 2	Cook	06005212	14	-	Yes
Vat NH 1	Cook	06103227	13	-	Yes
Waffle 3	Cook	06005212	104	-	Yes
USFS275	Cook	06103230	8	-	Yes
1518	Cook	05904217	161	-	Yes
NE 10	Cook	06204233	28	-	Yes
USFS274	Cook	06103229	9	-	Yes
Cross Salvage	Cook	06005231	57	-	Yes
Sawbill 7	Cook	06004216	26	-	Yes
Cook Lake 1	Cook	06205229	111	-	Yes
Wringer Gaps 3	Cook	06005213	1	-	Yes
Wringer Gaps 1	Cook	06005213	1	-	Yes
RACR Unit	Cook	06104206	309	-	Yes
Swamp River Burn	Cook	06304117	1,500	-	Yes
USFS108	Cook	06302106	43	-	Yes
USFS109	Cook	06302106	10	-	Yes
Wringer Gaps 4	Cook	06005213	2	-	Yes
USFS184	Cook	06203235	28	-	Yes
USFS211	Cook	06102203	11	-	Yes
Wringer Gaps 2	Cook	06005213	1	-	Yes
Vat NH 2	Cook	06103234	9	-	Yes
Neptune 2	Cook	06103219	47	-	Yes
Winger Gaps 5	Cook	06005213	1	-	Yes
Cook Lake 2	Cook	06205228	56	-	Yes
Cook Lake 3	Cook	06205229	13	-	Yes
Gunflint TSI 1	Cook	06201129	134	-	Yes
Gunflint TSI 2	Cook	06201129	121	-	Yes
USFS273	Cook	06105212	37	-	Yes
Gunflint TSI 3	Cook	06201201	26	-	Yes
Waffle 1	Cook	06005212	76	-	Yes
1506	Cook	06402132	5	-	Yes
TNC-DNR23	Cook	06304102	31	-	Yes
TNC-DNR24	Cook	06304102	10	-	Yes
TNC-DNR22	Cook	06304102	5	-	Yes
USFS252	Cook	06004208	20	-	Yes
USFS247	Cook	06104218	30	-	Yes
USFS238	Cook	06104218	56	-	Yes
USFS148	Cook	06104218	22	-	Yes
USFS239	Cook	06104219	15	-	Yes
NewUSFS118	Lake	06111204	4	-	Yes
NewUSFS118	Lake	06111204	2	-	Yes
NewUSFS118	Lake	06111204	5	-	Yes
NewUSFS118	Lake	06111204	3	-	Yes
NewUSFS120	Lake	06210219	18	-	Yes
USFS205	Lake	06211226	14	-	Yes
USFS206	Lake	06211226	2	-	Yes
TNC-DNR8	Lake	05907236	64	-	Yes
USFS238	Lake	05907226	14	-	Yes

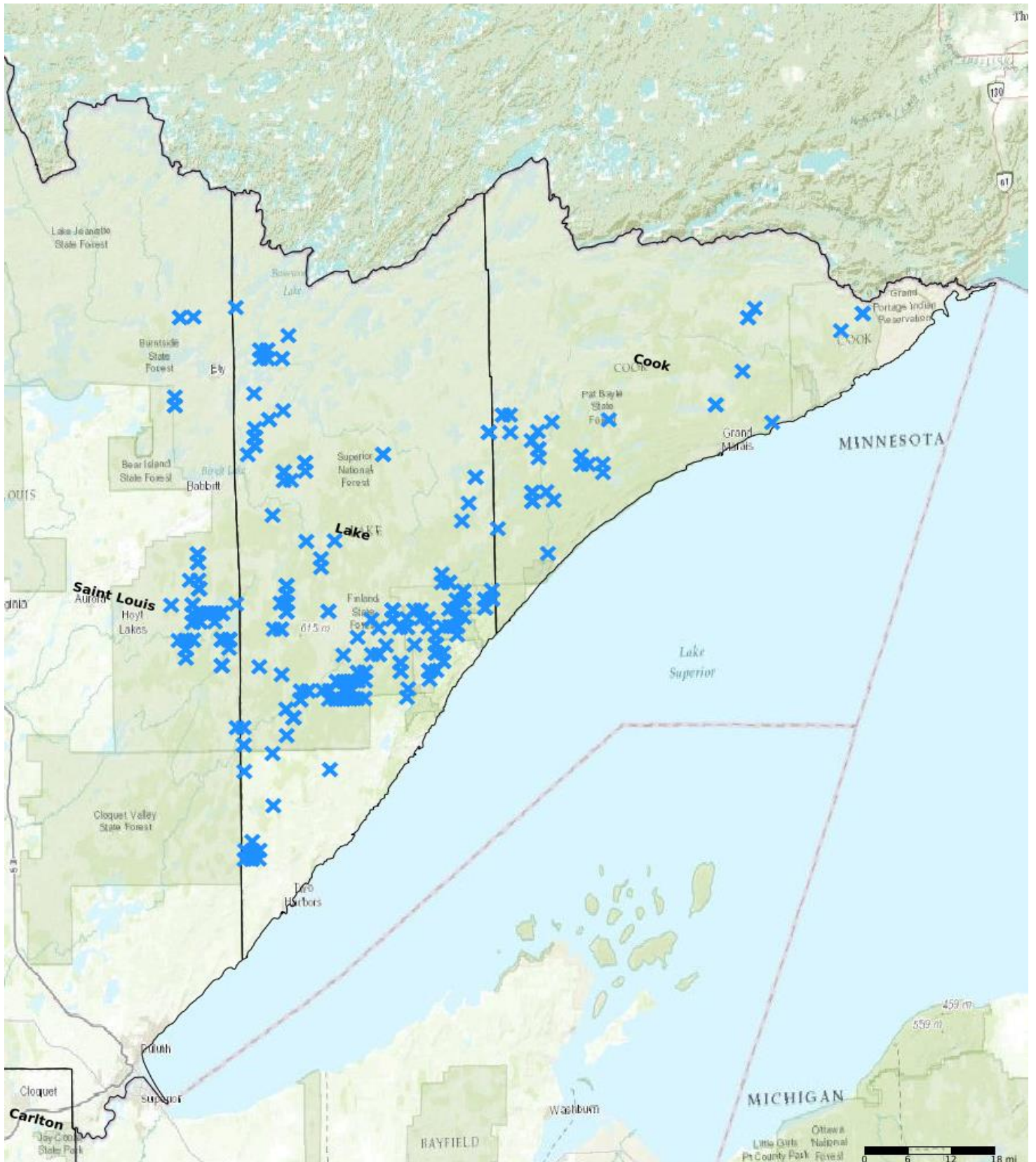
TNC-DNR8	Lake	05907236	17	-	Yes
TNC-DNR8	Lake	05907236	26	-	Yes
473	Lake	05907235	18	-	Yes
LC37	Lake	05806218	63	-	Yes
LC38	Lake	05806218	45	-	Yes
MNDNR34	Lake	05808222	15	-	Yes
MNDNR32	Lake	05807213	35	-	Yes
LC60	Lake	05806219	132	-	Yes
MNDNR33	Lake	05807213	45	-	Yes
LC70	Lake	05806212	18	-	Yes
LC70	Lake	05806212	23	-	Yes
TNC-DNR8	Lake	05907236	69	-	Yes
LC70	Lake	05806212	17	-	Yes
LC71	Lake	05806211	58	-	Yes
LC74	Lake	05806212	14	-	Yes
1348 Caribou Silver South	Lake	05806214	70	-	Yes
LC72	Lake	05707206	69	-	Yes
LC40	Lake	05809235	39	-	Yes
LC73	Lake	05708214	57	-	Yes
LC75	Lake	05707210	82	-	Yes
LC90	Lake	05707210	4	-	Yes
LC91	Lake	05707203	10	-	Yes
2020 SP 6	Lake	05707210	35	-	Yes
NewUSFS122	Lake	05709209	36	-	Yes
USFS198	Lake	05709229	63	-	Yes
LC78	Lake	05709228	53	-	Yes
LC31	Lake	05709228	29	-	Yes
LC103	Lake	05709234	18	-	Yes
LC34	Lake	05709234	20	-	Yes
LC32	Lake	05709234	24	-	Yes
LC33	Lake	05709234	5	-	Yes
LC36	Lake	05709233	15	-	Yes
LC35	Lake	05709234	8	-	Yes
TNC-DNR16	Lake	05609204	6	-	Yes
406	Lake	05609203	12	-	Yes
TNC-DNR17	Lake	05609205	36	-	Yes
TNC-DNR16	Lake	05609204	17	-	Yes
TNC-DNR17	Lake	05609205	3	-	Yes
LC43	Lake	05609206	37	-	Yes
LC44	Lake	05709227	78	-	Yes
LC45	Lake	05709234	35	-	Yes
LC46	Lake	05609203	14	-	Yes
LC47	Lake	05609203	12	-	Yes
LC48	Lake	05709228	21	-	Yes
USFS213	Lake	05709227	71	-	Yes
USFS214	Lake	05709227	8	-	Yes
USFS107	Lake	05709229	39	-	Yes
LC49	Lake	05709223	38	-	Yes
LC50	Lake	05709223	55	-	Yes
USFS224	Lake	05709226	12	-	Yes
LC53	Lake	05709224	28	-	Yes
USFS226	Lake	05709225	27	-	Yes
LC56	Lake	05709224	85	-	Yes
LC58	Lake	05709233	12	-	Yes
LC78	Lake	05609201	7	-	Yes
LC57	Lake	05609204	20	-	Yes
507	Lake	05609204	13	-	Yes
LC86	Lake	05609201	8	-	Yes

NewUSFS112	Lake	05811212	11	-	Yes
1539	Lake	06311215	79	-	Yes
Tofte TSI 1	Lake	06108216	23	-	Yes
Tofte TSI 2	Lake	06106234	80	-	Yes
Tofte TSI 4	Lake	06006229	43	-	Yes
Tofte TSI 1	Lake	06106234	148	-	Yes
Tofte TSI 3	Lake	06006216	16	-	Yes
Lau TSI 5	Lake	05710234	21	-	Yes
Lau TSI 6	Lake	05710233	8	-	Yes
Lau TSI 11	Lake	05610207	12	-	Yes
USFS257	Lake	06411219	8	-	Yes
Lau TSI 4	Lake	05710234	7	-	Yes
Lau TSI 7	Lake	05610204	11	-	Yes
Lau TSI 1	Lake	05610204	9	-	Yes
Lau TSI 2	Lake	05710233	43	-	Yes
Lau TSI 8	Lake	05709231	38	-	Yes
Lau TSI 3	Lake	05710234	15	-	Yes
Lau TSI 9	Lake	05809218	1	-	Yes
NewUSFS105	Lake	05910231	35	-	Yes
Lau TSI 10	Lake	05809218	30	-	Yes
NewUSFS105	Lake	05910231	40	-	Yes
USFS110	Lake	06211209	20	-	Yes
MNDNR27	Lake	05808215	3	-	Yes
NewUSFS106	Lake	05810206	54	-	Yes
USFS105	Lake	05910231	38	-	Yes
TNC-DNR10	Lake	05808222	34	-	Yes
MNDNR28	Lake	05808215	5	-	Yes
USFS202	Lake	05808215	3	-	Yes
USFS201	Lake	05808215	1	-	Yes
USFS203	Lake	05808215	1	-	Yes
TNC-DNR10	Lake	05808222	5	-	Yes
NewLC201	Lake	05807220	9	-	Yes
NewLC201	Lake	05807217	11	-	Yes
LC76	Lake	06311214	43	-	Yes
LC77	Lake	06311214	58	-	Yes
NewUSFS110	Lake	06110230	11	-	Yes
NewUSFS127	Lake	06111217	5	-	Yes
NewUSFS121	Lake	06111209	3	-	Yes
NewUSFS121	Lake	06111209	3	-	Yes
NewUSFS118	Lake	06111204	2	-	Yes
NewUSFS118	Lake	06111204	1	-	Yes
2019-S08	Lake	06310205	58	-	Yes
2019-L02	Lake	05707222	28	-	Yes
2019-S07	Lake	06310219	51	-	Yes
2019-S04	Lake	05707210	36	-	Yes
2019-S06	Lake	05909205	24	-	Yes
LC84	Lake	05608201	96	-	Yes
LC42	Lake	05511202	12	-	Yes
LC79	Lake	05710236	62	-	Yes
2019-S01	Lake	05411202	54	-	Yes
2019-S03	Lake	05707210	17	-	Yes
LC83	Lake	05807228	104	-	Yes
LC81	Lake	05609202	6	-	Yes
LC82	Lake	05807234	81	-	Yes
LC85	Lake	05708236	18	-	Yes
MNDNR40	Lake	05711224	79	-	Yes
LC80	Lake	05708204	79	-	Yes
USFS173	Lake	05811226	22	-	Yes

446	Lake	06211233	8	-	No
2020-S02	Lake	05806230	13	-	Yes
USFS197	Lake	05810207	3	-	Yes
1537	Lake	05707214	12	-	Yes
2020-S01	Lake	05806231	34	-	Yes
2020-S10	Lake	05806205	80	-	Yes
2020-S04	Lake	05806230	7	-	Yes
2020-S05	Lake	05806230	7	-	Yes
Ylatapa	Lake	05806208	20	-	Yes
2020 S06	Lake	05806220	28	-	Yes
1538	Lake	05707211	9	-	Yes
LC94	Lake	05806208	36	-	Yes
MNDNR42	Lake	05707221	8	-	Yes
2020-S03	Lake	05806230	10	-	Yes
MNDNR44	Lake	05707221	12	-	Yes
LC97	Lake	06311215	30	-	Yes
2020-S08	Lake	05806219	24	-	Yes
1536	Lake	05707214	3	-	Yes
USFS254	Lake	05610217	19	-	Yes
LC100	Lake	06311223	30	-	Yes
MNDNR41	Lake	05707221	29	-	Yes
MNDNR43	Lake	05707221	6	-	Yes
LC99	Lake	06311223	16	-	Yes
LC102	Lake	05707228	38	-	Yes
LC103	Lake	06011223	14	-	Yes
LC95	Lake	05806208	9	-	Yes
LC101	Lake	06311222	5	-	Yes
MNDNR48	Lake	05807226	22	-	Yes
MNDNR49	Lake	05807221	31	-	Yes
LC93	Lake	05807225	44	-	Yes
USFS255	Lake	05610217	62	-	Yes
USFS253	Lake	05610217	74	-	Yes
LC96	Lake	05806205	45	-	Yes
2020-S07	Lake	05806219	5	-	Yes
LC92	Lake	05707203	17	-	Yes
USFS227	Lake	05811225	4	-	Yes
TNC-DNR11	Lake	05708223	12	-	Yes
MNDNR51	Lake	05708223	80	-	Yes
TNR-DNR12	Lake	05708214	19	-	Yes
1320	Lake	05708214	10	-	Yes
MNDNR52	Lake	05711216	55	-	Yes
2020-S09	Lake	05806208	8	-	Yes
USFS258	Lake	05611231	40	-	Yes
USFS259	Lake	05611231	33	-	Yes
USFS261	Lake	05611219	44	-	Yes
900	Lake	05806207	13	-	Yes
LC89	Lake	05707221	14	-	Yes
LC98	Lake	06310219	20	-	Yes
1355	Lake	05708208	7	-	Yes
MNDNR51	Lake	05708207	58	-	Yes
MNDNR52	Lake	05708208	12	-	Yes
MNDNR53	Lake	05806201	9	-	Yes
LC101	Lake	05808224	37	-	Yes
1458	Lake	05808222	82	-	Yes
LC102	Lake	05808225	38	-	Yes
1546	Lake	05807218	40	-	Yes
END KC North	Lake	05808222	37	-	Yes
LC100	Lake	05808225	44	-	Yes

Tofte TSI 2	Lake	06108216	41	-	Yes
NewUSFS107	Lake	05810207	19	-	Yes
USFS106	Lake	05810206	43	-	Yes
USFS196	Lake	05810207	7	-	Yes
USFS208	Lake	05811225	17	-	Yes
USFS195	Lake	05810218	14	-	Yes
532	Lake	05810207	19	-	Yes
USFS207	Lake	05811225	9	-	Yes
LC39	Lake	05910224	39	-	Yes
USFS210	Lake	05810207	26	-	Yes
LC51	Lake	05910203	37	-	Yes
391	Lake	05810207	4	-	Yes
USFS225	Lake	05910213	44	-	Yes
USFS235	Lake	05811225	12	-	Yes
UAFS194	Lake	05810218	17	-	Yes
USFS209	Lake	05610230	7	-	Yes
LC59	Lake	05511218	58	-	Yes
LC61	Lake	05411229	2	-	Yes
904	Lake	05311204	5	-	Yes
LC63	Lake	05311205	2	-	Yes
LC64	Lake	05311205	2	-	Yes
LC66	Lake	05411231	4	-	Yes
LC65	Lake	05311206	1	-	Yes
LC67	Lake	05411233	33	-	Yes
LC68	Lake	05411232	7	-	Yes
LC69	Lake	05509218	25	-	Yes
1545	Lake	05311205	15	-	Yes
Beaver Hut North	Lake	06110230	39	-	Yes
Beaver Hut South	Lake	06110231	24	-	Yes
MNDNR37	Lake	05808219	19	-	Yes
MNDNR38	Lake	05808229	36	-	Yes
USFS245	Lake	06110232	16	-	Yes
USFS244	Lake	06110227	8	-	Yes
USFS242	Lake	06110222	13	-	Yes
USFS243	Lake	06110222	27	-	Yes
MNDNR39	Lake	05808226	43	-	Yes
Bill Lake 1	Lake	06106201	61	-	Yes
Bill Lake 2	Lake	06106201	16	-	Yes
Bill Lake 3	Lake	06106201	35	-	Yes
2019-S05	Lake	05806214	56	-	Yes
TNC-DNR9	St. Louis	05812216	19	-	Yes
SLC69	St. Louis	05812217	30	-	Yes
USFS192	St. Louis	05812235	38	-	Yes
SLC65	St. Louis	05812234	10	-	Yes
22	St. Louis	05812215	10	-	Yes
NewSLC59	St. Louis	05912231	28	-	Yes
NewSLC59	St. Louis	05912231	4	-	Yes
NewSLC59	St. Louis	05912231	3	-	Yes
USFS193	St. Louis	05812235	17	-	Yes
NewSLC59	St. Louis	05912231	1	-	Yes
452	St. Louis	05812217	26	-	Yes
NewSLC59	St. Louis	05912231	75	-	Yes
SLC73	St. Louis	05813224	24	-	Yes
SLC78	St. Louis	05812218	7	-	Yes
USFS199	St. Louis	05812234	40	-	Yes
SLC80	St. Louis	05812218	4	-	Yes
USFS200	St. Louis	05812235	24	-	Yes
SLC79	St. Louis	05812218	10	-	Yes

TNC-DNR9	St. Louis	05812216	12	-	Yes
TNC-DNR9	St. Louis	05812216	41	-	Yes
SLC77	St. Louis	05712202	17	-	Yes
USFS246	St. Louis	05812234	32	-	Yes
USFS220	St. Louis	05812215	23	-	Yes
TNC-DNR9	St. Louis	05812216	27	-	Yes
SLC83	St. Louis	05812235	6	-	Yes
SLC81	St. Louis	05812235	2	-	Yes
SLC84	St. Louis	05812235	11	-	Yes
USFS223	St. Louis	05812212	17	-	Yes
USFS114	St. Louis	05812221	58	-	Yes
USFS218	St. Louis	05812215	17	-	Yes
USFS204	St. Louis	06412230	10	-	Yes
USFS234	St. Louis	05812215	15	-	Yes
13	St. Louis	05812215	21	-	Yes
SLC70	St. Louis	05712215	13	-	Yes
SLC82	St. Louis	05812235	16	-	Yes
1054	St. Louis	05812234	19	-	Yes
USFS212	St. Louis	05813235	5	-	Yes
USFS216	St. Louis	05813235	20	-	Yes
USFS215	St. Louis	05813209	74	-	Yes
NewSLC50	St. Louis	05713202	56	-	Yes
USFS271	St. Louis	05912218	29	-	Yes
NewSLC53	St. Louis	05713202	71	-	Yes
NewSLC51	St. Louis	05713211	25	-	Yes
USFS267	St. Louis	05912207	29	-	Yes
USFS229	St. Louis	05813235	26	-	Yes
NewSLC58	St. Louis	05912230	70	-	Yes
USFS270	St. Louis	05912218	31	-	Yes
NewSLC52	St. Louis	05713202	24	-	Yes
USFS266	St. Louis	05913225	71	-	Yes
USFS268	St. Louis	05912207	6	-	Yes
USFS260	St. Louis	05612224	16	-	Yes
USFS115	St. Louis	05813224	74	-	Yes
MNDNR30	St. Louis	05813212	12	-	Yes
USFS269	St. Louis	05912218	34	-	Yes
USFS113	St. Louis	06213210	12	-	Yes
USFS228	St. Louis	05813236	47	-	Yes
SLC86	St. Louis	05813234	117	-	Yes
USFS143	St. Louis	06413226	29	-	Yes
USFS116	St. Louis	05813224	9	-	Yes
SLC61	St. Louis	05812217	10	-	Yes
USFS112	St. Louis	06213215	6	-	Yes
1157	St. Louis	06413226	29	-	Yes
SLC75	St. Louis	05812219	14	-	Yes
USFS111	St. Louis	06213215	13	-	Yes
MNDNR29	St. Louis	05813212	58	-	Yes
TNC-DNR15	St. Louis	05813236	91	-	Yes
SLC72	St. Louis	05712215	5	-	Yes
SLC74	St. Louis	05812219	12	-	Yes
SLC64	St. Louis	05812234	15	-	Yes
TNC-DNR14	St. Louis	05813213	24	-	Yes
SLC63	St. Louis	05812234	8	-	Yes
SLC68	St. Louis	05812234	25	-	Yes
SLC76	St. Louis	05813235	17	-	Yes
USFS183	St. Louis	05812235	37	-	Yes
TNC-DNR9	St. Louis	05812216	12	-	Yes
SLC71	St. Louis	05712215	6	-	Yes



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

Parcel Map
Minnesota Moose Habitat Collaborative - Phase III
(Data Generated From Parcel List)