

Lessard-Sams Outdoor Heritage Council

2012 Accomplishment Plan

Program Title: DNR Accelerated Forest Habitat Enhancement (F-04)

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Funds Recommended: \$826,000

Legislative Citation: ML 2011, Special Session, Ch. XXX Art. X, Sec. X, Subd. 3(c) Accelerated Forest Habitat Enhancement - Phase II

\$826,000 the first year is to the commissioner of natural resources to restore and enhance lands in state forests, pursuant to Minnesota Statutes, section 89.021.

Abstract:

This program of on-the-ground conservation projects will amplify wildlife and ecological values of forest communities on Minnesota's public forestlands. Our restoration and enhancement management will treat 7,396 ac at \$112/ac.

Program 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.

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 was the primary priority used by Regional and Area DNR staff selecting and ranking forest projects for inclusion in this program.

Scope of our program: The 25 projects in our program are organized by priority management objectives:

1. Enhance forest community by altering the plant species composition and/or structure;

Example - On Breman WMA conduct a hand release to enhance the growth of Northern red oak saplings and trees to increase mast available for wildlife, and meet SFRMP goal to "improve the regeneration and increase the presence of oak and pine across the MLU Subsection".

2. Enhance the brushland habitat by altering the plant species structure and/or composition;

Example - On Roseau River WMA shear lowland brush to set back succession in mature willow stands to improve cover and forage for deer and moose, enhance nesting and brood rearing habitat for a variety of both game and non-game brushland dependant avian species.

Perpetuate the brushland component of the Aspen Parklands landscape and predispose these stands to future management with prescribed fire.

Habitat to be affected: Our program affects a range of forest habitats:

- Upland forests and woodlands (incl. fire-dependent forests, mesic hardwoods)
- Wetland forests forest systems (incl. floodplain forests)
- Upland brush
- Wetland brush

Our program will enhance oak and create a mix of young hardwood forest with more open meadow/brush lands to benefit grouse, elk, and deer. Enhancement of conifer stands and mixed hardwood/conifer forests will provide habitat for fisher and marten, and thermal cover for deer and moose. Shearing of trees and brush in large open landscape priority areas will benefit sharp-tailed grouse. Shearing and mowing of hardwoods and brush in smaller patches will benefit woodcock and deer.

Our program will benefit a number of nongame species, including yellow rails, sandhill cranes, northern harriers, bobolinks, and sandpipers. Activities that create/enhance forest openings will provide habitat for nongame species, including least chipmunks, northern flickers, cooper's hawks, and song sparrows.

The less intensive timber management in our program will help protect rare native plant communities and a number of nongame species through retention and enhancement of plant species diversity and structure.

Actions planned: DNR staff will administer the program, engage contractors or MCC to conduct field work, and supervise activities in the field to assure effectiveness. Requested funds are for contracting with private vendors and MCC, supplies/small equipment, and related fleet expenses. Funds are not being requested for personnel. Overall, treatment costs per acre are approximately \$112.

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, state forests, and one Aquatic Management Area). 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).

Restoration and enhancement activities on 7,396 ac of forestland will include:

- prescribed burning;
- mowing or shearing of woody vegetation;
- planting, seeding or encouraging natural regeneration;
- selective cutting and thinning;
- seedling protection;
- herbicide treatments; and others.

Site selection and scoring process: Projects were submitted by regional and area staff in DNR Divisions of Fish and Wildlife, Forestry, and Ecological Resources, from the DNR Central, Northeast, and Northwest 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.

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."

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.
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 restore or enhance critical habitat on wild rice lakes, shallow lakes, cold water lakes, streams and rivers, and spawning areas.
 2. Protect forest land through acquisition or easement, to prevent parcelization and fragmentation and to provide the ability to access and manage landlocked public properties.
 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.
1. Northern Forest Section Vision
 2. The Council's future for the Forest/Prairie Transition Section envisions diverse and productive remnant tracts of native prairie, forests grasslands, wetlands, lakes and rivers, and their associated fish and wildlife habitat.
 3. The Council sees a future when ample grasses and other vegetation on shorelands and higher in the watershed keeps water on the land This will yield clean lakes and streams, steady lake and stream levels, and improved aquatic vegetation, providing a plentiful supply of habitat for fish, game and wildlife in the Section, especially habitat for waterfowl and upland birds.
 4. These rivers and streams and their surrounding vegetation will provide corridors of habitat including intact areas of forest cover in the eastern reaches of the Section, and large wetland/upland complexes in the more westerly areas. These wetland/upland complexes will consist of native prairies, restored prairies, quality grasslands and restored shallow lakes and wetlands.

Priority Actions for the 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.

1. The Council's vision for the Metropolitan Urbanizing Section is a network of natural lands in the Section providing wildlife habitat, quality fisheries, especially cold-water fisheries and a forest land base that contributes to the habitat picture.
2. These natural lands in the Metropolitan Urbanizing Section include complexes of restored and perpetually protected wetlands, prairies, and forests, providing habitat benefits and access. These will have core areas with protected highly biologically diverse wetlands and plant communities including native prairies. Where possible, the habitats will connect, making corridors for wildlife and species in greatest need of conservation, and hold wetlands and shallow lakes open to public recreation and hunting. The Section's game lakes will be significant contributors of waterfowl, due to efforts to protect uplands adjacent to game lakes. In the corridors, the streams, rivers and lakes will be protected by vegetative buffers along riparian areas. Remnant oak savanna will be protected and its health restored, as will forests contributing to quality fisheries. As a result cold-water streams and lakes will provide high quality fisheries within an hour's drive of the majority of the state's population. Where possible, invasive species will have been permanently eradicated.

Priority Actions for the Southeast Forest Section

1. Protect forest habitat through acquisition in fee or easement, to prevent parcelization and fragmentation and to provide the ability to access and manage landlocked public properties.
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.

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.

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

These activities 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.

FY2009

DNR	\$200 mil
Division of Fish & Wildlife	\$33.1 mil
Division of Forestry	\$25.5 mil
Division of Ecological Resources	\$11.6 mil
Our program	\$0.826 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.

Accomplishment Timeline

Activity	Milestone	Date completed
Forest stand improvement site preparation (such as weed removal, fire breaks, soil preparation, etc.)	3,000 ac	6/30/2012
	3,000 ac	6/30/2013
	500 ac	6/30/2014
	500 ac	6/30/2015
Forest stand treatment/implementation (such as planting, burning, shearing, thinning, etc.)	1,500 ac	6/30/2012
	3,500 ac	6/30/2013
	1,000 ac	6/30/2014
	1,000 ac	6/30/2015
Forest stand Post-treatment (evaluation, release, browse protection, etc.)	0	6/30/2012
	2,000 ac	6/30/2013
	3,000 ac	6/30/2014

	2,000 ac	6/30/2015

Table B-2. Other Outcome Table

(This table should be used instead of attachment B for activities that are not counted in acres, miles etc. If you use attachment B you can delete this table from the accomplishment plan.)

Goal 1	Activity – P/R/E	Measure	Impact	Ecological Type
Goal 2				

Attachments *(on spreadsheet workbook – 3 separate tabs):*

- A. Budget
- B. Proposed Outcome Tables
- C. Parcel List

No Map is needed for the accomplishment plan

Attachment A. Budget Spreadsheet

Name of Proposal:

DNR Accelerated Forest Habitat Enhancement

Date:

14-Jun-11

Legal Citation / Proposal Number:

F-04

[Link Here to definitions of the budget items below.](#)Total Amount of Request \$ **826,000** From page 1 on the funding form.

Personnel

Position breakdown here	FTE	Over # of years	LSOHC Request	Anticipated Cash Leverage	Cash Leverage Source	Total
<i>Manager of Programs</i>			\$ -		\$ -	-
<i>Admin Asst</i>					\$ -	-
<i>position 3</i>					\$ -	-
<i>position 4</i>					\$ -	-
<i>position 5</i>					\$ -	-
<i>position 6</i>					\$ -	-
<i>position 7</i>					\$ -	-
Total	0		\$ -	\$ -	\$ -	-

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 Leverage	Cash Leverage Source	Total
Personnel - <i>auto entered from above</i>	\$ -	\$ -	\$ -	\$ -
Contracts	\$ 783,592		\$ 783,592	783,592
Fee Acquisition w/ PILT (<i>breakout in table 6 & 7</i>)			\$ -	-
Fee Acquisition w/o PILT (<i>breakout in table 6 & 7</i>)			\$ -	-
Easement Acquisition			\$ -	-
Easement Stewardship			\$ -	-
Travel (in-state)	\$ 13,000		\$ 13,000	13,000
Professional Services			\$ -	-
DNR Direct Support Services (<i>DNR programs only</i>)	\$ 10,408		\$ 10,408	10,408
DNR Land Acquisition Costs			\$ -	-
Other			\$ -	-
Capital Equipment (<i>auto entered from below</i>)	\$ -	\$ -	\$ -	-
Other Equipment/Tools	\$ 9,000		\$ 9,000	9,000
Supplies/Materials	\$ 10,000	\$ -	\$ 10,000	10,000
	\$ 826,000	\$ -	\$ -	\$ 807,000

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

Item Name	LSOHC Request	Leverage
<i>Item 1 enter here</i>		
<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	0	0

Attachment B. Outcome Tables

Name of Proposal:	DNR Accelerated Forest Habitat Enhancement
Date:	15-Jun-11
Legal Citation / Proposal Number:	F-04

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			25		25
Protect					0
Enhance			7371		7371
Total	0	0	7396	0	

Total Acres (sum of Total column)

7396

These two cells should be the same figure.

Total Acres (sum of Total row)

7396

Table 2. Total Requested Funding by Resource Type

	Wetlands	Prairies	Forest	Habitats	Total
Restore			\$ 18,500		\$ 18,500
Protect					\$ -
Enhance			\$ 807,500		\$ 807,500
Total	\$ -	\$ -	\$ 826,000	\$ -	

Total Dollars (sum of Total column)

\$ 826,000

These two cells should be the same figure.

Total Dollars (sum of Total row)

\$ 826,000

Check to make sure this amount is the same as the Funding Request Amount on page 1 of Main Funding Form.

Table 3. Acres within each Ecological Section

	Metro/Urban	Forest/Prairie	SE Forest	Prairie	Northern Forest	Total
Restore			25			25
Protect						0
Enhance		1213	489	5	5664	7371
Total	0	1213	514	5	5664	

Total Acres (sum of Total column)

7396

Total Acres (sum of Total row)

7396

Total Acres from Table 1.

7396

These three cells should be the same figure.

Attachment B. Outcome Tables

Table 4. Total Requested Funding within each Ecological Section

	Metro/Urban	Forest/Prairie	SE Forest	Prairie	Northern Forest	Total
Restore			\$ 18,500			\$ 18,500
Protect						\$ -
Enhance		\$ 145,650	\$ 134,250	\$ 7,000	\$ 520,600	\$ 807,500
Total	\$ -	\$ 145,650	\$ 152,750	\$ 7,000	\$ 520,600	

Total Dollars (sum of Total column)

\$ 826,000

These two cells should be the same figure.

Total Dollars (sum of Total row)

\$ 826,000

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 NO State PILT Liability					0
	0	0	0	0	

Table 7. Estimated Value of 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 NO State PILT Liability					\$ -
	\$ -	\$ -	\$ -	\$ -	

Attachment D. Parcel List

Program Title: DNR FY2012 Accelerated Forest Habitat Enhancement (revised June 2011)											
Parcel Name	Area Name	County	Township	Range	Direction	Section	TRDS	# of acres	Estimated Cost to OHF	Description	Activity
Jack Pine Management	Park Rapids	Hubbard	139	32	2	09		118	\$15,000	The goal is to enhance natural regeneration of jack pine stands through the retention of live seed sources after harvest and adaptive management. These sites will be harvested in different patterns leaving younger jack pine seed trees in strips or clumps or by conducting patch clear cuts in a younger jack pine stand.	E
Badoura Woodcock Brushland Project	Park Rapids	Hubbard	139	32	2	9		400	\$46,000	Regeneration of brushland habitat for the enhancement of woodcock, sandhill crane and for various other brushland habitat community species. Project timeline will include both summer rotary ax and winter shearing to evaluate impacts of enhancement opportunities.	E
Building Site-Level Resiliency in Lowland Black Ash Forest in the Face of the EAB Threat	Park Rapids	Cass	145	27	2	4		100	\$22,200	Enhancement of forest resiliency in WFn64 (wet black ash) NPC HCVF sites. 100 acres of WFn64 have been identified for enhancement in Cass county. The goal of the project is to enhance the resistance of these stands to decreased transpiration and increased water levels in the event that EAB causes total mortality to the ash component. All of the sites are within MCBS sites of Outstanding biodiversity significance, and two sites are within Old Growth SMZ and are high priority for protection.	E
Mertz Shear	Red Lake WMA	Beltrami	156	35	2	7,18		400	\$35,000	Enhance a brushland landscape by shearing 400 acres of mature willow. Mechanical shearing will benefit sharp-tail grouse, sandhill cranes, and other brushland dependent wildlife by creating an open landscape. This work is also a prerequisite to prescribed burning. This area has a history of brush land species use, but lack of maintenance has reduced habitat quality.	E

Attachment D. Parcel List

Thief River Falls Brushland Enhancement	Thief River Falls multiple WMAs	Marshall	<u>155</u>	<u>39</u>	<u>2</u>	<u>8</u>		500	\$73,500	This proposal will mechanically treat up to 500 acres of rank brushlands which have also been invaded by woody species. Contract rotary and mechanical treatment methods will be used. The purpose of the treatments will be to regenerate brushlands and restore open landscape attributes to these areas for the benefit of wildlife species dependent upon these cover types.	E
<u>Red Pine Stand Enhancement</u>	<u>Red Lake WMA</u>	<u>Lake of the Woods</u>	<u>158</u>	<u>35</u>	<u>2</u>	<u>26</u>		<u>172</u>	<u>\$21,000</u>	<u>The goal is to enhance the species and structural diversity of red pine plantations through thinning treatments and adaptive management. These sites are being thinned to a low basal area and half of each site were set up for a variable density thinning with ¼ and ½ acre skips and gaps.</u>	<u>E</u>
Juneberry Brush Shearing	Roseau River WMA	Roseau	<u>162</u>	<u>44</u>	<u>2</u>	<u>22</u>		93	\$15,000	Set back succession in mature decadent stands of lowland brush to enhance habitat conditions for a wide variety of game and non-game wildlife species while perpetuating the brushland component of the Aspen Parklands landscape. Project will consist of shearing 960 acres of lowland brush, 320 acres each fiscal year, for 3 years. Restoring the early-successional brushland component to this landscape and following up with rotational prescribed fire as a management option will help to maintain the site for use by woodcock, furbearers, white-tailed deer, sharp-tailed grouse, waterfowl and other wildlife species. Project work will be completed by March 2014.	E

Attachment D. Parcel List

CONTINGENCY Juneberry Brush Shearing	Roseau River WMA	Roseau	<u>162</u>	<u>44</u>	<u>2</u>	<u>22</u>				Set back succession in mature decadent stands of lowland brush to enhance habitat conditions for a wide variety of game and non-game wildlife species while perpetuating the brushland component of the Aspen Parklands landscape. Project will consist of shearing 960 acres of lowland brush, 320 acres each fiscal year, for 3 years. Restoring the early-successional brushland component to this landscape and following up with rotational prescribed fire as a management option will help to maintain the site for use by woodcock, furbearers, white-tailed deer, sharp-tailed grouse, waterfowl and other wildlife species. Project work will be completed by March 2014.	E
Nelson Bridge Brush Shearing	Roseau River WMA	Roseau	<u>163</u>	<u>43</u>	<u>2</u>	<u>25</u>		600	\$46,650	Set back succession in mature willow stands to improve cover and forage for deer and moose, enhance nesting and brood rearing habitat for a variety of both game and non-game brushland dependant avian species. Perpetuate the brushland component of the Aspen Parklands landscape and predispose these stands to future management with prescribed fire. Project will consist of shearing 460 acres of lowland brush. Project work will be completed by March 2013.	E
<u>Hardwood Stand Improvement- Bremen</u>	<u>Sandstone</u>	<u>Pine</u>	<u>44</u>	<u>16</u>	<u>2</u>	<u>21</u>		<u>23</u>	<u>\$4,600</u>	<u>Release and enhance the growth of Northern red oak saplings, and trees, in the stand, important for wildlife species who utilize mast for food. Crop tree Crown Release of Northern Red Oak & other desirable species.</u>	<u>E</u>
Hardwood Stand Improvement - Solona	Solona State Forest	Aitkin	<u>45</u>	<u>22</u>	<u>2</u>	<u>30</u>		54	\$5,400	Enhance the growth and form of the red oak, tamarack and paper birch on this site. Hand release by removing adjacent competing vegetation and retaining the diversity in the remainder of the stand as per Mille Lacs Uplands SFRMP goals. Work best accomplished leaf-off in fall or early spring. T44R24S16	E

Attachment D. Parcel List

Hardwood Stand Improvement - Aitkin (S24)	Aitkin	Aitkin	<u>47</u>	<u>26</u>	<u>2</u>	<u>30</u>		7	\$840	Enhance the growth and form of the red oak, yellow birch, butternut and paper birch on this rich hardwood site. Hand release by removing adjacent competing vegetation and retaining the diversity win the remainder of the stand as per Mille Lacs Uplands SFRMP goals. Work best accomplished leaf-off in fall or early spring.	E
Hardwood Stand Improvement - Aitkin (S23)	Aitkin	Aitkin	<u>47</u>	<u>27</u>	<u>2</u>	<u>25</u>		7	\$840	Enhance the growth and form of the red oak and paper birch growing on this rich hardwood site. Selecting crop trees and releasing by hand cutting adjacent competing vegetation, maintaining stand diversity as per Mille Lacs Uplands SFRMP. Work best done leaf off in fall or early spring.	E
Cloquet River Conifer Release in Wood Turtle Habitat	Cloquet State Forest	St. Louis	<u>54</u>	<u>14</u>	<u>2</u>	<u>21</u>		348	\$154,720	Hand release jack pine and long lived conifer species by cutting competing species such as aspen and balsam fir twice over 3 growing season. project sites are within MCBS sites of outstanding or high biodiversity significance ranked for their significance for wood turtle.	E
Freeley Oak Seeding	Grand Rapids	Itasca	<u>55</u>	<u>25</u>	<u>2</u>	<u>33</u>		39	\$1,700	Oak trees will be directly seeded on 28 acres to provide and enhance wildlife habitat and increase forest diversity. The future acorn mast crop produced by these trees will provide food for wildlife. This planting will also restore oak that was lost from a past outbreak of the two-lined chestnut borer insect.	E
Bass Brook Brush Removal and Oak Planting	Grand Rapids	Itasca	<u>55</u>	<u>26</u>	<u>2</u>	<u>13, 14</u>		4	\$11,600	Oak trees provide hard mast for a variety of wildlife species as well as contributing to forest diversity. Oaks also provide wildlife nesting and denning sites. This project area is an oak stand in the Bass Brook WMA. Seven gaps in the forest canopy were identified for a total of 4 acres. These gaps contain dense stands of beaked hazelnut. Brush saws will be used to hand cut the hazelnut to create an open habitat free of competition for oak production during summer of 2011. A total of 1000 bur oak and 1000 pin oak will be planted in the forest gaps in the spring of 2012.	E

Attachment D. Parcel List

SNF/DNR Coop Blueberry Oak Habitat Enhancement	Superior NF	St. Louis	<u>61</u>	<u>8</u>	<u>2</u>	<u>7</u>		330	\$64,617	Manage oak outcrop forest habitats to enhance oak and fruiting shrub components. Treatment will consist of hand release of oaks and fruiting shrubs. Follow-up treatment (not requested in this proposal) will be the reintroduction of low intensity fire.	E
CONTINGENCY SNF/DNR Coop Blueberry Oak Habitat Enhancement	Superior NF	St. Louis	<u>57</u>	<u>13</u>	<u>2</u>	<u>23</u>				Manage oak outcrop forest habitats to enhance oak and fruiting shrub components. Treatment will consist of hand release of oaks and fruiting shrubs. Follow-up treatment (not requested in this proposal) will be the reintroduction of low intensity fire.	E
<u>Conifer Forest Stand Enhancement</u>	<u>Grand Rapids</u>	<u>Itasca</u>	<u>146</u>	<u>25</u>	<u>2</u>	<u>36</u>		<u>100</u>	<u>\$36,000</u>	<u>Timber stand improvement to increase the presence of long-lived conifers in select forest stands.</u>	E
Cambridge Area Woodcock and Grouse Alder Management	Dalbo, Lake 5 & Ann WMAs	Kanabec, Mille Lacs, Isanti	<u>40</u>	<u>25</u>	<u>2</u>	<u>36</u>		25	\$4,000	Regenerate and rejuvenate old decadent alder stands via hydroaxing to enhance habitat for woodcock and grouse.	E
Popple Lake Buckthorn Control	Popple Lake WMA	Morrison	<u>40</u>	<u>32</u>	<u>2</u>	<u>15</u>		37	\$70,083	Popple Lake WMA was inventoried in May and June 2010. Remainder of upland forested habitats also contain similar infestations based upon observations from wildlife field staff and will be inventoried in June 2010. This proposal is to treat buckthorn in all upland oak and hardwood forested habitats on the WMA, which total approximately 81 acres. Goals is to treat all buckthorn stems found, with priority on treating stems equal or greater to 3/4 inch in diameter which would comprise the bulk if not all seed-bearing stems.	E
CONTINGENCY Popple Lake Buckthorn Control	Popple Lake WMA	Morrison	<u>40</u>	<u>32</u>	<u>2</u>	<u>15</u>				Popple Lake WMA was inventoried in May and June 2010. Remainder of upland forested habitats also contain similar infestations based upon observations from wildlife field staff and will be inventoried in June 2010. This proposal is to treat buckthorn in all upland oak and hardwood forested habitats on the WMA, which total approximately 81 acres. Goals is to treat all buckthorn stems found, with priority on treating stems equal or greater to 3/4 inch in diameter which would comprise the bulk if not all seed-bearing stems.	E

Attachment D. Parcel List

Mille Lacs and Four Brooks Brushland Burns	Mille Lacs & Four Brooks WMA	Mille Lacs	<u>40</u>	<u>26</u>	<u>2</u>	<u>9</u>		3500	\$27,000	This project will use helicopter ignition to burn one decadent stand of lowland willow/alder brush encroaching on large wetland complexes within the Mille lacs WMA. Additional complexes will utilize ground ignition and available resources from other offices. A four person CCM crew will also be used by other areas to support their prescribed burn activities.	E
Nosek Hardwood Planting	Nosek WMA	Fillmore	<u>101</u>	<u>12</u>	<u>2</u>	<u>7</u>		5	\$7,000	Re-establish hardwood forest on the Nosek WMA in Fillmore County. Site is currently old pasture taken over by box elder. Will under plant with hardwoods and then girdle and chemically treat. Will be don in halves over two year period.	E
Hoffman Hardwood Seeding	Hoffman WMA	Goodhue	<u>113</u>	<u>15</u>	<u>2</u>	<u>29</u>		10	\$7,500	Establish floodplain forest on the WMA that is currently cropped. No longer need crops on this land and establishing forest would improve habitat for deer, turkey, and song birds. A lowland forest mix will be used.	R
Yeager Direct Seeding	Yeager WMA	Olmsted	<u>107</u>	<u>13</u>	<u>2</u>	<u>32</u>		15	\$11,000	Establish floodplain forest on field currently being farmed. No longer need crops on this WMA land and establishing forest would improve habitat for deer turkeys and song birds. A lowland forest mix will be used.	R
Whitewater Hardwood Planting and Post Sale Treatment	Whitewater WMA	Winona	<u>107</u>	<u>10</u>	<u>2</u>	<u>25</u>		489	\$134,250	Estimated 350 acres to purchase trees and contract plant about 60% of 612 acres of oak stands to be examined for FY12 would actually be harvested and thus needing forest development funding. Also about 139 acres of past timber sales would need post-sale treatment at \$150/ac. Likely post-sale areas: west headquarter (29ac); Swanson's (57ac) Demonstration farm area (21ac) and Hollywood (32ac)	E
Sauk Rapids Brushland Management	Tribute & Stearns Prairie Heritage WMAs	Stearns	<u>124</u>	<u>28</u>	<u>2</u>	<u>03</u>		20	\$10,500	Project will consist of rejuvenation of block area of native brushlands. Focus of this project will include planting native willow, alder, dogwood, plum and others. Brushland burning may be used to invigorate and restore brushlands.	E

When a project is beyond one section, legal descriptions are for the projects central location.