

Main Request for Funding Form

**Lessard-Sams Outdoor Heritage Council
Fiscal Year 2013**

Program or Project Title: *MN DNR Accelerated Forest Wildlife Habitat Program*

Funds Requested: \$1,720,000

Manager's Name: *Cynthia Osmundson*

Organization: *MN DNR*

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City *St. Paul* **State** *MN* **Zip:** *55155*

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Organization Web Site: *mndnr.gov*

County Location:

Aitkin, Anoka, Beltrami, Carlton, Cass, Clearwater, Cook, County, Goodhue, Houston, Hubbard, Itasca, Koochiching, Lake, Le Sueur, Morrison, Redwood, Rice, St. Louis, Stearns, Wright,

Ecological Planning Regions: [to \]](#)

Northern Forest Forest/Prairie Transition Southeast Forest

Prairie Metro/Urban

Activity Type:

Protect - Fee Protect - Easement Protect - Other

Restore Enhance

Priority Resources addressed by activity:

Wetlands Forests Prairie Habitat

Project Abstract

This program of on-the-ground conservation projects will enhance and restore habitat in targeted forest communities on Minnesota's public forestlands. Our management will impact 18,950 ac at \$91/ac.

Project Narrative

Design and scope of work

Problem to be addressed:

Forests face a formidable array of challenges: fragmentation, invasive species, climate change, disease, and changes in forest-based economics and recreation. While Minnesota's 16.2 million ac of forest are diverse, the acreage and composition of forests have changed significantly. The forest acreage is about half of what it was (31.5 million ac) in the mid 1800s.

Just over half of the forestland in Minnesota is publicly owned; the State of Minnesota administers about 24%. Minnesota's forests help maintain the state's environmental and economic health. They are habitat for fish and wildlife, and a source of biodiversity, clean water, watershed protection, carbon sequestration, recreational opportunities, and many other benefits.

Urgency and opportunity:

Habitat loss and degradation are identified as the primary challenge facing wildlife. Almost one-third of the state's 292 Species in Greatest Conservation Need (SGCN) inhabit forests. The management objectives in this program parallel the forest management options outlined in Minnesota's State Wildlife Action Plan, Tomorrow's Habitat for the Wild and Rare (Tomorrow's Habitat Plan). Implementation of these objectives in key habitats identified in the Plan will maintain and enhance native forest communities supporting game and non-game wildlife populations. Tomorrow's Habitat Plan also calls for the purchase and protection of key habitats as another tool to address the conservation needs of these species.

Scope of our program:

The 33 projects in our program are targeted to a range of forest habitats:

- *Coniferous Forests/Lowlands*
- *Coniferous Forest/Upland*
- *Deciduous Forest/Lowland*
- *Deciduous Forest/Upland (Maple-Basswood)*
- *Deciduous Forest/Upland (Oak)*
- *Deciduous Forest/Upland (Aspen)*

We are targeting forest habitat that benefits a range of wildlife species. The table on the following pages describes the targeted habitats, lists representative wildlife species, and identifies Species of Greatest Conservation Need (SGCN) tied to these habitats.

How do these wildlife species benefit from the projects?

- *Creation/enhancement of thermal cover (ex. – moose, spruce grouse,*
- *Invigorating production of berries and masts (ex. – bear, bluejays),*
- *Shelter from predation (ex. – ruffed grouse, snowshoe hare),*
- *Retention of trees with cavities for rearing of young (ex. wooducks, pine marten),*
- *Creation/maintenance of lek dancing grounds (ex. – sharp-tailed grouse),*
- *Retention of key trees for roosting (ex. – barred owl, and*
- *Maintenance of treed riparian corridors (ex. – river otter).*

Targeted forest habitats, impacted wildlife species, management approach, and a representative project

HABITAT	HABITAT DESCRIPTION	WILDLIFE SPECIES (EXAMPLES)	WILDLIFE SPECIES OF GREATEST CONSERVATION NEED	MANAGEMENT APPROACH	REPRESENTATIVE PROJECT
CONIFEROUS FOREST/LOWLAND	Shallow basins and peat complexes; black spruce, tamarack, white cedar	<i>(coniferous forests)</i> Water shrew Northern myotis Snowshoe hare Least chipmunk Northern flying squirrel Porcupine Gray wolf Black bear	Connecticut warbler Boreal chickadees Rusty blackbirds Olive-sided flycatchers Butterflies disa alpin & Bog copper Northern bog lemmings	Mimic natural disturbance patterns to create small patches and other components, manage to retain biological legacies (ex – large snags and stumps) at the stand-level	Morph Meadows White Cedar Regeneration: plant white cedar as a stand component on five upland stands, to provide winter cover for deer in a major deer wintering area. (50 ac, \$23,000)
CONIFEROUS FOREST/UPLAND	Occur primarily on sites of coarse and/or shallow soils; dominant tree species are pine, spruce, balsam fir, and white cedar; shaped by occurrence of intense fires	Marten Fisher Wolverine Bobcat White-tailed deer Moose Ruffed grouse Wild turkey Great grey owl Boreal owl Ruby-thrted hummingbird Three-toed woodpecker Boreal chickadee Red crossbill Blue-spotted salamander Mink frog	Black-backed woodpeckers Spruce grouse Winter wrens Bay-breasted warblers Heather vole Smokey shrew	Mimic natural disturbance patterns to produce more larger patches; use fire (“let burn” approach or prescribed burning); increase the number of stands dominated by pines; manage to maintain biological legacies at the stand-level	Manitou Collaborative Patch Project: planting, protection & hand release to establish a large conifer dominated patch that will be managed to promote the characteristic, function and structure of an older growth stage upland conifer forest community. (122 ac, \$71,978)

<p>DECIDUOUS FOREST/LOWLAND</p>	<p>Found primarily on floodplains, river terraces, and shallow basins; species vary but often include: willow, cottonwood, river birch, green ash, swamp oak, alder</p>	<p><i>(deciduous forests)</i> Opossum Least shrew Hoary bat Gray & fox squirrel Beaver Grey & red fox Long-tailed weasel Mink River otter White-tailed deer Wood duck Cooper’s hawk American woodcock</p>	<p>Cerulean warblers Prothonotary warbler Red-shouldered hawk Eastern massasaugas (crayfish) <i>(in all types of deciduous upland)</i> Ovenbirds Least flycatchers black-throated blue warblers Northern goshawk Four-toed and red-backed salamanders</p>	<p>Mimic natural disturbance patterns, create more large patches, promote uneven aged stands to create small patches and other components, manage to retain biological legacies (ex – large snags and stumps) at the stand-level; control invasive species</p>	<p>Root River WMA Direct Seeding: Restore lowland hardwood forest stand by seeding a crop field with a mix of tree seeds, using direct seeding method. (20 ac, \$21,000)</p>
<p>DECIDUOUS FOREST/ UPLAND (MAPLE-BASSWOOD)</p>	<p>Occurs where soils retain water and wildfires are infrequent; noted for continuous, dense canopy; species are sugar maple, basswood, red oak, elm, bitternut hickory, hackberry; natural disturbance characterized by death of individual trees in the dense canopy; extent of this habitat has been greatly reduced</p>	<p>Great-horned owl Barred owl Red-headed woodpecker Wood turtle Spiny softshell Timber rattlesnake Tiger salamander Northern cricket frog</p>	<p>Acadian flycatchers Cerulean warblers Hooded warblers Red-shouldered hawks Woodland voles Wood thrushes <i>(in all types of deciduous upland)</i> Ovenbirds Least flycatchers black-throated blue warblers Northern goshawk Four-toed and red-backed</p>	<p>Manage to maintain and create large patches of maple-basswood forest, prevent loss due to development, manage to retain biological legacies at the stand-level; control the spread of invasive species, collaborate management across ownerships to increase patch size</p>	<p>Popple Lake WMA Buckthorn Control: use contractors to control buckthorn in order to improve three mesic hardwood stands. Method include cutting, herbicide treatment, and mechanical cut (ASV). (66 ac, \$114,000)</p>

			salamanders		
DECIDUOUS FOREST/ UPLAND (OAK)	Found on dry or relatively moist upland sites; uncommon in the northeast; regenerated by fire, species composition depends on moisture and nutrient regime, species may include: pin oak, bur oak, white oak, red oak, hazel, hickory, black cherry, aspen, bitternut; common history of grazing facilitated colonization by invasive species (esp. buckthorn)		Eastern hognose snake <i>(in all types of deciduous upland)</i> Ovenbirds Least flycatchers black-throated blue warblers Northern goshawk Four-toed and red-backed salamanders	Mimic natural disturbance patterns to guide rotation periods, encourage a pattern of larger patches, manage to retain biological legacies at the stand-level; control the spread of invasive species	Brainerd Area Oak Regeneration: previously harvested stands need management to re-establish oak. Actions include burning, site prep, and seeding. (100 ac, \$72,800)

<p>DECIDUOUS FOREST/ UPLAND (ASPEN)</p>	<p>characterized by a canopy dominated by aspen, these stands are the early stage of a wide variety of native plant communities in fire-dependent and mesic forest systems/mixed with birch, fir, basswood</p>		<p>American woodcock Boreal owls <i>(in all types of deciduous upland)</i> Ovenbirds Least flycatchers black-throated blue warblers Northern goshawk Four-toed and red-backed salamanders</p>	<p>Mimic natural disturbance regimes; manage to maintain biological legacies (such as conifer patches)</p>	<p>Lake County Woodcock Habitat Project: brush sites have matured beyond the point of usefulness to early successional wildlife species (woodcock, moose, ruffed grouse, etc.). Contract to remove the rank vegetation and encourage early young forest vegetation. (20 ac, \$5,000)</p>
<p>LOWLAND SHRUB</p>	<p>Occurs where water tables are high and shrubs dominate the plant growth; species depends to a large extent on acidity, species include: alder, willow, leatherleaf, birch, dogwood</p>	<p>Short-tailed shrew Little brown bat Least weasel Woodchuck Coyote Badger Eastern spotted skunk American bittern Upland sandpiper Sandhill crane Snapping turtle Common mudpuppy</p>	<p>Sharp-tailed grouse Golden-winged warbler Swamp sparrow</p>	<p>Protect lands from drainage and development, maintain large expanses of open lands (including wetlands) with few trees</p>	<p>Thief River Falls Brushland Management: mechanically treat up to 1,000 acres of rank or advanced brushlands and open landscape areas that have been invaded by woody species. Contract rotary mowing and shearing will be used. (1,000 ac, \$100,000)</p>

Actions planned:

DNR staff will administer the program, engage contractors or CCM to conduct field work, utilize DNR crews for specific SNA projects, and supervise activities in the field to assure effectiveness. Over 72% of requested funds are for contracting with private vendors or CCM. Treatment costs per acre are approximately \$91.

Restoration and enhancement activities on 18,950 ac of forestland include:

- *prescribed burning;*
- *mowing or shearing of woody vegetation;*
- *planting, seeding or encouraging natural regeneration;*
- *selective cutting and thinning;and*
- *herbicide & other invasive species treatments.*

These projects are not conducted as part of the DNR's commercial timber operations. Projects included in this program are beyond what we are currently able to accomplish.

With few exceptions, forest stand improvements will be implemented on state administered lands, (WMAs, SNAs, and State Forests). The exceptions are a small number of projects that cross ownership boundaries with other public lands owners (County Tax Forfeit Lands, County Forests, and U.S. Forest Service National Forests).

Implementation of the projects will be greatly facilitated by the availability of limited personnel. The funding requests includes a Project Manager (0.5 FTE), whose duties include managing fund allocation between projects, administering contracts, monitoring sited treatment/manipulation, and tracking accomplishments. This Project Manager will work with the projects on WMAs, State Forests, and other public lands. The SNA Program has unique needs and as such has included a request to fund a Project Manager (0.03 FTE) and field staff (.4 FTE) to conduct and supervise on-site management.

Setting of priorities:

Subsection forest resource management plans (SFRMP) are vegetation management plans for forest lands administered by the Division of Forestry and Section of Wildlife. Ecological Classification System (ECS) subsections, not administrative boundaries, are the basic units of delineation. The focus of these plans is identifying long-term desired future forest composition goals within a subsection. Accomplishing SFRMP goals is the primary priority used by Regional and Area DNR staff selecting and ranking forest projects for inclusion in this program.

Site selection and scoring process:

Projects were submitted by regional and area staff in DNR Divisions of Fish and Wildlife, Forestry, and Ecological & Water Resources, from the DNR Regions. Interdisciplinary DNR teams screened and ranked projects that were then forwarded for inclusion in this proposal.

Stakeholder involvement:

The SFRMP process, the source for our proposal goals, includes a fairly extensive stakeholder input process. We are not aware of stakeholder opposition to work included in this proposal. In addition, the SNA Program gains advice from the Commissioner’s Advisory Committee and volunteer site stewards.

Project flexibility:

Program managers may add, delete, and substitute projects on this parcel list based upon need, readiness, cost, opportunity, and/or urgency so long as the substitute parcel/project forwards the constitutional objectives of this program in the Project Scope table of this accomplishment plan. The final accomplishment plan report will include the final project parcel list.

Planning

“The mission of the Outdoor Heritage Fund, as specified in the state Constitution, is to protect, restore, and enhance wetlands, prairies, forests and habitat for fish, game and wildlife.”

(criteria of special emphasis in our proposal are underlined.)

Statewide Priority Criteria

1. *Are ongoing, successful, transparent and accountable programs addressing actions and targets of one or more of the ecological sections.*
2. *Produce multiple enduring conservation benefits.*
3. *Are able to leverage effort and/or other funds to supplement any OHF appropriation.*
4. *Allow public access. This comes into play when all other things about the request are approximately equal.*
5. *Address conservation opportunities that will be lost if not immediately acted on.*
6. *Restore or enhance habitat on state-owned WMAs, AMAs, SNAs, and state forests.*
7. *Use a science-based strategic planning and evaluation model to guide protection, restoration and enhancement, similar to the United States Fish and Wildlife Service’s Strategic Habitat Conservation model.*
8. *Address wildlife species of greatest conservation need, Minnesota County Biological Survey data, and rare, threatened and endangered species inventories in land and water decisions, as well as permanent solutions to aquatic invasive species.*
9. *Provide Minnesotans with greater public access to outdoor environments with hunting, fishing and other outdoor recreation opportunities.*
10. *Ensures activities for “protecting, restoring and enhancing” are coordinated among agencies, non profits and others while doing this important work.*
11. *Target unique Minnesota landscapes that have historical value to fish and wildlife.*

Priority Actions for the Northern Forest Section

1. *Protect shoreland and watersheds to restore or enhance critical habitat on wild rice lakes, shallow lakes, cold water lakes, streams and rivers, and spawning areas.*
2. *Provide access to manage habitat on landlocked public properties or protect forest land from parcelization and fragmentation through fee acquisition, conservation or access easement.*
3. *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.*
4. *Restore forest-based wildlife habitat that has experienced substantial decline in aerial extent in recent decades.*

Priority Actions for Forest/Prairie Transition Section

1. *Protect, enhance and restore wild rice wetlands, shallow lakes, wetland/grassland complexes, aspen parklands, and shoreland that provide critical habitat for game and non-game wildlife.*
2. *Protect, enhance and restore rare native remnant prairie.*
3. *Protect, enhance and restore migratory habitat for waterfowl and related species, so as to increase migratory and breeding success.*

Priority Action for Metropolitan Urbanizing Area

1. *Protect, enhance and restore remnant native prairie, Big Woods forests and oak savanna with an emphasis on areas with high biological diversity.*
2. *Protect habitat corridors, with emphasis on the Minnesota, Mississippi and St. Croix rivers (bluff to floodplain.)*
3. *Enhance and restore coldwater fisheries systems.*
4. *Protect, enhance and restore riparian and littoral habitats on lakes to benefit game and non-game fish species.*

Priority Actions for Southeast Forest Section

1. *Protect forest habitat through acquisition in fee or easement, to prevent parcelization and fragmentation*
2. *Protect, enhance and restore habitat for fish, game and non-game wildlife in rivers, cold water streams and associated upland habitat.*
3. *Protect, enhance and restore remnant goat prairies.*
4. *Restore forest-based wildlife habitat that has experienced substantial decline in aerial extent in recent decades.*

Priority Actions for the Prairie Section

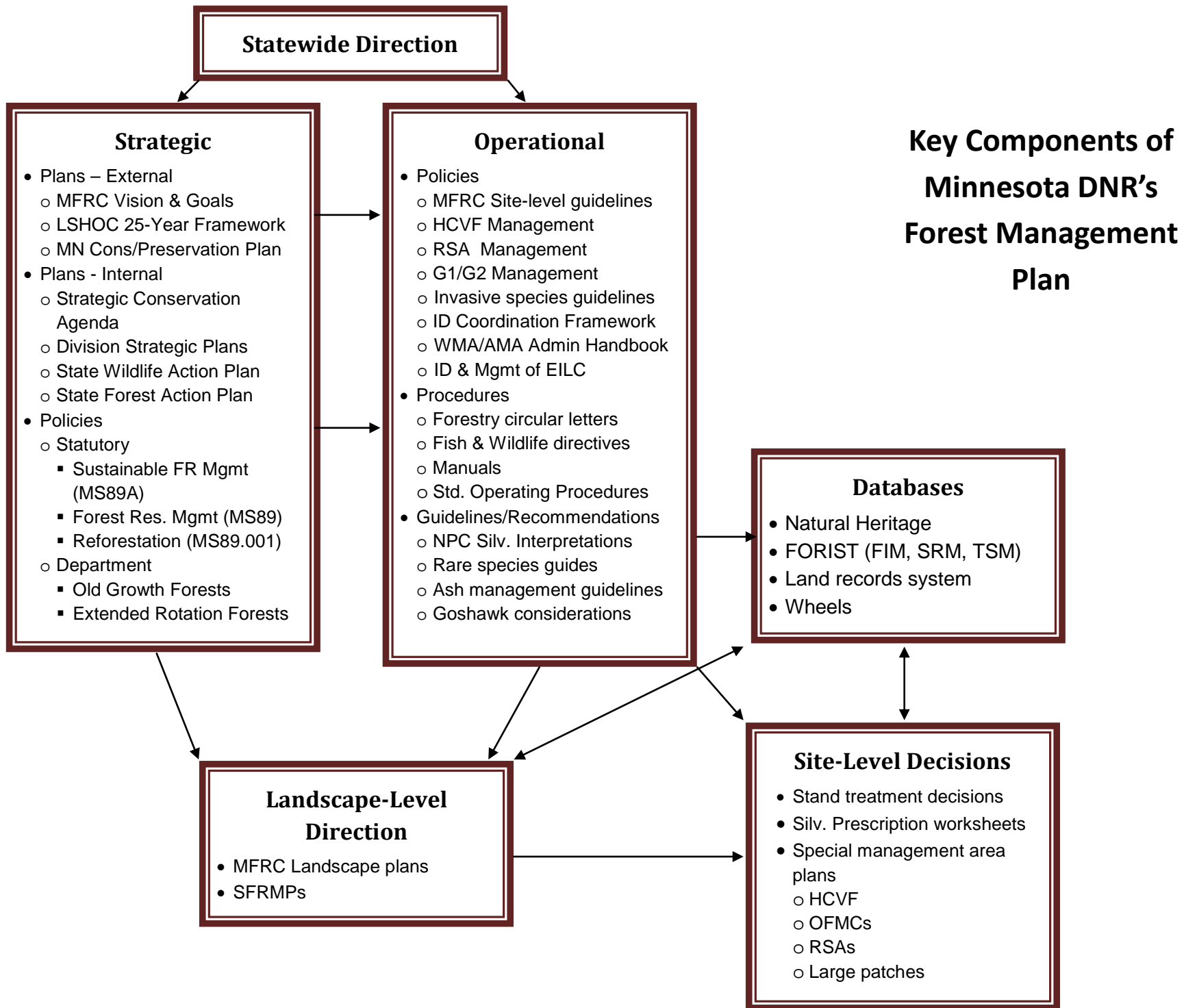
1. *Protect, enhance, or restore existing wetland/upland complexes, or convert agricultural lands to new wetland/upland habitat complexes.*

2. *Protect, enhance and restore remnant native prairie, Big Woods forests and oak savanna.*
3. *Convert agricultural land to wetland/upland to protect, enhance, or restore existing habitat complexes, such as existing WMA's.*
4. *Restore or enhance habitat on public lands.*
5. *Protect, restore and enhance shallow lakes.*
6. *Protect expiring Conservations Reserve Program (CRP) lands.*
7. *Protect, enhance and restore migratory habitat for waterfowl and related species, so as to increase migratory and breeding success.*

Landscape and Site-level Direction:

Direction for forest management comes from various sources (see the chart on following page). Several guidance documents are applicable across multiple landownerships (MN Forest Resources Council Vision and Goals, LSOHC 25 year Framework, MN Statewide Conservation and Preservation Plan). Other documents provide a landscape-scale perspective but apply only to state-administered lands (Subsection Forest Resources Management Plans, Strategic Conservation Agenda, etc.). Many additional policies, guidelines, and recommendations for best management practices are followed by DNR and similar land management organizations (Site-level Guidelines, Rare Species Guide, etc.).

As a result of the significant body of work to guide both landscape-scale and site-level forest management, managers have made great strides in the proficiency and effectiveness of managing forests for desired outcomes.



The **Minnesota Statewide Conservation and Preservation Plan** identifies habitat loss and degradation as the number one driver of change for wildlife in Minnesota. The Plan addresses key issues of land and habitat fragmentation, degradation, loss and conversion, and land use practices. Recommended key strategies to positively impact habitat include: integrated planning, land and water restoration and protection, and sustainable practices. **Our program addresses these key issues and incorporates many of the key strategies.**

The State Wildlife **Actions Plan, Tomorrow's Habitat for the Wild & Rare**, calls for focused efforts to address the conservation needs of rare game and nongame wildlife species. Habitat loss and degradation are identified as the primary challenge facing wildlife. Almost one-third of the state's 292 Species in Greatest Conservation Need (SGCN) inhabit forests. The management objectives in our program parallel the forest management options outlined in Tomorrow's Habitat Plan. Implementation of these objective in key habitats identified in the Plan will maintain and enhance native forest communities supporting game and non-game wildlife populations. Tomorrow's Habitat Plan also calls for the purchase and protection of key habitats as another tool to address the conservation needs of these species.

Our program makes significant progress towards accomplishing goals of the multiple DNR landscape level forest management plans (Subsection Forest Resources Management Plans) ([://www.dnr.state.mn.us/forestry/subsection/index.html](http://www.dnr.state.mn.us/forestry/subsection/index.html))

Our program directly achieves the **DNR's Strategic Conservation Agenda 2009-2013** indicators and targets under Integrated Public & Private Land Management.

Appendix J (Sensitive Native Plant Communities) of The MN Forest Resources Council's **Voluntary Site-Level Forest Management Guidelines for Landowners, Loggers, and Resource Managers** lists Sensitive Native Plant Communities. Our program works in at least 12 of the 40 listed communities.

Our program implements the goals of the **DNR A Vision for Wildlife and Its Use - Goals and Outcomes, 2006-2012** (FAW core functions, MN Statute 84.941): wildlife resource goals, population and habitat strategies, brushlands and prescribed burning, Ecological Subsection regional challenges. In addition, it restores and enhances biodiversity significance areas whose protection helps fulfill the goals of the **SNA Long Range Plan**.

Our program meets the goals of several MN Forest Resources Council landscape plans ([://www.frc.state.mn.us/Landscap/Landscape.html](http://www.frc.state.mn.us/Landscap/Landscape.html)).

Science based - This program builds on the best available science from the fields of wildlife management, ecological silviculture, and systems restoration. Success has been demonstrated through decades of sound wildlife and land management by DNR. Our program is one of several that implement the DNR's Subsection Forest Resource Management Plans (SFRMPs). These are long-term (50 plus years) plans with short-term (10 years) vegetation management directions. SFRMPs are based on scientific principles inherent in the Ecological Classification System. The Plans articulate the mix of ecological and social values and economic products that will be sustained through forest management. A small percentage of projects in our

program are geographically outside the range of an SFRMP (including several SNA projects). . In these instances, management is consistent with the sustainability principles evident in the SFRMPs.

DNR's ecologically-based silviculture approach to forest management uses native plant community information to prescribe and support stand-level management. As a result, stand-level treatments take into account natural disturbance regimes, stand dynamics, growth stages, tree behaviors, and seasonal operability.

Relationship to Other Constitutional Funds

We believe the work being proposed is most appropriate for Outdoor Heritage funding rather than other Constitutional funding. However, DNR will consult and coordinate with other partners that receive constitutional funding to ensure all funding sources complement each other and provide the greatest natural resource outcomes.

Relationship to Current Organizational Budget

Expenditures in Fiscal Year 2010, not including Bonding funds

DNR total - \$456 million

Division of Ecological and Water Resources total - \$74.6 million

Division of Fish and Wildlife total - \$90.3 million

Division of Forestry total - \$83.2 million

Our program - \$1.7 mil

Sustainability and Maintenance

Area land managers will monitor project sites and take any necessary actions to sustain the habitat improvements as part of their public land management responsibilities. Maintenance work will be carried out by existing staff, MCC crews, temporary project staffing or through vendor contracting. Periodic enhancements (beyond routine management) will be funded through annual funding requests from a variety of funding sources, including Game and Fish Fund, Bonding, Gifts, Federal Sources, Environmental Trust, and Outdoor Heritage Fund.

Outcomes

The habitat characteristics in 6 targeted forest types are enhanced for hundreds of species. Habitat availability is increased and quality is improved. Nearly 19,000 acres are impacted across the 6 forest types. Ecological services provided by the forest landscape is no doubt

enhanced. Some work takes place in all LSOHC Sections, making this truly a statewide undertaking.

Activity Type Detail

Fee Acquisition Projects

Will local government approval be sought prior to acquisition?

Yes No, please explain not applicable

If no, please explain here:

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

Yes No, please explain not applicable

If no, please explain here:

Easement Acquisition Projects

Will the eased land be open for public use?

Yes No, please explain not applicable

If no, please explain here:

Will the conservation easement be permanent?

Yes No, please explain not applicable

If no, please explain here:

Restoration and Enhancement Projects

Is the activity on permanently protected land and/or public waters?

Yes No, please explain not applicable

If no, please explain here:

Does the activity take place on an Aquatic Management Area (AMA), Scientific and Natural Area (SNA), Wildlife Management Area (WMA), or State Forests?

Yes, which ones

No, please explain

not applicable

If so, please indicate which ones:

Avon Hills SNA
Boot Lake SNA
Cedar Mountain SNA
Chamberlain Woods SNA
Hemlock Ravine SNA
Lost 40 SNA
Prairie Creek Woods SNA

Burleene WMA
BenLacs WMA
Rice-Skunk WMA
Popple Lake WMA
Grey Eagle WMA
Sponsa WMA
Ereaux WMA
Coon Lake Marsh WMA
McDougall WMA
Oak Ridge WMA
Elgin Woods WMA
Michaelson WMA
Sartell WMA
Carter WMA
Le Blanc WMA
Mosquito Creek WMA
Woodrow Pediocetes WMA
Corinna WMA
Happy Valley WMA
Pelican Lake WMA
Suconnix WMA
Tamarac WMA
Morph Meadows WMA

Mud Goose WMA
Big Rice WMA
Mud Goose WMA
Dry Sand WMA
Crow Wing Chain WMA
Mud Lake WMA
Popple Lake WMA
Red Lake WMA
Root River WMA
Upper Rice WMA
Shooks Slough WMA
James B. Fern WMA
Mosquito Creek WMA
Henry O. Bjoring WMA
Old Red Lake Trail WMA
Woodrow Pediocetes WMA
Wolf Trail WMA

Badoura State Forest
Bowstring State Forest
George Washington State Forest
Big Fork State Forests
Grand Portage State Forest
Kabetogama State Forest
Pine Island State Forest
*Collishan Bottoms Unit, Richard J. Dorer
State Forest*

Lake County
Manitou Unit (mixed public ownership)

Past Outdoor Heritage Fund Appropriations Received for this program

ML 2009	ML 2010	ML 2011
\$	\$1,791,000	\$826,000

Accomplishment Timeline

Activity	Milestone	Date
<i>Forest stand improvement site</i>	<i>5,000 ac</i>	<i>6/30/2013</i>
<i>preparation (such as weed removal, fire breaks, soil preparation, etc.)</i>	<i>5,000 ac</i>	<i>6/30/2014</i>
	<i>500 ac</i>	<i>6/30/2015</i>
	<i>500 ac</i>	<i>6/30/2016</i>
<i>Forest stand treatment/implementation (such as planting, burning, shearing, thinning, etc.)</i>	<i>1,500 ac</i>	<i>6/30/2013</i>
	<i>5,500 ac</i>	<i>6/30/2014</i>
	<i>1,000 ac</i>	<i>6/30/2015</i>
	<i>1,000 ac</i>	<i>6/30/2016</i>
<i>Forest stand Post-treatment (evaluation, release, browse protection, etc.)</i>	<i>0</i>	<i>6/30/2013</i>
	<i>2,000 ac</i>	<i>6/30/2014</i>
	<i>5,000 ac</i>	<i>6/30/2015</i>
	<i>2,000 ac</i>	<i>6/30/2016</i>

Attachments:

- A. Budget**
- B. Proposed Output Tables 1-5**
- C. Parcel List**

Attachment A. Budget Spreadsheet

Name of Proposal:	MN DNR Accelerated Forest Wildlife Habitat Program
Date:	1-Jul-11

[Link HERE to definitions of the budget items below.](#)

Total Amount of Request \$ 1,720,000 *From page 1 on the funding form.*

Personnel

Position breakdown here	FTE	Over # of years	LSOHC Request	Anticipated Cash		Total
				Leverage	Cash Leverage Source	
<i>Project Manager</i>	0.5	4	\$ 116,000			\$ 116,000
<i>SNA Project Manager</i>	0.03	3	\$ 7,200			\$ 7,200
<i>SNA Field Staff (spec-tech-labor)</i>	0.4	3	\$ 63,450			\$ 63,450
						\$ -
						\$ -
						\$ -
Total	0.93		\$ 186,650	\$ -	\$ -	\$ 186,650

Budget and Cash Leverage *(All your LSOHC Request Funds must be direct to and necessary for program outcomes.)*

Please describe how you intend to spend the requested funds.

Budget Item	LSOHC Request	Anticipated Cash		Total
		Leverage	Cash Leverage Source	
Personnel - auto entered from above	\$ 186,650	\$ -	\$ -	\$ 186,650
Contracts	\$ 1,239,252			\$ 1,239,252
Fee Acquisition w/ PILT (breakout in table 7)				\$ -
Fee Acquisition w/o PILT (breakout in table 7)				\$ -
Easement Acquisition				\$ -
Easement Stewardship				\$ -
Travel (in-state)	\$ 89,700			\$ 89,700
Professional Services				\$ -
Direct Support Services	\$ 28,456			\$ 28,456
DNR Land Acquisition Costs (\$3,500 per acquisition)				\$ -
Other				\$ 175,942
Capital Equipment <i>(auto entered from below)</i>	\$ -	\$ -		\$ -
Other Equipment/Tools	\$ 11,222			\$ 11,222
Supplies/Materials	\$ 164,720			\$ 164,720
	\$ 1,720,000	\$ -	\$ -	\$ 1,720,000

Capital Equipment *(single items over \$10,000 - auto entered into table above)*

Item Name	LSOHC Request	Leverage
<i>Item 2 enter here</i>		
<i>Item 3 enter here</i>		
<i>Item 4 enter here</i>		
<i>Item 5 enter here</i>		
<i>Item 6 enter here</i>		
<i>Item 7 enter here</i>		
<i>Item 8 enter here</i>		
Total	-	-

Attachment B. Output Tables

Name of Proposal:	MN DNR Accelerated Forest Wildlife Habitat Program
Date:	1-Jul-11

Table 1 and Table 3 column totals should be the same AND Table 2 and Table 4 column totals should be the same

If your project has lakes or shoreline miles instead of land acres, convert miles to acres for Tables 1 and 3 using the following conversion:

Lakeshore = 6 acres per lakeshore mile / Stream & River Shore = 12 acres per linear mile, if both sides

Table 1. Acres by Resource Type

Describe the scope of the project in acres (use conversion above if needed)

	Wetlands	Prairies	Forest	Habitats	Total
Restore			52		52
Protect Fee					0
Protect Easement					0
Protect Other					0
Enhance			18898		18898
Total	0	0	18950	0	

Total Acres (sum of Total column)
Total Acres (sum of Total row)

18950
18950 *These two cells should be the same figure.*

Table 2. Total Requested Funding by Resource Type

	Wetlands	Prairies	Forest	Habitats	Total
Restore		\$ 109,550			\$ 109,550
Protect Fee					\$ -
Protect Easement					\$ -
Protect Other					\$ -
Enhance		\$ 1,610,450			\$ 1,610,450
Total	\$ -	\$ 1,720,000	\$ -	\$ -	

Total Dollars (sum of Total column)
Total Dollars (sum of Total row)
Check to make sure this amount is the same as the Funding Request Amount on page 1 of Main Funding Form.

\$ 1,720,000
\$ 1,720,000 *These two cells should be the same figure.*

Table 3. Acres within each Ecological Section

	Metro/Urban	Forest/Prairie	SE Forest	Prairie	Northern Forest	Total
Restore	44					44
Protect Fee						0
Protect Easement						0
Protect Other						0
Enhance	260	574	67	375	17630	18906
Total	304	574	67	375	17630	

Total Acres (sum of Total column)
Total Acres (sum of Total row)
Total Acres from Table 1.

18950
18950
18950 *These three cells should be the same figure.*

Attachment B. Output Tables

Table 4. Total Requested Funding within each Ecological Section

	Metro/Urban	Forest/Prairie	SE Forest	Prairie	Northern Forest	Total
Restore	\$ 83,650					\$ 83,650
Protect Fee						\$ -
Protect Easement						\$ -
Protect Other						\$ -
Enhance	\$ 70,300	\$ 236,200	\$ 57,565	\$ 99,450	\$ 1,172,835	\$ 1,636,350
Total	\$ 153,950	\$ 236,200	\$ 57,565	\$ 99,450	\$ 1,172,835	

Total Dollars (sum of Total column) \$ 1,720,000 *These two cells should be the same figure.*
 Total Dollars (sum of Total row) \$ 1,720,000
 Check to make sure these amounts are the same as the Funding Request Amount on page 1 of Main Funding Form.

Table 5. Target Lake/Stream/River Miles

miles of Lakes / Streams / Rivers Shoreline

Table 6. Acquisition by PILT Status (enter information in acres)

	Wetlands	Prairies	Forests	Habitats	Total
Acquired in Fee with State PILT Liability					0
Acquired in Fee w/o State PILT Liability					0
Permanent Easement <i>PILT Liability</i> <i>NO State</i>					0
	0	0	0	0	

Table 7. Estimated Value of Land Acquisition by PILT Status (enter information in dollars)

	Wetlands	Prairies	Forests	Habitats	Total	
Acquired in Fee with State PILT Liability					\$ -	\$ -
Acquired in Fee w/o State PILT Liability					\$ -	\$ -
Permanent Easement <i>PILT Liability</i> <i>NO State</i>					\$ -	\$ -
	\$ -	\$ -	\$ -	\$ -		

FYI: should match total in budget table that is auto entered below

Attachment C. Parcel List

Name of Proposal: MN DNR FY13 Accelerated Forest Wildlife Habitat Program

Date: 1-Jul-11

REVISED JUL 22 (first three rows are additions)

Parcel Name	County	Township (25-258)	Range (01-51)	Direction most parcels are 2 with the exception of some areas of Cook County which is 1	Section (01 thru 36)	TRDS	# of acres	Budgetary Estimate (includes administrative, restoration or other related costs and do not include matching money contributed or earned by the transaction)	Description	Activity PF=Protect Fee PE=Protect Easement PO=Protect Other R=Restore E=Enhance	If Easement, what is the easement cost as a % of the fee acquisition?	Any existing protection? (yes/no)	Open to hunting and fishing? (yes/no)
OHF FY13 Nemadji Oak and Conifer Hand Release	Carlton	T46N	R16W	2	S26	T46N R16W S26	1,420	\$41,000	We will use Conservation Corps Minnesota (CCM) and possibly private contractors to remove competing vegetation by hand release from red oak, white pine, and white spruce seedlings and saplings. The oak is mostly natural regeneration and comprises the bulk of the work, but a few stands also have planted white pine and/or white spruce. The competing vegetation is mostly aspen and some maple. The aspen and maple are very common and tend to crowd out the slower growing oak and conifer without intermediate treatments. The release work will be targeted at stands 5 to 10 years post timber harvest. This gives the oak and conifer time to get established.	E		Yes	Yes
OHF FY13 Lake County Upland Aerial Seeding	Lake	T59N	R7W	2	S9	T59NR7WS9	1,350	\$81,100	Since sites to be seeded are generally timber sales with a window of 3 years for harvest to occur, more than 450 acres may be seeded in one year & fewer than 450 acres in another year. Species to be aerially seeded include white pine, white spruce, jack pine, red pine, black spruce, tamarack, & some white cedar. White cedar is difficult seed for this application method. The costs include up to \$10.00 per acre for the helicopter time & up to \$170.00 per acre for the seed. Species mixtures will be on appropriate upland sites in Lake, Cook, & eastern St.Louis County.	E		Yes	Yes

Attachment C. Parcel List

OHF FY13 LSOHC - TSI work	St. Louis	T68N	R20W	2	S9	T68N R20W S9	52	\$4,680	Using a motorized brush saw, to cut deciduous species competing with conifers to aid the conifers to become a dominant or codominant tree to provide winter and nesting cover for both game and non-game species. The outcome should be mixed stands of conifer and deciduous trees with some reserve areas, reserved specific species (ie Oak, White Pine, aspen, balsam). Site specific Wildlife habitat concerns will be addressed on a site by site basis. SFRMP goals: Increasing all upland conifer forest composition and decreasing Aspen composition. NPC: MHn44, FDn43 and FDn33	E		Yes	Yes
OHF FY13 Nemadji Oak and Conifer Hand Release	Carlton	T46N	R16W	2	S26	T46N R16W S26	1,420	\$41,000	We will use Conservation Corps Minnesota (CCM) and possibly private contractors to remove competing vegetation by hand release from red oak, white pine, and white spruce seedlings and saplings. The oak is mostly natural regeneration and comprises the bulk of the work, but a few stands also have planted white pine and/or white spruce. The competing vegetation is mostly aspen and some maple. The aspen and maple are very common and tend to crowd out the slower growing oak and conifer without intermediate treatments. The release work will be targeted at stands 5 to 10 years post timber harvest. This gives the oak and conifer time to get established.	E		Yes	Yes

Attachment C. Parcel List

OHF FY13 Lake County Upland Aerial Seeding	Lake	T59N	R7W	2	S9	T59NR7WS9	1,350	\$81,100	Since sites to be seeded are generally timber sales with a window of 3 years for harvest to occur, more than 450 acres may be seeded in one year & fewer than 450 acres in another year. Species to be aerially seeded include white pine, white spruce, jack pine, red pine, black spruce, tamarack, & some white cedar. White cedar is difficult seed for this application method. The costs include up to \$10.00 per acre for the helicopter time & up to \$170.00 per acre for the seed. Species mixtures will be on appropriate upland sites in Lake, Cook, & eastern St.Louis County.	E		Yes	Yes
OHF FY13 LSOHC - TSI work	St. Louis	T68N	R20W	2	S9	T68N R20W S9	52	\$4,680	Using a motorized brush saw, to cut deciduous species competing with conifers to aid the conifers to become a dominant or codominant tree to provide winter and nesting cover for both game and non-game species. The outcome should be mixed stands of conifer and deciduous trees with some reserve areas, reserved specific species (ie Oak, White Pine, aspen, balsam). Site specific Wildlife habitat concerns will be addressed on a site by site basis. SFRMP goals: Increasing all upland conifer forest composition and decreasing Aspen composition. NPC: MHn44, FDn43 and FDn33	E		Yes	Yes
OHF 2013 Boot Lake SNA Forest Reconstruction	Anoka	T33N	R22W	2	S19	T33N R22W S19	44	\$83,650	Restoration of oak-red maple-white pine woodland (from locally collected seed) on old farm fields to increase wildlife habitat & forest diversity on this MCBS outstanding biodiversity significance site. Wildlife benefited includes deer, fox, mink, bald eagle, mourning dove, woodduck, & rare-SGCN songbirds (e.g. pine warbler & ovenbird). Includes local seed collection, nursery seed propagation & direct seeding, site preparation, weed & herbivore control.	R		Yes	No

Attachment C. Parcel List

OHF 2013 Avon Hills SNA Forest Reconstruction	Stearns	T125N	R30W	2	S18	T125N R30W S18	8	\$25,900	Restoration of red oak-basswood forest (from locally collected seed) on old farm fields to improve wildlife habitat, archery deer hunting, & forest diversity on this MCBS high biodiversity significance site. Wildlife benefited includes deer, fox, mink, grouse, & rare-SGCN songbirds (e.g. eastern phoebe, red-eyed vireo, & Nashville wabrber). Includes local seed collection, nursery seed propogation & direct seeding, site preparation, weed & herbivore control.	R		Yes	Yes
OHF 2013 Lost 40 SNA Rx Burn	Itasca	T150N	R27W	2	S34	T150N R27W S34	135	\$19,000	Prescribed burning of red pine-white pine woodland to increase wildlife habitat, all forms of hunting, & forest diversity on this designated old growth site. Wildlife benefited includes bear, deer woodcock, ruffed grouse, fox, mink, grouse, & rare-SGCN songbirds (e.g. black-throated green warbler, least flycatcher, & veery). This project is a second phase of reintroducing fire to the old-growth portion of the Lost 40 SNA and adjacent USFS land.	E		Yes	Yes
OHF 2013 Hemlock Ravine SNA Forest Regeneration	Carlton	T48N	R16W	2	S3	T48N R16W S3	50	\$32,000	Regeneration of Minnesota's largest population of the rare eastern hemlock to improve wildlife habitat, archery deer hunting, & forest diversity on this MCBS outstanding biodiversity site. Wildlife benefited includes ruffed grouse, bear, deer woodcock, ruffed grouse, fox, mink, grouse, & rare-SGCN songbirds (e.g. black & white warbler, black-throated green warbler, & ovenbird). Hemlock-mixed hardwood forest regeneration will be achieved through construction of additional exclosures necessary to protect seedlings from deer & hare browse.	Enhancement		Yes	Yes

Attachment C. Parcel List

OHF 2013 Chamberlain Woods SNA Invasive Treatment & Rx Burn	Le Sueur	T111N	R26W	2	S22	T111N R26W S22	215	\$16,150	Enhancement of pin oak-bur oak woodland & flood plain forest to increase wildlife habitat & forest diversity on this MCBS high biodiversity significance site. Wildlife benefited includes deer, fox, mink, woodduck, turkey & rare-SGCN songbirds (e.g. American redstart & eastern bluebird). Includes invasive woody vegetation treatment in the floodplain forest & invasive woody vegetation treatment & prescribed burn in the oak forest.	E		Yes	No
OHF 2013 Prairie Creek Woods SNA Invasives Treatment	Rice	T110N	R19W	2	S34	T110N R19W S3	80	\$38,600	Enhancement of sugar maple-basswood-bitternut hickory forest to improve wildlife habitat, deer hunting, & forest diversity on this MCBS outstanding biodiversity significance site. Wildlife benefited includes deer, mink, turkey & rare-SGCN songbirds (e.g. eastern wood peewee, eastern phoebe & rose-breasted grosbeak). Includes cutting of boxelders to release oak and other native species & expanded removal of invasive garlic mustard.	E		Yes	Yes
OHF 2013 Cedar Mountain SNA Woodland Invasives Treatment & Rx Burn	Redwood	T112N	R34W	2	S14	T112N R34W S14	80	\$44,700	Enhancement of bur oak-basswood forest to improve wildlife habitat, deer archery hunting, & forest diversity on this MCBS outstanding biodiversity significance site. Wildlife benefited includes deer, fox, mink, pheasants, rare-SGCN songbirds (e.g. red-eyed vireo, eastern wood peewee, & rose-breasted grosbeak). Includes removal & treatment of invasive species & reintroduction of fire to parts of this forest community.	E		Yes	Yes
OHF Ash River Ski Trail Conifer Enhancement	St. Louis	T68N	R20W	2	S15	T68N R20W S15	72	\$19,000	Following Border Lakes SFRMP and NPC guidance, white spruce will be planted in areas recently harvested for timber to establish a conifer component within the regenerating stands. Conifers will be planted at a lower density than what is usually practiced.	E		Yes	Yes

Attachment C. Parcel List

OHF East Camp 90 Conifer Enhancement	St. Louis	T68N	R20W	2	S32	T68N R20W S32	40	\$5,200	This project will involve hand-releasing white spruce seedling planted within a regenerating aspen stand. The Division of Fish and Wildlife has previously invested funds in prepping this site for planting via roller-chopping. This project will result in more conifer.	E		Yes	Yes
OHF Mixed Conifer/Hardwood Enhancement	Koochiching	T152N	R26W	2	S36	T152N R26W S36	20	\$9,450	A two-aged regen harvest was completed winter 2010/2011 in 2 stands in close proximity. Timber harvested was spruce, balsam fir, and paper birch. Aspen overstory was reserved to reduce natural aspen regeneration, which would compete with desired conifers.	E		Yes	Yes
OHF Boreal Mixed Forest Restoration	Cook	T61N	R2W	2	S17	T61R2S17	450	\$51,500	This project will restore the boreal mixed forest to provide habitat for boreal species including moose and pine marten. A variety of techniques will be used to establish a mix of conifers and deciduous overstory to provide thermal cover for moose.	E		Yes	Yes
OHF 2013 Sauk Rapids Area Wide WMA Buckthorn Removal	Wright	T120N	R26W	2	S33	T120NR26WS33	260	\$66,000	Remove and treat buckthorn on 5 Sauk Rapids Area Wildlife WMAs (listed) using contractors within forested habitat type.	E		Yes	Yes
OHF 2013 Manitou Collaborative Patch Project	Lake	T59N	R7W	2	S36	T59N R7W S36	122	\$71,978	Planting, protection & hand release to establish a large conifer dominated patch that will be managed to promote the characteristics, function and structure of an older growth stage upland conifer forest community.	E		Yes	Yes
OHF 2013 Popple Lake WMA Buckthorn Control	Morrison	T40N	R32W	2	S15	T40N R32W S15	44	\$117,917	Popple Lake WMA was inventoried in May and June 2010 and found to contain significant buckthorn infestation. This proposal is to treat buckthorn in all remaining 44 acres of upland oak and hardwood forested habitats on the WMA (37 acres funded).	E		Yes	Yes
OHF North Shore Brush Shear	Beltrami	T155N	R32W	2	S25	T155N R32W S25	250	\$20,000	Decadent brushland will be mechanically sheared to enhance habitat for sharptail grouse, sandhill cranes and short-eared owls.	E		Yes	Yes

Attachment C. Parcel List

OHF - Mechanical Brush Management	Cass	T138N	R30W	2	S17	T138NR30WS17	400	\$70,000	This is a multi-year brush shearing project on both DNR Forestry administered and County administered state owned land. Project specifications include shearing/cutting 100 acres of brush on one of four sites per year for four years.	E		Yes	Yes
OHF FY13 Mud Lake WMA Timber Stand Improvement	Morrison	T129N	R31W	2	S1	T129N R31W S1	66	\$114,000	Hire contractors or non-profit group (GRG or TNC) to manage contract for buckthorn control to improve 3 mesic hardwood stands for total of 66 acres. Methods to include cut-stump & herbicide treatment, basal bark herbicide treatment, and mechanical/ASV cut	E		Yes	Yes
OHF - Meadow Habitat Prescribed Burns	Cass	T138N	R30W	2	S17	T138NR30WS17	12,220	\$78,000	This is a four year project on DNR administered land on both WMA and non-WMA lands. The intent of the project is to re-vitalize wet meadow habitat via prescribed burning.	E		Yes	Yes
OHF 2013 Forest/Woodland Burning & Mgmt Crew	Morrison	T41N	R31W	2	S19	T41NR31WS19	500	\$87,700	3-year project. Hire dedicated crew (seasonal laborers), or subcontracting with MCC or TNC for 4-person crew to accomplish timber stand improvements on area-wide WMAs through oak understory prescribed burning, and buckthorn removal with herbicide.	E		Yes	Yes
OHF Deer River Area Forestry Forest Conifer Stand Establishment	Itasca	T56N	R25W	2	S15	T56NR25WS15	144	\$47,500	Establish conifers on multiple sites without the traditional use of herbicides, allowing natural regeneration to become established along with planted or seeded trees. Sites will develop into more natural looking and ecological functioning forest stands.	E		Yes	Yes
OHF - Woodland Prescribed Burns	Hubbard	T142N	R33W	2	S33	T142NR33WS33	205	\$9,000	During the last round of SFRMP planning for the CPMOP, guidelines were developed for future forest management. Included in these guidelines was a directive to increase jack pine acreage. PRWL area staff have identified a pool of forest stands.	E		Yes	Yes
OHF 2013 Increasing white pine in Pine Island State Forest	Koochiching	T158N	R29W	2	S27	T158N R29W S27	100	\$88,000	Open gaps in canopy with harvest and/or girdling to allow more sunlight to reach forest floor and promote pine and spruce seedling establishment. Expose mineral soil to enhance natural seeding with RX fire or mechanical scarification if need.	R		Yes	Yes

Attachment C. Parcel List

OHF 2013 Agassiz Lowlands Beach Ridge Conifer Restoration	Koochiching	T156N	R26W	2	S29	T156N R26W S29	240	\$44,350	The lack of coniferous seed trees originally on site will make artificial planting necessary in order to maintain a conifer coverype. On 40% of the area, planting through existing debris/vegetation will occur, but light mechanical seed bed site preparation in the form of disc trenching or shearing may be necessary for seed germination requirements, as well as artificial stock survival. Managing areas that will resprout to pure aspen can be achieved by a localized herbicide application. NPC classification and seed tree proximity will aid in determining the appropriate planting species combinations and density.	R		Yes	Yes
OHF 2013 Wildlife/Lake County Coop Forest Development	Lake	T62N	R9W	2	S29	T62NR9WS29	68	\$19,940	Project intent is to prep sites for increaseing conifer component. Both sites are in the Garden Lake Deer Yard and will meet broader objectives in the Border Lakes SFRMP for increasing conifer and within stand diversity.☐ Project site, acres & priority:	E		Yes	Yes
Brainerd-OHF-FY13-Northern Hardwood Improvement	Aitkin	T47N	R25W	2	S3	T47NR25WS3	200	\$20,800	Enhance the growth and form of the red oak, paper birch, basswood, yellow birch and sugar maple growing on these northern rich mesic hardwood sites while maintaining stand diversity as per Mille Lacs Uplands and North 4 SFRMP.	E		Yes	Yes
Brainerd-OHF-FY13-Oak Regeneration	Aitkin	T47N	R25W	2	S4	T47NR25WS4	100	\$72,800	The known stands in Aitkin Forestry Area include 215 acres that need to have oak re-established on them and they include several harvested FIM stands near South Long Lake, an old field in 36-137-25 that was planted with WS, and more sites.	R		Yes	Yes
OHF Thief River Falls brushland management	Beltrami	T155N	R38W	2	S22	T155N R38W S22	1,000	\$100,000	This proposal will mechanically treat up to 1000 acres of rank or advanced brushlands and open landscape areas that have been invaded by woody species. Contract rotary mowing and shearing will be used. The purpose of the treatments will be to regenerate.	E		Yes	Yes

Attachment C. Parcel List

OHF 2013 Morph Meadows White Cedar Regeneration	Itasca	T147N	R29W	2	S15	T147N R29W S15	50	\$23,000	Plant White Cedar as a stand component on five upland stands, to provide winter cover for deer in a major deer wintering area. All all stands were harvested within the past 15 years, and have mature white cedar growing on them now.	E		Yes	Yes
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