Management
Analysis
& Development

Lessard-Sams
Outdoor Heritage Council

Strategic Planning and Recommendation Development Process – Summary of Input Meetings

September 2009

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Management Analysis & Development

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Contents

Introduction

The Lessard–Sams Outdoor Heritage Council (L-SOHC) hosted five regional meetings with conservation professionals and the public to create:

1. A 25-year framework to ensure funding recommendations conform with statutory and constitutional requirements;
2. An initial five- and ten-year funding plan; and
3. Priorities for the Council's Call for Requests for FY 2011 appropriations.

This document summarizes the results of the five regional meetings.

Method

Management Analysis & Development followed processes set forth in the *L-SOHC's FY 2011 Strategic Planning and Recommendation Development Process*, which was adopted by the Council on June 16, 2009.[1] This process relies principally on existing species/habitat/resource plans to build a strategic framework for achieving priority habitat goals and objectives. It also relies on the state's conservation community and public input to validate and refine the habitat objectives that are contained in these plans.

Conservation professionals input meetings

The project team conducted five all-day meetings with conservation professionals representing different organizations and expertise. At these meetings, participants reviewed various conservation plans' spatial goals and discussed 25-year spatial targets (acres or shoreline miles) for each section's prairie, wetland, forest and aquatic habitats. The recommended spatial targets represented the participants' professional judgment of "realistic" goals for each section and guidance from statewide conservation plans, **considering all possible funding sources**, not just the Outdoor Heritage Fund.

This process was very challenging, given data gaps and the difficulty of predicting organizations' future capacity for conservation work. Another challenge was separating targets by prairies, wetlands, forests and aquatic habitats because these ecosystems are often intermixed. As such, the professionals' discussions and debates created targets for a 25-year planning horizon with some degree of uncertainty. Some suggestions for refining these targets with further data gathering and analysis are summarized in this report in "suggestions for future planning processes."

The professionals also provided an average cost per acre or mile so that the spatial targets could be measured monetarily. Finally, the professionals provided landscape characteristics that should be the highest funding priorities and priority actions for protection, restoration and enhancement.

[1] The Lessard-Sams Outdoor Heritage Council's FY 2011 Strategic Planning and Recommendation Development Process can be found at: http://www.lohc.state.mn.us/materials/2011-Lessard-SamsPlan.pdf

Public input meetings

The general public was invited to observe the conservation professionals meetings, and to participate in a comment period of at least one hour that followed each meeting. The meetings began with a welcome from the Executive Director and Council members who were present, followed by introductions of participants. The Executive Director gave a brief description of the Council, the constitutional amendment process, and what the Council has been doing to date, including a description of the small grants program and the upcoming call for requests. The Executive Director answered questions from attendees regarding the Council. A facilitator from Management Analysis described the day-long planning process for those who had not attended. The facilitator took feedback first from participants who had observed the process during the day, and then asked more general questions.

How to read the tables

The tables in each section's summary include columns with the following definitions:

- **1st-year target:** the number of acres or shoreline miles that can be protected, restored and enhanced with Fiscal Year 2011 funding, given organizations' current capacities and **regardless of funding source.**
- **5-year target:** the cumulative acres or shoreline miles protected, restored and enhanced at the end of five years (includes the 1st-year target).
- **10-year target:** the cumulative acres or shoreline miles protected, restored and enhanced at the end of ten years (includes the 1st-year and 5-year targets).
- **25-year target:** the desired number of acres or shoreline miles that will be protected through 2034, **regardless of funding source.**

All funding targets are in 2009 dollars with no adjustment for future years' inflation. A number of meeting participants noted that costs can vary significantly based on the land's development potential or required restoration and enhancement work. The midpoint was used when conservation professionals provided a range for spatial targets or cost per acre or shoreline mile. Protection cost per acre is either fee title or easement cost.

The "restore and enhance" spatial targets may exceed the protect targets because currently protected acres and shorelines also need restoration and enhancement. For simplicity, the restore and enhance actions were combined for the spatial and funding targets.

Definitions

The Council's definitions for protect, restore and enhance are:

Protect: action to maintain the ability of habitat and related natural systems to sustain fish, game or wildlife through acquisition of fee title or conservation easements.

Restore: action to bring a habitat back to a former state of sustaining fish, game or wildlife, with an ultimate goal of restoring habitat to a desired conservation condition.

Enhance: action to increase the ability of habitat and related natural systems to sustain and improve fish, game or wildlife in an ecologically sound manner.

Common discussion themes

At both conservation professional and public input meetings, some common themes emerged as topics of concern with participants. Some had to do with programmatic and implementation concerns, while others were responses to Council policies and processes.

Ramp-up: In establishing protection targets in various areas, participants discussed that efforts would need to ramp up over a few years. Some considerations were the need to accelerate contracting with the private sector, obtaining appropriate seeds for restoration and enhancement projects, and obtaining landowner agreement.

Organizational capacity and workforce planning concerns: Both agencies and organizations were concerned about whether they would have sufficient personnel to undertake these projects, with some (generally in state agencies) noting that they are not currently filling vacancies. Personnel limitations present an issue for ramp-up, and for the ultimate ability to achieve the goals outlined. Participants noted that there is a limited supply of people who are skilled and educated in the process of working with landowners and in land conservation transactions, but that to fulfill these goals in the shorter term (the first ten to fifteen years), it would need to be through existing agencies. One suggestion was to discuss the need for personnel ramp-up in expertise and effort with conservation agencies so that they may incorporate this into their workforce plans. Another suggestion was to get communities and groups involved in restoration and enhancement efforts.

Ongoing maintenance: The need for ongoing maintenance of restored lands came up often during prairie restoration discussions, but also in other areas. Participants had significant concerns that protecting lands would be money poorly spent if the lands are not maintained in the desired state. There were questions as to whether prescribed burns every four to five years or other treatments addressed every few years fall within the definition of "enhance." Some other concerns were with the frequent monitoring and addressing of invasive species that some projects require (buckthorn, thistle, honeysuckle). This maintenance concern does not apply to land acquired by easement, because maintenance is often spelled out in the agreements, though some owners may require technical assistance. It applies to land acquired by conservation agencies or groups. There were differing views – one participant said his organization wouldn't look to the OHC for ongoing maintenance money – but would look to it for bigger ticket items that the agency would not able to accomplish otherwise. Others noted that budgets are limited or dedicated for maintenance efforts currently, so additional funds would need to be provided. "Maintenance" can also include annual monitoring to identify invasive species and other issues that need attention.

Research and data collection: There is a lack of information on characteristics of some lands, particularly private lands, and participants stressed the value of gathering data to assess the land base to make many of the judgments on priority characteristics. A specific restoration and enhancement project may require data collection to appropriately design the activities.

Working with private landowners. Participants at most meetings emphasized the value and opportunities in working with private landowners. They said that both public and private lands must be restored and enhanced for the greatest environmental benefit. Some examples that were provided:

- In the Southeast Forest section, a participant noted that the section is primarily privately owned (75 percent), so it is not practical to protect land only through easement. A participant noted, "Even if we had a ton of money, private land owners want to control their own land – we will be handicapped if we can't work with private landowners on their land." This also came up during discussions of the feasibility of entering into conservation easements with landowners who formerly had participated in the CRP program. Landowners may be willing to forego the use of their lands for a finite period, but not in perpetuity.
- In the Northern Forest section, private lands were estimated to be about half of the forested land base. Participants noted that with the decline in timber sales, the region is experiencing large changes in land use – one participant noted that an investment company bought all the Potlatch land available for sale in one year. The participant saw an opportunity to influence the management of large amounts of land that are in private ownership – where owners have the will but not the wherewithal for proper forest management.
- In the Forest/Prairie Transition section, this came up in the context of shoreline preservation, since 65 percent of the region's shoreline is in private ownership. A meeting participant suggested that the council look at ways to get reasonable guarantees for a duration of project life that are different from fee title or permanent easement. This would mean an expected lifespan that gets at conservation values. The participant noted also that as you get more restored shoreline, you change the social culture around these resources – you change the mindset and people start doing the right thing.

Confusion about the "open taking of game" provision: At numerous meetings, some participants were confused about the meaning of the constitutional "open taking of game" provision and believed that it would present a barrier for establishing easements on private property. It was pointed out to them that the provision applies only to land acquired by fee title, and that easements could be established on land without full public access.

Questions about the other funds established by the constitutional amendment: At both the conservation professionals' and public input meetings, there were questions about the allocation of funding from the other funds established by the constitutional amendment in November 2008. Some participants noted that they had envisioned more of a connection or coordination between these funds, since they were voted on as a package, but that they do not see this coordination happening. Some noted that they could write one proposal that would provide benefits on at least three dimensions – clean water, outdoor heritage, park and trails, and arts and cultural heritage. Participants at the St. Paul meeting recommended that the Council meet jointly with the Clean Water Council to consider overlapping targets, generally, and particularly overlaps within the Metro/Urbanizing section.

State law and local ordinance use and enforcement: participants in three meetings noted that some shoreland restoration/enhancement projects would be unnecessary if state laws and local ordinances relating to water quality were better enforced. A prominent example had to do with plowing/planting row crops to the water's edge. Existing zoning and land use authorities could also be used to complement Council efforts.

Public policy and lawmaking: Participants in a few meetings noted that there are state and federal laws on the books that are barriers to successful protection, restoration and enhancement. Most frequently mentioned was the Farm Bill, and there were also numerous references to tax laws that discourage landowners from entering into easement agreements.

Work on the definitions. Questions and concerns about the Council's definitions were heard at both conservation professionals and public input meetings, and comments followed during the draft comment period. Some issues were

1. Whether the definition of "protect" should include only permanent easement or acquisition, or if there was room within this definition to consider work with private landowners outside of perpetual easement.
2. Restore and enhance – where does maintenance and preservation of the investment fit in?
3. Whether non-game species such as songbirds fit in the Council's definition of "habitat."

Suggestions for future planning processes

This planning process occurred during a compressed time period of six weeks, including time to review existing plans, develop draft matrices for conservation professionals' consideration, and to obtain professionals' and public input. During this time, the project team collected ideas and suggestions for future Council planning processes, for the Council's consideration for its next round of planning.

Set goals (spatial, priority, funding) for entire ecological subsections first, then score them by prairie/forest/wetland/habitat afterward. The structure that the Council created for identification of spatial targets and priorities aligned with the constitutional language of "prairies, forests, wetlands and habitat." This structure was unfamiliar and awkward for conservation professionals. These systems are interconnected and overlapping, and "habitat" exists within prairies, forest and wetlands, leaving the "habitat" category as a catch-all category for lakes, streams and rivers. The professionals preferred to conduct their targeting with ecological sections or sub-sections in mind. After setting targets, if need be, efforts could be "scored" by the constitutional language categories.

Identify current levels of effort and prior year accomplishments for conservation partners. These discussions were held with a lack of knowledge of the current level of effort being expended by state, county, and federal agencies, as well as nonprofit organizations. Identifying current levels of effort and ongoing accomplishments would help establish a firmer "baseline" from which goals would be established, and would help the council ensure that its funding supplement, not supplant, existing efforts.

Identify county and regional plans, and additional species-specific plans
Conservation professionals identified many plans beyond the list of 22 plans that were reviewed by Management Analysis prior to the meetings. A broader search for these plans would allow for a richer advance summary of regional goals, targets, priority land characteristics and restoration/enhancement actions.

Use GIS/mapping tools to estimate areas of overlap between existing efforts and current plans in their spatial targets. Advance consultation with the authors of reports regarding the geo-spatial location of their plan targets, and how they might overlap with the targets identified in other plans, might help the council locate areas that would provide multiple benefits.

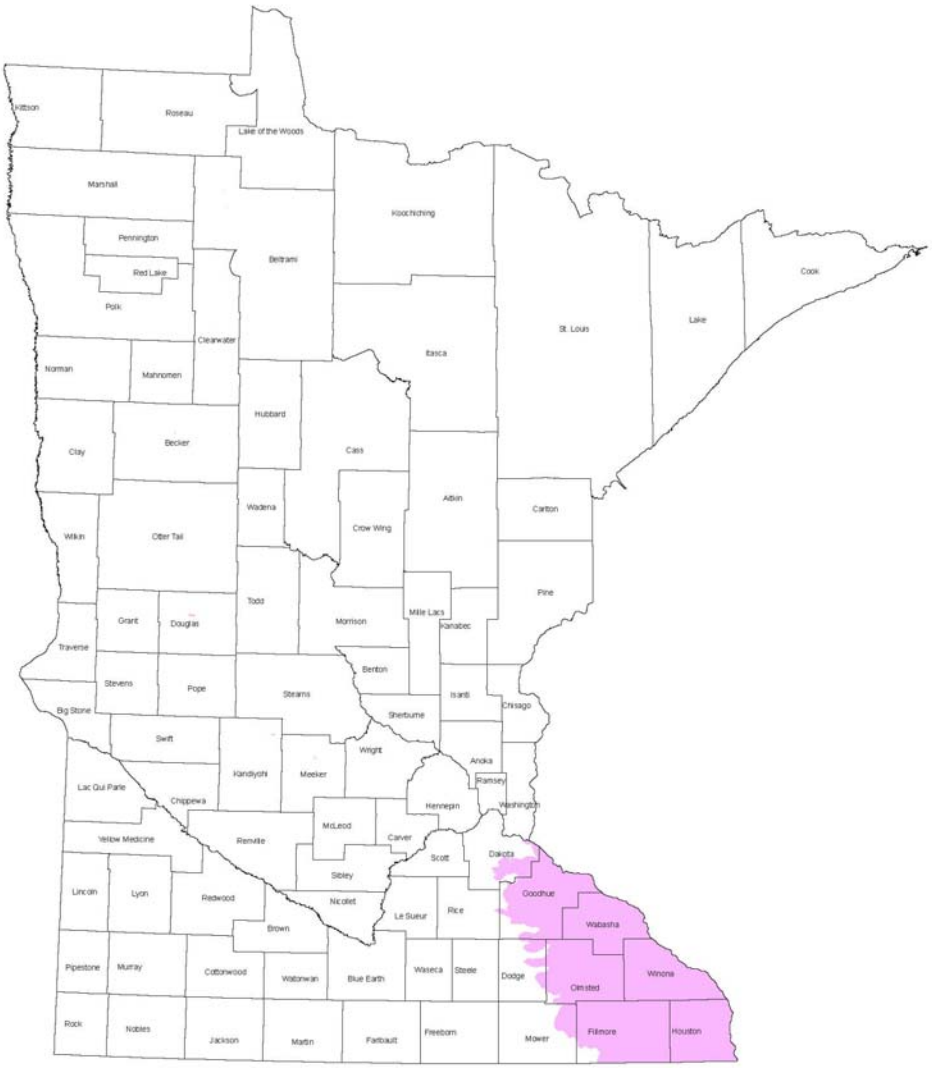
Consider the work of the Minnesota County Biological Survey in identifying the highest quality remnants of native vegetation. This recommendation came up repeatedly in conservation professionals' meetings.

Link outputs to outcomes. This process has had a focus on inputs, processes and outputs, and assumed that the plans reviewed and the professional input would focus on efforts that will achieve desired outcomes for fish, game and wildlife. This will need to be measured, reviewed and reassessed within project plans, and by the Council on a regular basis.

Set parameters for creating targets. Some targets were set based on saving all remaining native landscape, when some of those lands may be converted or remain in private hands during the next 25 years. Other targets were to address large-scale water quality issues. Some targets included private lands and others just public and privately held easement-lands. In the absence of the Council's guidance or goals, groups used different approaches to setting targets, with some inconsistencies among the sections.

Consider changes to section boundaries. As circumstances change, the council may need to change the boundaries of its sections. One specific suggestion was to change the boundary line for the Metropolitan/Urbanizing section to include all of Isanti and Chisago Counties.

Southeast Forest section summary



Conservation professionals' meeting

Following is a summary of the Southeast Forest Section's conservation professionals' meeting held August 7, 2009, in Rochester.

Summary Table

	Target	1st year	5 years	10 years	25 years
Prairie	Acres protected	6,500	30,000	71,000	153,000
	Acres restored\enhanced	8,500	38,000	76,000	195,000
	Cost (all fund sources)	$41,050,000	$185,500,000	$419,700,000	$939,600,000
Wetlands	Acres protected	500	2,500	5,000	15,000
	Acres restored\enhanced	1,000	5,000	10,000	20,000
	Cost (all fund sources)	$5,000,000	$25,000,000	$50,000,000	$115,000,000
Aquatic habitat	Acres protected	500	1,020	2,190	5,200
	Acres restored\enhanced	1,050	2,100	4,200	6,500
	Shoreline miles protected	10	80	200	500
	Shoreline restored\enhanced	13	60	120	325
	Cost (all fund sources)	$14,200,000	$36,740,000	$77,155,000	$155,775,000
Forest	Acres protected	1,500	22,500	39,000	81,000
	Acres restored\enhanced	3,000	32,000	72,000	142,000
	Cost (all fund sources)	$9,650,000	$129,250,000	$235,500,000	$481,500,000
Costs (all fund sources)		$69,900,000	$376,490,000	$782,355,000	$1,691,875,000

Priority Characteristics and Actions

The professionals provided landscape characteristics that should be the highest funding priorities, and priority actions for protection, restoration and enhancement. These are summarized below in the order they came up in discussion. These characteristics and actions were in addition to those recommended by the plans that were reviewed at the Council's request (also summarized by source).

Priority landscape characteristics

For All areas[2] in the Southeast Forest Section

Give priority to programs in Southeastern Minnesota with these features:

- Biodiverse areas, as identified by the Minnesota County Biological Survey.
- Fill gaps between corridors and projects adjacent to existing corridors.
- Places that might be close to development or affected by population growth factors.
- Projects that help meet regional plan goals.

[2] The professionals listed these priority characteristics during the discussion of prairies, and noted during subsequent discussions that the same priorities apply to wetlands, forests and habitat.

- 75 percent of the land in this section is privately owned. Private land presents the greatest opportunity to make the most change for habitat and clean water.

For Prairie Protection in the Southeast Forest Section

Give priority to prairie protection programs with these features:

- Biodiverse, significant areas. Prairie remnants identified by Minnesota County Biological Survey and near already protected large blocks of land.
- Bluff prairies.
- The DNR and The Nature Conservancy have priority project areas: Root and Zumbro rivers, which support regional plan objectives.
- Four to nine square-mile complexes, at least 20% wetlands (at least 50% are seasonal) and 40 percent grasslands (Duck Plan).
- Larger grasslands/wetland complexes (2,000 acres plus) to benefit grassland species and near other public lands to create corridors (Wildlife Management Acquisition Plan).
- Farmlands containing a mixture of cultivated grains, undisturbed grasslands, and wetlands. Undisturbed grass habitats for nesting and brood rearing. Dense, woody habitats nearby for winter cover (Ringed-neck Pheasant Plan).
- Native prairie and savanna and areas that link large, intact ecosystems (Statewide Conservation and Preservation Plan).

For Wetland Protection in the Southeast Forest Section

Give priority to wetland protection programs with these features:

- See above, under “All Areas” – similar priorities as were identified for prairies.
- Restore tributaries/streams to flood plains.
- Preserve wetland edge effects (the boundary between the wetland and altered land). Examples were St. Lawrence and Decorah Edge.
- Protect driftless area tributaries.
- Many small basins (9 acres each, on average) and permanent wetlands for migration (Duck Recovery Plan).
- Provide winter cover (Pheasant Plan).

For Habitat Protection in the Southeast Forest Section

Give priority to habitat protection programs with these features:

- See above, under “All Areas” – similar priorities as were identified for prairies and wetlands.
- Restore Mississippi River tributary rivers to floodplain.
- Projects that acquire larger Aquatic Management Acquisition easements – greater than 66 feet from mid-stream to shore.
- Projects that use alternative restoration methods other than just rip-rap.
- Promote multiple benefits (hunting and fishing).

For Forest Protection in the Southeast Forest Section[3]

Give priority to forest protection programs with these features:

- See above, under "All Areas" – similar priorities as were identified for prairies, wetlands and habitat.
- Complete the Richard J. Dorer Memorial Forest acquisitions as a "birthday present" to commemorate the 50th anniversary of the forest (est. 1961).
- Provide public access to public lands that cannot be reached.
- A bluffland view shed protection feature, like Wisconsin's.
- Unique forest systems, such as slopes and a seepage forest community.
- Large complexes with high interior to edge ratio (implies larger undisturbed central area).
- Support rare species, such as the peregrine falcon.

Priority Restoration and enhancement actions

For Prairie Restoration and Enhancement in the Southeast Forest Section

Give priority to prairie restoration and enhancement programs with these features:

- Invasive-species control.
- Prescribed burning.
- Grassland enhancement – might not be totally replanting.
- If 75 percent of the land is private, allow grazing management and fencing.
- Grazing for invasive-species control (example: Scottish highland cattle).
- Site assessment to understand scope of project.
- Most Southeast Minnesota prairie acres are protected through conservation easement or Conservation Reserve Program (per reviewed conservation plans).

For Wetland Restoration and Enhancement in the Southeast Forest Section

Give priority to wetland restoration and enhancement programs with these features:

- Invasive species – monitor and react – be proactive.
- Removing levees.
- Reconnect headwater streams – be strategic from a hydraulic standpoint.
- Restore natural hydrology – break up tiles.
- Promote groundwater recharge and cleaner groundwater.
- Dredging on Mississippi River (silted backwaters).
- Most Southeast Minnesota Wetland acres are protected through conservation easement (per reviewed conservation plans).
- Drained wetlands in headwater areas.

For Habitat Restoration and Enhancement in the Southeast Forest Section

Give priority to habitat restoration and enhancement programs with these features:

- Invasive-species control.
- Water drawdowns.
- Support a watershed approach, as described in the trout management plan.

[3] In addition to these priorities, participants noted that there are numerous plans that identify priorities: The Statewide Forest Resources Management Plan, the Richard J. Dorer State Forest Plan, the Land Asset Management Plan for each area, the Southeast Landscape Plan, the Upper Mississippi Forest Plan, the Lower Zumbro Plan and the Vermillion Plan.

- Follow *Strategic Plan for Coldwater Resources Management in Southeast Minnesota.*
- Restore connectivity.
- Priority to the native species of fish.
- Enhancement of recreational value.
- Protect through management and conservation easements (Aquatic Management Acquisition Plan).

For Forest Restoration and Enhancement in the Southeast Forest Section

Give priority to forest restoration and enhancement programs with these features:

- Restoration and enhancement actions for the Richard J. Dorer Memorial Forest acquisitions as a "birthday present" to commemorate the 50th anniversary of the forest.
- Burning.
- Seeding.
- Invasive-species control.
- One-hundred-foot buffer for trout steams and tributaries.
- Technical assistance.
- Monitoring.
- Retain closed canopy.
- Green jobs – technical assistance requires more foresters.
- Manage by eco classification system to determine the restoration needs.
- Protection through conservation easements (Forests for the Future Plan).

Prairies

The professionals created three prairie categories:

- **Native:** remnant prairie from pre-settlement times.
- **Restored:** agricultural lands restored to prairie using native species.
- **Surrogate grasslands:** agriculture lands converted to grasslands (native grass species with minimal variation).

The native prairie protection estimate is based on the goal of protecting most of what remains. The restored prairie and grasslands protection targets are based on statewide (Duck Recovery, Pheasant and WMA) plans and the professionals' judgment of what is "doable."

Meeting participants estimated that 25 to 30 percent of the prairie acres require some type of maintenance work annually after the prairie is established. Maintenance activities include burning, livestock grazing (fencing and water source), vegetation cutting, tree removal, and invasive-species removal. The "restore\enhance" targets exclude maintenance costs. Participants also noted that prairie restoration would be slowed due to insufficient native seed stock during the first five years.

Native Prairie

Target	1st year	5 years	10 years	25 years
Protect – acres	500	5,000	11,000	28,000
Protect – cost ($3,700 per acre)	$1,850,000	$18,500,000	$40,700,000	$103,600,000
Restore\enhance – acres	1,500	8,000	16,000	40,000
Restore\enhance – cost ($2,000 per acre)	$3,000,000	$16,000,000	$32,000,000	$80,000,000

Native prairie also requires restoration (tree and exotic specie removal and burning).

Restored Prairie

Target	1st year	5 years	10 years	25 years
Protect – acres	5,000	20,000	50,000	100,000
Protect – cost ($4,500 per acre)	$22,500,000	$90,000,000	$225,000,000	$450,000,000
Restore\enhance – acres	6,000	25,000	50,000	125,000
Restore\enhance – cost ($1,500 per acre)	$9,000,000	$37,500,000	$75,000,000	$187,500,000

Surrogate Grasslands (Prairie)

Target	1st year	5 years	10 years	25 years
Protect – acres	1,000	5,000	10,000	25,000
Protect – cost ($4,500 per acre)	$4,500,000	$22,500,000	$45,000,000	$112,500,000
Restore\enhance – acres	1,000	5,000	10,000	30,000
Restore\enhance – cost ($200 per acre)	$200,000	$1,000,000	$2,000,000	$6,000,000

Wetlands

The wetlands protection estimate is based on the Duck Recovery and Pheasant plans, plus additional acreage for the wetland complexes of the Root and Zumbro rivers and Decorah Edge.[4] Participants assumed all new protected acres require restoration and enhancement, along with 5,000 acres of currently protected wetlands.

Target	1st year	5 years	10 years	25 years
Protect – acres	500	2,500	5,000	15,000
Protect – cost ($3,000 per acre)	$1,500,000	$7,500,000	$15,000,000	$45,000,000
Restore\enhance – acres	1,000	5,000	10,000	20,000
Restore\enhance – cost ($3,500 per acre)	$3,500,000	$17,500,000	$35,000,000	$70,000,000

The $3,500 cost per acre to restore and enhance wetlands is more than double the next highest cost estimate from another section's meeting participants. Southeast Forest participants said the costs are "construction and seeding."

Habitat

The professionals created three aquatic habitat categories:

- **Lakeshore and reservoir acres:** a 200-foot wide buffer strip surrounding a lake or acreage to expand a reservoir.
- **Mississippi River "backwaters:"** off-channel habitats within the river's floodplain.
- **Streams and rivers:** a 50-foot wide buffer strip along cold water streams and warm-water rivers and streams.

The reservoir acres are purchased land that would be flooded because this section does not have many natural lakes. The river and stream targets were based on participating aquatic conservation professionals' recommendations.

[4] A 200-mile long underground shale band that discharges groundwater along hillsides and feeds surrounding wetlands.

Lake shore and reservoirs (acres)

Target	1st year	5 years	10 years	25 years
Protect – acres	0	20	190	200
Protect – cost ($4,500 per acre for fee title)	$0	$90,000	$855,000	$900,000
Restore\enhance – acres	50	100	200	500
Restore\enhance – cost ($3,500 per acre)	$175,000	$350,000	$700,000	$1,750,000

Mississippi River backwaters (acres)

Target	1st year	5 years	10 years	25 years
Protect – acres	500	1,000	2,000	5,000
Protect – cost ($3,500 per acre)	$1,750,000	$3,500,000	$7,000,000	$17,500,000
Restore\enhance – acres	1,000	2,000	4,000	6,000
Restore\enhance – cost ($10,000 per acre)	$10,000,000	$20,000,000	$40,000,000	$60,000,000

Cold streams (shoreline miles)

Target	1st year	5 years	10 years	25 years
Protect – shoreline miles	5	50	125	250
Protect – cost ($75,000 per mile-easement)	$375,000	$3,750,000	$9,375,000	$18,750,000
Restore – shoreline and instream miles	5	25	50	125
Restore – shoreline and instream cost ($165,000 per mile)	$825,000	$4,125,000	$8,250,000	$20,625,000
Enhance – riparian miles	4	20	40	100
Enhance – riparian cost ($10,000 per mile)	$40,000	$200,000	$400,000	$1,000,000

Warm streams and rivers (shoreline miles)

Target	1st year	5 years	10 years	25 years
Protect – shoreline miles	5	30	75	250
Protect – cost ($75,000 per mile-easement)	$375,000	$2,250,000	$5,625,000	$18,750,000
Restore\enhance – shoreline, instream, and riparian miles	4	15	30	100
Restore\enhance – shoreline, instream, and riparian costs ($165,000 per mile)	$660,000	$2,475,000	$4,950,000	$16,500,000

Forests

Meeting participants separated the forest targets by upland and bottom land forests, and oak savanna. The upland and bottomland target was based on the Forests for the Future Plan with additional acreage for protecting bottomland forests and completing land acquisition for the Richard J. Dorer Memorial Hardwood State Forest. The oak savanna target is based on remaining acres that can be reasonably saved. Participants recommend that 20 percent of protected forest acres receive annual maintenance.

Upland and bottomland forests (acres)

Target	1st year	5-years	10 years	25-years
Protect – acres	1,000	20,000	35,000	75,000
Protect – cost ($4,500 per acre)	$4,500,000	$90,000,000	$157,500,000	$337,500,000
Restore\enhance – acres	2,000	25,000	60,000	120,000
Restore\enhance – cost ($700 per acre)	$1,400,000	$17,500,000	$42,000,000	$84,000,000

Oak savanna forests (acres)

Target	1st year	5-years	10 years	25-years
Protect-acres	500	2,500	4,000	6,000
Protect-cost ($4,500 per acre)	$2,250,000	$11,250,000	$18,000,000	$27,000,000
Restore\enhance-acres	1,000	7,000	12,000	22,000
Restore\enhance -cost ($1,500 per acre)	$1,500,000	$10,500,000	$18,000,000	$33,000,000

August 7, 2009, Rochester Meeting Participants

Adam Birr, Impaired Waters Technical Coordinator MN Department of Agriculture	Dustin Looman, Southern Minnesota Crew Manager, Minnesota Conservation Corps
Rich Biske, Blufflands Conservation Coordinator The Nature Conservancy	Bonnie Maffitt, Vice President Prairie Smoke Chapter of The Prairie Enthusiasts
Linda Dahl, Executive Director SE MN Water Resources Board	Mark Martell, Director of Bird Conservation Audubon Minnesota - National Audubon Society
Mark Ebbers, Trout and Salmon Program Consultant, DNR Fish and Wildlife Division	Don Nelson, Area Wildlife Supervisor DNR Fish and Wildlife Division
Jaime Edwards, Nongame Wildlife Specialist DNR Ecological Resources	John Nicholson, Assistant State Conservationist – Field Operations Natural Resources Conservation Service
Valiree Green, Forestry Specialist Senior DNR Forestry Division	Dick Peterson, Coordinator DNR Forests for the Future Program
Jeff Hastings, Project Manager Trout Unlimited	Ann Pierce, Program Supervisor Senior DNR Ecological Resources
Terry Helbig, Area Forest Supervisor DNR Forestry Division	Walter Popp, Program Supervisor DNR Ecological Resources
Nancy Kafka, Conservation Director Minnesota Land Trust - Southern Region	Kevin Stauffer, Supervisor DNR Area Fisheries
Mary Kells, Board Conservationist Board of Water and Soil Resources	Mary Stefanski, Winona District Manager Upper Mississippi River National Wildlife and Fish Refuge
Steve Klotz, Area Fisheries Supervisor DNR Fish and Wildlife Division	Tim Terrill, District Manager Winona Soil and Water Conservation District
Nicole Lehman, Environmental Specialist McGhie & Betts, Inc. Environmental Services	Jim Vogen, Region 12 Director Minnesota Deer Hunters Association (MDHA)
Terry Lee, Water Planner Olmsted County	Brian Watson, Manager Dakota County Soil and Water Conservation District

Public input meeting

Following is a summary of the Southeast Forest Section's public input meeting held August 7, 2009 in Rochester.

Participants

The table below shows the names of the participants at the public input meeting, and their organizational affiliation, if they indicated one.

Name	Organization
Jeff Broberg	Minnesota Trout Association; LCCMR; McGhie and Betts Environmental Services, Inc.
Bill Bruins	Zumbro Valley Audubon; SEMN Forest Landscape Committee of FRC
Joel Dunnette	Zumbro Valley Audubon; Prairie Smoke/TPE
Bob Fitch	Minnesota Nursery and Landscape Association
Barb Herbertz	City of Rochester – Public Works Department
Kyle Herring	Herring Exterior Design
Jesse Hockstra	RNeighbors
Rene Lafflam	RNeighbors, Rochester Neighborhood Resource Center
Nicole Lehman	McGhie and Betts Environmental Services, Inc.
Andy Masterpole	Yaggy Colby Associates
Ray Ramon	Lake Zumbro Forever, Inc.
Nate Runke	Maier Forest and Tree
Al Schacht	Minnesota Forestry Association
Jason Schilling	RNeighbors
Bob Sixta	RNeighbors and ERC
Gary Sobotta	Trout Unlimited
Aaron Stelpflug	RNeighbors
Richard Tiede	
John Weiss	Post-Bulletin

Responses to questions:

Comments on today's professional session (from one person who observed):

- I was impressed with the expertise and thoughtful comments by the professionals. The most revealing comment was about undercounting wetlands potential based on beaver fur trade effects. People were ready with suggestions and it was a dynamic meeting and interactions; debate on the numbers.

Comments from all participants:

What do you think are this region's greatest needs?

- Restoration of Lake Zumbro. It is a much used area, only one we have around.
- Completion of the Dorer Forest purchases.
- Cold and warm water stream restoration.
- Maintenance of existing public land.
- Acquisition of additional public land. We don't have that much in this section.
- Protection and enhancement of forest around Rochester.
- Development of action plan related to impact of EAB and how it relates to wetlands and forest. Exportation of ash trees in general.
- Consider an integrated landscape approach. In the bluffs, we have everything from wetlands to prairie in the same place.
- Better enforcement of rules on the books to protect our natural resources.
- Maintenance and protection of our urban forest. Ten years after EAB goes through, people will think it was needed.
- Our plans aren't comprehensive enough for greenway, open space planning. Other parts have done it and know what to protect. We are not as competitive in getting these grants because we haven't done step A (inventory and planning).
- A corollary, trout groups have spent a lot of time developing strategic plan. I didn't see many of these plans had been used.
- We listed all the plans when we did some planning for this area.
- In statewide plans: we are often left out. There's a bias towards the northern region.

What would you like the counsel to accomplish for this region?

- $50 million a year.
- 300 miles of trout stream restoration-instream restoration. Does economic impact play into how plans get funded? If a project creates higher economic use, does it get a higher priority?
- Funding for restoring 200 acres of Lake Zumbro.
- The Council should provide equity around the state and integrate how money is being spent from other sources. Synergize rather than spend little amounts here and there from all the different funds (Lessard, Parks) Also we need a more equitable distribution of public lands. We have a higher need for acquisition in this part of the state.
- More connectivity of our corridors. Closing the gaps.
- Assure us that we get our fair share of the dollars for projects in our area.
- Stop the decline in formerly common birds, see them rebound: meadow larks, red woodpeckers, etc.

- Integrate the idea that an urban area like Rochester can impact the streams, rivers, and lakes surrounding the city. Quantify how the city impacts the environment.
- Projects that get the most bang for the buck: leverage unique resources, money and volunteers. Most efficient use of funds.
- Protect 80 percent of our groundwater supported wetlands.
- Get the professionals' numbers from today of prairies restored and protected.
- Where DNR has data on critical habitat for rare species, DNR takes the lead in acquiring, not expecting the local governments to acquire them.
- Warm water stream restoration.

Do you have any other general advice or comment for the Council?

- The economic impact component: At the beginning of the 25 year plan, get the most matching funds and volunteers, and go after the projects that generate the highest economic return for the dollar spent - utility. A trout stream that is enhanced will see its use go from 300 to 1,000. You restore Lake Zumbro and you get many more people.
- As a component of any fee title or easement, there should be a management plan and a funding request to accomplish it.
- Urban forestry: it is in the cities and towns where we have the greatest opportunity for environmental improvement, because that is where the damage happens.
- Has Darby realized on how diverse the different regions are? (Darby's response: Yes, I've gotten a feeling reflecting the difference in land and resources, but also a commonality of protecting prairie. Despite the variation in flavor, there's also been commonality.)
- It should be a goal of all these groups governing natural resources funds to work together. L-SOHC and LCCMR could work together. That a person could come with one application for all the funds. The same form, process and schedule. Then projects could use funds from all the different funds (LCCMR, Lessard, Parks, Cultural).
- We have a state forest legacy plan and the state will acquire it. The state should communicate which legacy properties will be acquired. The plan was prepared by DNR but has not been shared with the people on what property will be acquired. When there's a project, it should be communicated to the people. If DNR is in negotiations, they should tell the public that the land is being acquired.

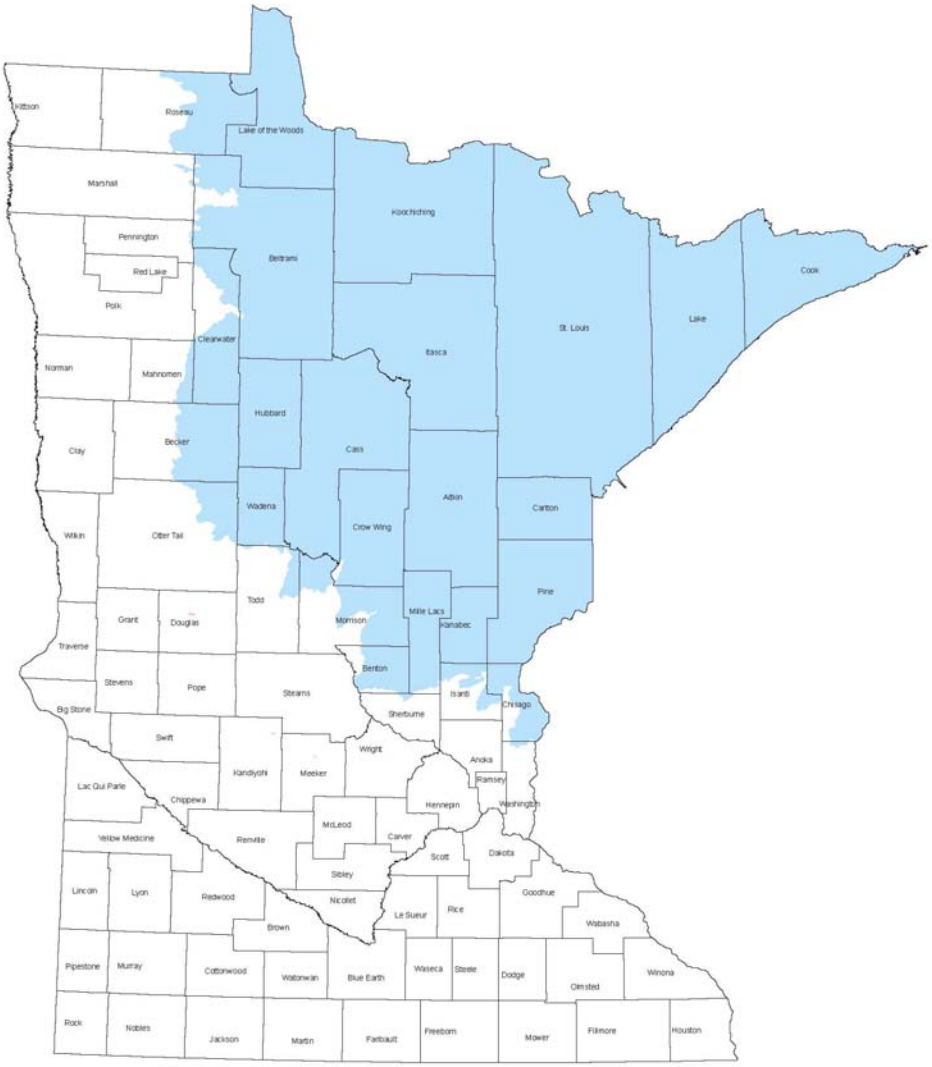
Comments received during draft review period

The following comments were received during the draft review period, between August 27 and September 9, 2009. They are listed in the order they were received, and the topic of each comment is shown in the first column. The third column indicates any change made to the draft document as a result of the comment, or refers readers to other sections of this report that discuss a similar topic.

Topic	Comment	Change made
Need to involve non-government entities.	Dear Lessard-Sams Council Members, I understand the development of the Strategic Plan for the state, as it relates to the Outdoor Heritage Fund has been a difficult, but important process that will set forth the guidelines over the next 25 years, and ultimately guide conservation management for the future. I attended the Conservation Professionals meeting that was held in Rochester on Friday, August 7, 2009 and appreciate the participation among professionals in attendance, and believe everyone provided comments that were in the best interests of the Southeast Forest Section as a whole. However, I do feel the meeting attendees were slightly weighted towards MNDNR professionals, therefore the ability for the group to consider all entities with the desire to build strategic partnerships was under represented. Simply stated, the targeted goals reflected for prairies, wetlands, aquatic habitat, and forests in the "Southeast Forest Section's Preliminary Goals and Objectives 25-Year Targets" only considers work that could potentially be completed by state agencies, such as the MNDNR, whose current capacity is already limited due to funding. In addition, not a single conservation professional mentioned or considered the efforts that could be completed on a local level through the Conservation Partners Legacy Grant Program, which allows for funding of project up to $400,000. With the passage, of the Clean Water, Land and Legacy Amendment, supported by Minnesota citizens, I think this is an opportunity to "think outside of the box" and also consider the local, non-profit organizations and their ability to come together and accomplish projects that will protect, enhance and restore Minnesota's landscape. Sincerely, Nicole E. Lehman Environmental Specialist McGhie & Betts Environmental Services, Inc. September 9, 2009 *Commenter attended conservation professionals meeting*	
Definitions and habitat categories	Thanks for the opportunity to add comments into your planning process. There are two specific items that I feel need to be addressed in a more comprehensive manner: 1. Definitions of "protect, enhance, restore" and Scope of eligible projects 2. The ways and means by which the constitutional charge to address wetlands, prairies, forests and habitat funding requests will be administered. **First to the definitions.** While I understand the need and desire to prevent mission drift and wavering purpose it is equally important to meet the	

Topic	Comment	Change made
	conservation needs of Minnesota with a practical view of meeting the demands. I believe that the term "protect" is more encompassing than the mere act of purchasing land or easements. Protection first requires knowledge and a solid foundation of the features deserving protection. Wetlands are the classic example. Until the first National Wetland Inventory Maps and the development of the Cowardin and USFWS system and the Corps of Engineers manual Minnesota's Wetland Conservation Act was not possible. The science to define and delineate the wetlands was a critical element to the protection. Without this foundation work the question was "what are we protecting?" In the same regard protection can encompass the development of statutes, rules and ordinances and the acts associated with enforcing the adopted rules. These are all legitimate acts of protection. When viewed in the context of the variability of natural resources across Minnesota different regions need different levels of protection. For example in Northern Minnesota where public land is abundant protection through policies and ordinances or more rigorous enforcement of existing rules may be more important than purchasing more land. On the other hand prairies in southern Minnesota may need both public ownership, private incentives and statutes, rules or ordinances that can be enforced. It seems to me that the definitions should be as broad as the Webster's Dictionary and the Requests for Proposals and the initiatives from year to year should focus on the precise elements that will be effective. We cannot be truly effective if we leave any of the tools for protection **Wetlands, Prairies, Forests and habitat.** I fear that the approach of dealing with these distinct ecological elements does not allow for landscape level resource management. We risk shortchanging the ecological system if we seek out or categorize projects solely by the silos adopted in the Constitution and we need a more comprehensive approach. It is my opinion that last year the lumping of groups and proposed projects by the narrow categories of wetlands, prairies , forests and habitat did not provide resource managers or conservation groups to take a comprehensive view of the problems or the solutions. As an example a Watershed project that has priorities across the spectrum of the landscape was limited to only applying to a single category. It is my advice that applicants should still have to be specific about the impact they will have on each category but they should have the opportunity to address more than one category at a time. Thank you for the opportunity to comment and thank you all for the time and effort you have devoted to Minnesota's resources. Jeffrey S. Broberg, President Minnesota Trout Association September 9, 2009 *Commenter attended the public input meeting*	See also discussion about definitions and work with private landowners in "common discussion themes." See also, "suggestions for future planning processes."

Northern Forest section summary



Conservation professionals' meeting

Following is a summary of the Northern Forest Section's conservation professionals' meeting held August 11, 2009 in Grand Rapids.

Summary Table

	Target	1st year	5 years	10 years	25 years
Forest	Acres protected	270,000	550,000	1,135,000	1,700,000
	Acres restored\enhanced	92,000	960,000	1,970,000	6,300,000
	Cost (all fund sources)	$153,900,000	$1,103,900,000	$2,386,400,000	$7,123,900,000
Wetlands	Acres protected	3,000	15,000	30,000	75,000
	Acres restored\enhanced	4,000	20,000	40,000	100,000
	Cost (all fund sources)	$18,000,000	$90,000,000	$180,000,000	$450,000,000
Aquatic habitat	Acres protected	30	300	760	1,520
	Acres restored\enhanced	3,000	15,000	40,000	85,000
	Shoreline miles protected	100	900	2,050	4,500
	Shoreline restored\enhanced	110	1,400	2,900	7,000
	Cost (all fund sources)	$8,815,000	$109,500,000	$257,400,000	$547,500,000
Total costs (all fund sources)		$180,715,000	$1,303,400,000	$2,823,800,000	$8,121,400,000

No prairie targets were developed.

Priority Characteristics and Actions

The professionals provided landscape characteristics that should be the highest funding priorities and priority actions for protection, restoration and enhancement. These are summarized below, in the order they came up in discussion. These characteristics and actions were in addition to those recommended by the plans that were reviewed at the Council's request (also summarized by source). No prairie targets were developed, and meeting participants did not spend much time discussing wetlands because many of the protected forested acres include an unknown number of "forested wetlands."

Priority landscape characteristics

For Forest Protection in the Northern Forest Section

Give priority to forest protection programs with these features:

- Aquatic components – lakes and rivers and known fisheries.
- Protection of riparian forests.
- Working forests with multiple public benefits, recreation, etc.(Forests for the Future)
- Parcels that put together existing lands to create unfragmented landscapes.
- Habitat for northern forest species at the southern edge of their range.
- Open access, not only to the easement protected lands but the lands that lie beyond them.
- Rare habitats that are not well "protected."
- Maintenance of early succession component.

- Species that need large continuous area.
- Parcels that provide access to landlocked public parcels.
- Parcels that allow for the management of shallow lakes or wetlands – key parcels at an outlet, for example.
- Small forested watersheds – where changes in land use have a major impact.
- Eliminate incompatible inholdings.
- Contain areas of statewide biodiversity significance identified by the Minnesota County Biological Survey.
- High-conservation value forests (high environmental, biodiversity and landscape values)– in working forests.
- Critical habitat for endangered, threatened and rare species (Wildlife Management Area Acquisition Plan)..
- Complements to other public lands to create corridors and protect larger blocks of land (Wildlife Management Area Acquisition Plan).
- Complete existing Wildlife Management Areas (Wildlife Management Area Acquisition Plan).
- Contain sharp-tail grouse habitat (Wildlife Management Area Acquisition Plan).
- Old growth forests ("vulnerable acres" target) and protect large blocks (100 acres or more) near existing protected parcels (Statewide Conservation and Preservation Plan).

For Habitat Protection: in the Northern Forest Section

Give priority to habitat protection programs with these features:

- Wetland complexes of habitat.
- High quality lakes that support cold water lake species.
- Riparian lands defined as sensitive shorelines. Definitions have been developed in Cass County and could be used elsewhere.
- The Stream Habitat Protection Program has a recommended prioritization:
    - Fix root causes of problems – address causes rather than symptoms.
    - What is the scale of the impact – localized or a dam that affects miles?
    - Ecological function
    - What is the potential for recovery upon completion?
    - Is it critical habitat – rare or very important?
    - The extent of landowner and community support.
    - Is there a critical timing issue – a chance to do it now or lose an opportunity.
    - Feasibility and viability of the project.
    - Compatible with other resource plans.
    - Professional judgment based on data collection – something can be of high value even if it is in a small area.
- Provides habitat for a rare species – e.g., mussel and turtles.
- Lands that connect already protected lands.
- Focus more on ecological function than on individual species – all the organisms that make it a healthy system.
- Lakes with small wooded watersheds susceptible to development.
- Lakes lightly developed or undeveloped – higher priority for protection.
- Restore shoreland buffers, prefer a native buffer
- Lakes minimally impacted by invasive species.

- Early succession habitats – those large brushlands – they overlap
- Lakes that have historically supported natural wild rice.
- Wild rice wetlands and shallow lakes that provide exceptional and unique habitat for a wide range of game and non-game wildlife.
- Cold water source areas for cold water streams.
- Estuaries and lakes with significance to waterfowl.
- Many small basins (9 acres each, on average) and permanent wetlands for migration (Duck Recovery Plan).
- Provide winter cover (Pheasant Plan).
- Protection mostly through easement.

Priority Restoration and Enhancement Actions

For Forest Restoration and Enhancement in the Northern Forest Section

Give priority to forest restoration and enhancement programs with these features:

- Riparian – such as to burn riparian meadows in a prairie landscape. Appropriate restoration of riparian areas.
- Use ecological classification tools in silviculture management.
- Fight or remove invasive species and re-vegetate with native.
- Large woody habitat.
- Where certain rare resources are in public ownership and management may be limited by trust fund, buy out the trust to allow management for the rare resources on the trust fund land, e.g., old growth.
- Use of intermediate stand treatments: timber stand improvements and prescribed burning.
- Actions to take care of early succession habitats such as shearing, mowing, not only small scale things but large scale for species such as sharp tailed grouse.
- Data acquisition from private lands.
- Enhanced use of prescribed and natural fire where appropriate.
- Pine underplantings with follow-up protection from deer browse.
- Support for partnerships in land management.
- Money for follow-up to assess whether plans are doing what we expect.
- Money to support chairperson or data person for multiple-ownership collaboratives.
- Selection of regionally appropriate restoration endpoints.
- Control invasives in rare natural species habitat.
- Increase the amount of forest land through planting and seeding.
- Use easements to protect large forest holdings and 90 percent of small forest holdings.
- Convert aspen/balsam poplar to upland pine for forest wildlife habitat and maintain and enhance oak component for timber and wildlife benefits (DNR Subsection Forest Resources Management Plans)
- Increased component of red, white and jack pine, cedar, tamarack, spruce and fir; range of species, patch sizes, and age classes that more closely resemble natural patterns and functions; natural range of variability; and diverse habitat to support a number of animal and plant species (Minnesota Forest Resources Council –Northeast, North Central and East Central plans).

For Habitat Restoration and Enhancement: in the Northern Forest Section

Give priority to habitat restoration and enhancement programs with these features:

- Focus on shorelines before they are disturbed – get ahead of it because restoration is very difficult and expensive.
- Beaver control and (human) dam removal and beaver dam removal
- Enforcement of existing regulations and reduced use of variances.
- Management to increase input of woody material.
- Instream and riparian restoration.
- Shoreland reserve – a complement to conservation easement.
- Watershed scale – part of larger plan – focus the restoration projects to have a watershed goal.
- Analyze the watershed and collect data to identify projects as opposed to picking projects that are “shovel ready.”
- Protect mostly through easements.
- Watersheds with agricultural impacts. Cattle crop dusting with run off into water sheds for example, nutrient run off.

Forests

The forest protection targets were divided into large holdings (ownership greater than 5,000 acres) and small holdings (under 5,000 acres) due to different protection costs. The large-holding protection target is based on the top-ten commercial landowners' current acreage. The first-year target includes the State of Minnesota and Blandin Paper Company (UPM)'s 187,300-acre conservation easement agreement, which received Outdoor Heritage and private funding.[5] Participants recommended that the entire 900,000 large holdings target be completed within ten years, or the opportunity will be loss.

The small-holding target is based on estimates of current easement activity and how much forest has been lost since pre-settlement. The forest targets include St. Croix headwater forests identified by Metro section participants as critical.

Target	1st year	5-years	10 years	25-years
Protect large holdings–acres	260,000	500,000	900,000	900,000
Protect large holdings–cost ($240 per acre in 1st year; $350 per acre for remaining years)	$62,400,000	$146,400,000	$286,400,000	$286,400,000
Protect small holdings–acres	10,000	50,000	235,000	800,000
Protect small holdings–cost ($1,000 per acre)	$10,000,000	$50,000,000	$235,000,000	$800,000,000
Restore\enhance – public acres	50,000	500,000	1,000,000	3,600,000
Restore\enhance – private acres	30,000	400,000	850,000	2,400,000
Restore\enhance – brushlands	12,000	60,000	120,000	300,000
Restore\enhance – cost ($1,000 for forest; $125 per acre for brushlands)	$81,500,000	$907,500,000	$1,865,000,000	$6,037,500,000

The large holdings protection's $240 cost per acre is based on the State of Minnesota – Blandin Paper Company (UPM) agreement. Participants gave a $300-$450 per acre for future-year "working forest conservation easements." The small holding protection cost per acre assumes 90 percent are conservation easements at $500-$1,000 per easement acre and ten percent are fee title at $2,000-$4,000 per acre. Brushlands are included in the protection targets but separated for the restore and enhance targets. Brushland restore and enhance costs are based on a range of $50 per acre for prescribed burning to $200 acre for mowing.

The restore and enhance forest targets are approximately half of existing forest lands. The brushlands target is based on DNR Forestry staff's post-meeting GIS analysis which identified brushland habitat by land ownership within 3.6 kilometers of known sharp-tailed grouse "dancing grounds" or leks. The forest and brushland targets include private lands with and

[5] http://news.dnr.state.mn.us/index.php/2009/06/03/upper-mississippi-forest-lands-protected-forever/. The easement purchase should be completed by December 31, 2010.

without easements, which are eligible for federal funds. Participants said it was critical to include privately owned lands and privately protected (easement) lands for the greatest ecological benefits.

Wetlands

Meeting participants did not spend much time discussing wetlands because many of the protected forested acres include an unknown number of "forested wetlands." The wetlands discussed here are other wetland types, including mining reclamation ones. The Board of Water and Soil Resources' Northeast Wetland Mitigation Inventory and Assessment Project estimates over 1 million acres for potential wetland mitigation. Priority landscape characteristics or actions were not discussed.

Target	1st year	5 years	10 years	25 years
Protect – acres	3,000	15,000	30,000	75,000
Protect – cost ($5,200 per acre)	$15,600,000	$78,000,000	$156,000,000	$390,000,000
Restore\enhance – acres	4,000	20,000	40,000	100,000
Restore\enhance – cost ($600 per acre)	$2,400,000	$12,000,000	$24,000,000	$60,000,000

Participants gave a $300 to $10,000 protection cost per acre, so the $5,200 midpoint is used. Participants did not provide an estimated restore and enhance cost per acre, so the Forest-Prairie Transition Section's $600 per acre is used.

Habitat

The professionals created three aquatic habitat categories:

- **Lakeshore and St. Louis River estuary miles:** a 25-foot wide buffer strip along a lake or the estuary.
- **Shallow lakes:** lakes less than 15 feet deep.
- **Streams and rivers:** a 25-foot wide buffer strip along each side.

Participants doubled the Aquatic Management Acquisition plan targets to also address impaired waters and to protect fragile cold-water streams. The lakeshore and estuary miles are based on the Nature Conservancy's identified lakes portfolio and to protect the St. Louis River estuary. The shallow lakes target is based on current DNR and tribal efforts.

Lake shore and estuary (miles)

Target	1st year	5 years	10 years	25 years
Protect – miles	25	300	700	1,500
Protect – cost ($33,000 per mile)	$825,000	$9,900,000	$23,100,000	$49,500,000
Restore\enhance – miles	10	200	500	1,000
Restore\enhance – cost ($264,000 per mile)	$2,640,000	$52,800,000	$132,000,000	$264,000,000

Protection costs are based on the midpoint of $1,000-$20,000 per acre, which Management Analysis converted to $33,000 per mile, assuming a 25-foot buffer. Restoration and enhancement costs are based on $50 per linear foot using the participants' range of $25 to $125 per foot and DNR lakeshore restoration program staff's experience of $40-$50 per linear foot. Forest-Prairie meeting participants provided a similar restore and enhance cost estimate of $250,000 per lakeshore mile.

Shallow lakes (acres)

Target	1st year	5 years	10 years	25 years
Protect – acres	30	300	760	1,520
Protect – cost ($2,800 per acre)	$84,000	$840,000	$2,128,000	$4,256,000
Restore\enhance – acres	3,000	15,000	40,000	85,000
Restore\enhance – cost ($1,000 per acre)	$3,000,000	$15,000,000	$40,000,000	$85,000,000

Participants' shallow lake protection targets were converted from shoreline miles to acres (approximately 3 acres per mile, assuming a 25-foot buffer). Protection cost per acre is the midpoint of $500-$5,000. Participants did not provide an estimated restore and enhance cost per acre, so the Forest-Prairie meeting's $1,000 per acre is used.

Streams and rivers (miles)

Target	1st year	5 years	10 years	25 years
Protect – coldwater miles	50	400	900	2,000
Protect – warm water miles	25	200	450	1,000
Protect – costs ($58,000 per mile)	$4,350,000	$34,800,000	$78,300,000	$174,000,000
Restore\enhance –miles	100	1,200	2,400	6,000
Restore\enhance – cost ($10,000 per mile)	$1,000,000	$12,000,000	$24,000,000	$60,000,000

Protection cost per mile based on the Northern Forest section's 2008 farm and timber land values that DNR uses for stream conservation easements, per Minnesota Statute 84.0272. Restoration cost per mile provided by DNR Fisheries Section, and assumes a 25-foot buffer. Restore and enhance target miles should be equally divided between cold- and warm-water streams.

August 11, 2009 Grand Rapids Meeting Participants

Cheryl Adams, Forest Ecologist UPM, Blandin Paper Mill	Rebecca Knowles, Plant Ecologist/ Planner, Leech Lake Band of Ojibwe
Jim Ballenthin, Chair Cass County Soil and Water Conservation District	Bob McGillivray, Senior Project Manager The Trust for Public Land
Bruce Cox, Clearwater County Land Commissioner	Lynn Mizner, Chair Minnesota Society of American Foresters
Paul A Dubuque, Natural Resources Forestry Specialist Senior, DNR Division of Forestry	Jon Nelson, Forest Policy & Planning Coordinator, DNR Division of Forestry
Tom Duffus, Upper Midwest Director The Conservation Fund	Art Norton, Field Representative The Nature Conservancy
Bill Faber, Natural Resources Instructor Dept. of Natural Resources Central Lakes College	Dave Olfelt, Assistant Regional Wildlife Supervisor, DNR Fish and Wildlife Division
Francis Fitz Fitzgerald, Director of Conservation Northern Region, Minnesota Land Trust	Dick Peterson, Program Coordinator DNR Forests for the Future
Walt Ford, Refuge Manager Rice Lake & Mille Lacs NWR	Kathleen Preece, Coordinator, MN Forest Resources Partnership; Family forest representative, MN Forest Resources Council
Craig Halla, Region Manager Forest Capital Partners	Jodi Provost, Private Lands Specialist DNR Fish and Wildlife Division
Maya Hamady, Senior Natural Resources Specialist DNR Ecological Resources Division	John Ringle, Fish and Wildlife Director Leech Lake Band of Ojibwe
John Hiebert, Natural Resources Program Consultant, Shoreland Habitat Program DNR Division of Fish and Wildlife	Pat Rivers, Project Manager Midwest Glacial Lakes Partnership
Steve Hughes, District Manager Aitkin County Soil and Water Conservation District	Kurt Rusterholz, Forest Ecologist DNR Division of Ecological Resources
Jay Huseby, Wildlife Director Red Lake Band of Chippewa DNR	Jim Sanders, Forest Supervisor Superior National Forest, Duluth
Lucinda Johnson, Senior Research Associate Natural Resources Research Institute	Paul Sandstrom, Coordinator Laurentian RC&D, Natural Resources Conservation Service
Rick Klevorn, Silviculture Program Leader DNR Forestry Division	Dan Steward, Water & Soil Conservationist Board of Water & Soil Resources
Karl Koller, Program Administrator DNR Region 2 Cleanwater Legacy	Mike Schrage, Wildlife Biologist Fond du Lac DRM
Bob Krepps, St Louis County Land Commissioner	Steve Wilds, retired U. S. Fish and Wildlife Service, Upper Great Lakes Woodcock and Young Forest Initiative

Public input meeting

Following is a summary of the Northern Forest Section's public input meeting held August 11, 2009 in Grand Rapids.

Participants

The table below shows the names of the participants at the public input meeting, and their organizational affiliation, if they indicated one.

Name	Organization
Dennis Good	Dark River Basin Association
David G. Holmbeck	Citizen (retired DNR)
Mike Hughes	Minnesota United Snowmobilers Association; Itasca County Transportation Task Force; Itasca County Park and Recreation Commission
Wayne Jacobson	
Mark Johnson	Minnesota Deer Hunters Association
William Sayward	Itasca Greenhouse
Mike Schrage	Fond du Lac Reservation Management Division
J. Suell	
Jack White	Minnesota United Snowmobilers Association; Northome City Government

Responses to questions:

General reactions from those who observed the process during the day: Do you have any suggestions to add?

- It was a difficult job, like throwing darts. It was good interchange. One corporate landowner, who suggested the number of acres and cost – it was like he was negotiating to get more from OHC. As he was talking about the potential fragmentation, saying if you don't buy it quickly you'd lose it. That is skewed. I also thought an agency person overstated impaired streams, to get more dollars. I don't buy that there are 2,000 miles of impaired streams. I've seen rivers at the headwaters that are clear, then they go through lake bed that causes them to become turbid, that is a natural turbidity. Resource managers are too quick to jump on the idea that the pollution is man-made. To restore, the bar is very difficult, but the money comes readily for restoration. Sort out the natural turbidity versus man-made. About the definitions: I hope the council moves towards more established definitions. The three definitions don't work and each person understands them differently. Move towards more defined terms, through rules (CFR, WCA, PCA water quality) that are more set in stone. What is a working forest? Does a working forest account for old growth? On the wetlands, the BWSR staff would have good feel for wetland protection and restoration needs.
- The restoration definition, you imply that something has to be restored because it is degraded. That definition is sufficient. I think we are being over-optimistic of what we can do and underestimating the time and money it will take.

- I second the previous two speakers. Tell the invited professionals to come prepared. You could be misleading the public. There is a lot of knowledge in the room, so give them six weeks to prepare. Then we could get something together that is powerful and we can tell the Legislature these are where the numbers came from, but it was really a guessing session. I'm very scared of emerald ash borer. I have lots of experience with other outbreaks. If you don't do something now, you are going to have a big problem.
- The priority actions and characteristics lists were pretty good overall. It is unfortunate that we didn't spend more time advising the council where projects should be done and what kind of priority projects. My sense was that the group didn't have a lot of confidence in the numbers. Maybe not the right group to come up with the cost numbers, perhaps have realtors do that. I hope the council doesn't rely too much on numeric targets to measure success. You can cut acres of aspen and say you've maintained ruffed grouse habitat. It is not necessarily the critical need for Minnesota. The council should spend more time on the critical habitats rather than what projects met numeric targets.
- My impression of the day was that it was throwing darts at numbers. That's not necessarily a bad thing. We had a lot of expertise, except for wetlands. This section is a big area to concentrate on. Everyone in here had their own agenda, which is fine, all different perspectives. We saw some pull and push. What impressed me the most was the immensity of the work for this region. It is five times what the council could fund. Our goals are probably not realistic with all funding sources. The one year targets were fairly appropriate. I don't envy the council. They have a huge job. It is going to be an evolution. The council will have to learn as they go. The expertise to rate the first set of projects. The councils have a let of steps to go through. The individual agendas won't get through.
- I appreciate having these public meetings. I encourage the council to have some peer review for these projects. For all these upcoming projects, they should have some kind of peer review, whether it comes from NGOs or the DNR.

Comments from all participants:

What do you think are this region's greatest needs?

- Be more worried about protecting what you have, and put less emphasis on restoration and enhancement. Keep what you have now and focus on it. Protect and add to it.
- Correcting man-caused problems. Like a creamery polluting a water source.
- Forest fragmentation and parcelization.
- Be ahead of threats to natural resources: EAB, bliss rust (you can't restore a pine forest if BR is not conquered), gypsy moth. Stay ahead of them.
- Enhanced recreational opportunities. Fish stocking. Protect waters from invasive species.
- Deer and other animal browse. We don't see natural regeneration due to these populations eating the seed.
- This goes with forest fragmentation: the development of private parcels and cabin creep and the loss of public access to land that was historically open (corporate forest timber land).

- There is a great need for trails for motorized vehicles, especially ATVs, which have very little trails. So they ride anywhere, which degrades the landscape. You'll reduce measurably the damage to the landscape (by providing more trails).

What would you like the counsel to accomplish for this region?

- You're looking at 25 years. A long journey starts with a single step. So you need to look at where you want to go and how you'll get there. So break it down into bits that are manageable and reasonable.
- Aggressively pursue thru easement or purchase, protection of undeveloped land for fish, wildlife and outdoor recreation. The council has done a good job of doing this, but this is an immediate need because once the land is sold off and subdivided, you don't get the land back.
- I echo the first two statements, especially the second one. Evaluate the projects so you hold people to what they said they were going to do. The Bear Creek project – that is dead, despite all the work that went into it.
- Improve the waters. There are rural septic systems that are failing and are detrimental to the health of water. The council should recommend a low interest loan program for people to replace failing systems. "Cash for dumpers."
- Non-industrial landowners, the small forest landowners, I'm not sure what's allowable within the constitutional language. Working with them to advise or help them manage their properties for timber and wildlife.
- Encourage non-industrial landowners to have a forest management plan.

Do you have any other general advice or comment for the Council?

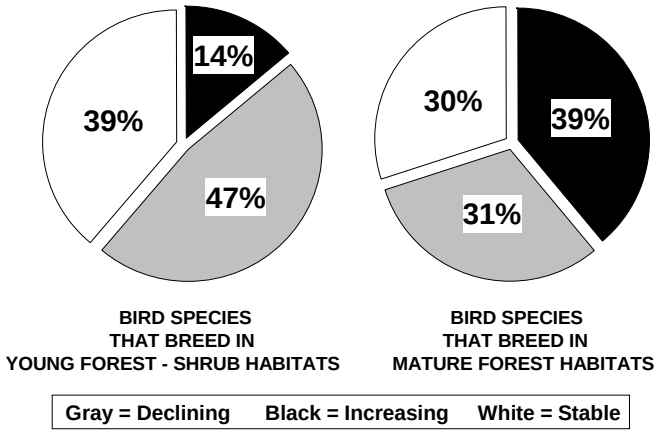
- I want to touch back on the peer review suggestion I made earlier. That should be not just on the merits or lack of them for these projects, but also the science and methodology in them that have to be examined, too. There are a lot of funny things going on there.
- Manage people's expectations. There was a lot of hype to get the bill passed. As discussed this morning, protection is cheaper than restoration. Take it one step at a time, one project at a time. Loans for septic systems won't work. People don't want to admit they are contributing to the problems.
- I loved my career with the DNR over this area, and got to know it. I was in southern Minnesota with the staff from there who wanted to picnic at a lake, which I'd say was pea soup. I hope the money goes to where it is needed: in southern Minnesota where the damage was done and where the people are.
- Trails: we have 18,000 miles in Minnesota. Whatever is done to improve the landscape and waters, it should not be done to the detriment of the trail system. The trail associations may be willing to work with the council in the planning to make sure that would happen. I can't guarantee the associations would help, but there's lot of them.
- The easement purchase for UPM. The council should look at big projects and not shy away from them. There is a lot of opportunity to do something in one fell swoop.

- The council should think big picture and long term, not just shoot for short benefit and gain. The council has been very active with its 33 percent of the money. Are there other councils set up for the other uses of the sales tax? (Bill Becker responded about legislative committees and statute directing use of the other funds).
- Right now, project proposers have no statutory requirement to have a public meeting. Public meetings should be required, not done at someone's discretion.

Comments received during draft review period

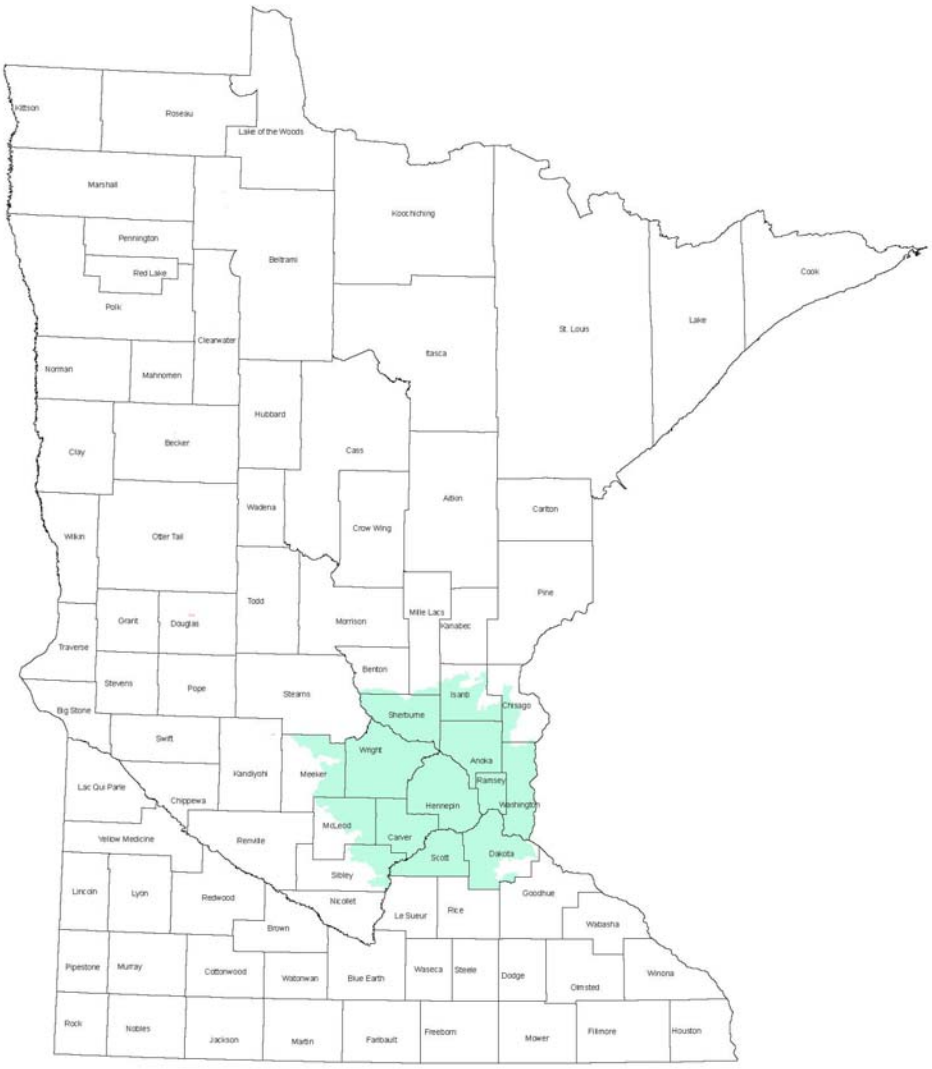
The following comments were received during the draft review period, between August 27 and September 9, 2009. They are listed in the order they were received, and the topic of each comment is shown in the first column. The third column indicates any change made to the draft document as a result of the comment, or refers readers to other sections of this report that discuss a similar topic.

Topic	Comment	Change made
Brushland target	Based on this analysis of habitat and land ownership within 3.6 km (2.16 miles) of current known sharp-tailed leks in the LMF (high priority for habitat-friendly farm practices and early successional habitat mgt.) - Private – Crop & disturbed grass (hay, pasture) = 246,000 acres + Undisturbed grass, sedge meadow, lowland shrub, and bog = 133,750 acres = 379,750 acres total Public Crop & disturbed grass = 11,230 ac Undisturbed grass, sedge meadow, lowland shrub, and bog = 130,460 acres = 141,690 acres total That's 521,440 acres of potential habitat, of which 264, 210 acres is brushland habitat (undisturbed grass, sedge meadow, lowland shrub, and bog) on public and private to maintain, restore, and enhance with repeated treatments such as prescribed fire, mowing, shearing or biomass harvest. In regard to your question Peter - the 264,210 of public and private brushland, and 11,230 acres of public crop and disturbed grass (275,440 ac total), are the least likely to be converted, and landowners most willing to manage for wildlife. Because the 3.6 km buffer is likely missing some habitat in the complexes that we've identified to target for management, not all leks are known, and there are places where "lek restoration" is desirable, please use a goal of 300,000 acres of brushland habitat in the LMF to restore and enhance with repeated treatments using all available funding sources, including L-SOHC funds, by DNR and our partners. Thanks for the chance to analyze this a bit more! Depending on how we look at the information, we may come up with a bit different figure each time, but at least now I feel comfortable that we've put data and better thought into our estimate. Jodie Provost DNR Fish and Wildlife Division August 27 Note: This commenter was the only participant who offered a brushland target at the meeting. She revised the figure based on analysis performed by Wes Bailey, Wildlife Research Biologist, DNR *Commenter attended conservation professionals meeting*	Brushland target was adjusted downward from 1 million acres to 300,000 acres.
Brushland habitats	Thank you for the opportunity to comment on the future direction for the Lessard-Sams Outdoor Heritage Council (Council). These comments are generated by a review of the 27 August draft of the Preliminary Goals and	

Topic	Comment	Change made
	Targets for the Northern Forest Section. The Ruffed Grouse Society supports efforts to maintain working forests on the landscape of northern Minnesota. These forests can help to sustain natural communities and rural economies. The Society endorses the emphasis outlined in the draft regarding the importance of enhancing brushland habitats for sharp-tailed grouse, American woodcock and other wildlife. Breeding Bird Survey (BBS) data document alarming declines for many bird species that breed in shrub or young forest habitats (Fig. 1). Note that 47% of the bird species that breed in shrub or young forest habitats have declined since 1966, whereas only 31% of birds that breed in mature forests have declined. Likewise, only 14% of bird species that breed in shrub or young forest habitats have increased since 1966, whereas 39% of birds that breed in mature forests have increased.  Figure 1. Breeding bird population trends for the BBS Eastern Survey Region (1966-2007). The Society is concerned that the draft recommendation to convert aspen forest communities to other forest types is in direct conflict with the breeding bird survey data outlined above and with public expectations regarding the role of the Council in enhancing habitats for game wildlife. It will not be possible to meet the Minnesota Department of Natural Resources' stated objective of sustaining ruffed grouse harvest levels at a yearly average of 600,000 birds if significant aspen habitat acreage is converted to other habitat types. Reductions in ruffed grouse populations will reduce hunting opportunity and economic benefits to local communities. The ruffed grouse is Minnesota's most popular game bird and generates $50 – 100 million annually to the states economy. The management of aspen forest habitats through clearcut regeneration harvests is the primary tool available to resource managers to sustain young forest habitats on the landscape. These important forest habitats are experiencing significant declines throughout the eastern United States. During the past several decades, young forest habitats have increased only in Minnesota and in Maine.	

Topic	Comment	Change made
	In February 2007, the American Bird Conservancy identified "Early Successional Deciduous Forests in the Eastern United States" as one of our nation's 20 most threatened bird habitats. Significant reductions in young forest habitat abundance in northern Minnesota will only exacerbate nationwide declines of young forest habitats and further complicate efforts to sustain populations of associated wildlife. In addition, such reductions would seriously threaten the continued viability of the seriously imperiled golden-winged warbler – the forests of northern Minnesota support 42% of the global population of this species. The Ruffed Grouse Society urges the Lessard-Sams Outdoor Heritage Council to support landscape conservation activities in Minnesota's northern forests that enhance conditions for wildlife dependent upon shrub-dominated and young forest habitats. Such actions will benefit both game and nongame wildlife, as well as the interests of Minnesota citizens as voiced in November of 2008. If you have any questions or comments, please don't hesitate to contact me. Thank you for your time. Dan Dessecker, Director of Conservation Policy Ruffed Grouse Society September 9, 2009 *Public Comment*	

Metropolitan Urbanizing section summary



Conservation professionals' meeting

Following is a summary of the Metropolitan Urbanizing Section's conservation professionals meeting held August 6, 2009 in St. Paul.

Summary Table

	Target	1st year	5 years	10 years	25 years
Prairie	Acres protected	500	10,000	30,000	81,100
	Acres restored\enhanced	4,700	23,500	47,000	118,700
	Cost (all fund sources)	$16,750,000	$158,750,000	$417,500,000	$1,107,750,000
Wetlands	Acres protected	1,000	10,000	36,000	90,100
	Acres restored\enhanced	2,300	11,500	23,000	58,000
	Cost (all fund sources)	$12,140,000	$100,700,000	$329,400,000	$825,200,000
Aquatic habitat	Acres protected[6]	3,000			15,000
	Shoreline miles[7] protected	18	45	90	176
	Shoreline restored\enhanced	25	125	250	600
	Cost (all fund sources)	$27,474,000	$9,360,000	$18,720,000	$157,828,000
Forest	Acres protected	1,000	20,000	50,000	138,100
	Acres restored\enhanced	4,000	20,000	40,000	100,000
	Cost (all fund sources)	$24,000,000	$300,000,000	$720,000,000	$1,957,200,000
Total cost (all fund sources)		$80,364,000	$568,810,000	$1,485,620,000	$4,047,978,000

Priority Characteristics and Actions

The professionals provided landscape characteristics that should be the highest funding priorities and priority actions for protection. These are summarized below, in the order they came up in discussion. Participants recommended a conservation corridor or system approach for protecting, restoring and enhancing the environment, saying that many actions will benefit watersheds.

Priority landscape characteristics

For Prairie Protection in the Metro-Urbanizing Section

Give priority to prairie protection programs with the following features:

- Capable of long-term sustainability.
- Connectivity and functionality on a landscape scale (rather than prairie/wetland/forest silos).
- Follow State Wildlife Action Plan for identifying habitats for species in greatest need of conservation.
- Maintenance practicality of fire dependent systems (smaller plots are harder to maintain).
- Focus on larger tracts.
- Prairie acquisitions that buffer wetlands.

[6] Shallow lakes only. Participants discussed watershed targets but did not set them due to insufficient information.
[7] Shoreline mile targets are for rivers and streams only, and exclude lakeshore miles due to insufficient information.

- Anoka Sandplain – key to protecting a whole range of plant communities.
- Water quality and a parcel's role in the watershed. Keep water where it falls for on-site water filtration and protecting aquatic habitat.
- Consider the relationship with other areas/boundaries just outside the Metro area. Prairie and forest eco-systems do not stop at these boundaries.
- Enhance aquatic systems and public waters.
- Locations that can provide interpretive or educational benefits.
- Groundwater restoration and protection.
- Consideration of our eastern border with Wisconsin and connectivity with their efforts.
- Landowner willingness to sell.
- Four to nine square-mile complexes, at least 20% wetlands (at least 50% are seasonal) and 40 percent grasslands (Duck Plan).
- Native prairie and grassland; critical habitat for endangered, threatened and rare species;
- Northern Anoka County, Mississippi and Vermilion river corridors and Carlos Avery WMA (Wildlife Management Acquisition Plan).
- Farmlands containing a mixture of cultivated grains, undisturbed grasslands, and wetlands. Undisturbed grass habitats for nesting and brood rearing (Ringed-neck Pheasant Plan).
- Anoka Sandplain and tallgrass and oak savanna prairie (Statewide Conservation and Preservation Plan).

For Wetland Protection in the Metro-Urbanizing Section

Give priority to wetland protection programs with the following features:

- Participants believed that the list they developed for prairie protection equally applied to priorities for wetland protection – see above
- Strategic connection with the Clean Water Fund and Parks and Recreation Fund.
- Intact wetlands and plant communities with high diversity.
- Protection of high-quality existing communities.
- Consideration of species in the State Wildlife Action Plan.
- Complexes of various wetlands types and grasslands.
- Landscape scale.
- Greater diversity (Wetlands Act may not be sufficient protection).
- Many small basins (9 acres each, on average) and permanent wetlands for migration (Duck Recovery Plan).
- Provide winter cover (Pheasant Plan).

For Habitat Protection in the Metro-Urbanizing Section

Give priority to aquatic habitat protection programs with the following features:

- Use Statewide Conservation and Preservation Plan's targeting recommendations.
- Use TNC's "Identifying Lake Conservation Priorities" report
- Protect high-quality lakes, watersheds and lakesheds.
- Strategically connected to the Total Maximum Daily Loads process, and coordinate targets with Clean Water Council.
- Reforestation can produce fishery benefits, too.
- Carp reduction.
- Restore rapids by removing Ford Dam to help fish spawning.

- Consider the type of project. Is it addressing the problem or a symptom?
- Consider the resource's potential.
- Consider the scale of impact and source of aquatic habitat threats.
- Whether or not there is critical habitat
- Compatibility with other resource plans/coordinated efforts – has the project been identified by collaborative efforts?
- Feasibility from technical point of view (economic and social/tax impacts, etc.)
- Timing – how quickly can it be done, and is there an opportunity?
- Level of landowner/community support
- Professional judgment
- Consider whether upland/wetland proposals could lead to aquatic benefits downstream.
- Prioritize proposals that generate greatest mutual benefit to upland, wetland, and aquatic habitats.

For Forest Protection in the Metro-Urbanizing Section

Give priority to forest protection programs with the following features:

- Reforestation of lands that were originally forests.
- Buffers for public lands and community spaces.
- Remnant Big Woods.
- Riparian corridors and bluff land forests, including lands along the Minnesota River that connect floodplain and terrace forests with bluff land forests.
- Connect reforestation with fisheries restoration: double benefit for same dollar. Reforest near trout streams.
- Control invasive species.
- Should be near existing large blocks to prevent forest fragmentation.
- Include working forest lands, not just forests for ecological and recreational benefits. While a small percent of the landscape, working forests provide ecological benefits, too.
- Low-value, degraded lands provide a benefit, too, but the owner requires technical assistance and education to manage properly.
- Green corridors.
- Ensure protection proposals include restoration management.
- Promote duck and waterfowl breeding.
- Connect with wetlands.

Priority Restoration and Enhancement Actions

Meeting participants did not develop specific lists, but urged the council to support restoration on private lands, too. The benefits would extend to public waters and help build relationships for future protection through acquisition or easements.

Spatial Target Development Process

Participants developed several 25-year and first-year spatial targets at the August 6 meeting, though many were concerned that they did not have sufficient data to make informed recommendations. Five and ten-year targets were generally not developed. Five participants plus

another participant's alternate volunteered to use this section's land cover data to create targets after the August 6 meeting.[8]

This smaller group met August 17 to develop prairie, wetland and forest spatial targets based on Minnesota County Biological Survey (MCBS) and Regionally Significant Ecological Areas (RSEA)[9] acreage data, updated with the latest Minnesota Land Cover Classification System (MLCCS) data. They did not develop aquatic habitat targets because the RSEA data does not identify the highest quality water acreage, so the August 6 meeting targets are used.

The group's protection targets are all RSEA acres that are privately owned and include those agriculture lands that could connect other natural areas if restored to native condition. The group explained that the RSEA data is the best information available and should represent the long-term target. They did not assume that some acreage may be converted to other uses or that some owners will not sell. The first-year, five-year and ten-year targets are based on current capacity and assume exponential growth in organizations' capacity after five years.

The restore and enhance targets are all publically owned (currently protected) RSEA acres plus most of the newly protected prairie and forest target acres. The first, five and ten-year targets were developed on a proportional basis (the first-year target is 1/25th of the 25-year target).

The aquatic habitat targets are from the August 6 meeting, and are based on the Aquatic Management Acquisition and Duck Recovery plans, though some participants said the targets are too low from a water-quality perspective (versus the plans' recreational perspective). Aquatic habitat conservation professionals felt that appropriate protection requires a watershed approach, rather than shoreline miles and acres, and data on high-quality watersheds is lacking to make recommendations.

The following tables show the group's targets. A subset of the protect targets are identified as the highest priority and include all MCBS acres plus RSEA acres with the two highest quality natural community rankings. These priority targets appear in parenthesis in the 25-year column. The 25-year cost is based on the entire target, not the priority acreage.

[8] The group's participants were Hannah Texler (DNR), Sharon Pfeifer (DNR), Dave Thill (Hennepin County), Steve Hobbs (Belwin Conservancy), Al Singer (Dakota County) and Leslie McInenly for Dave Zumeta (Minnesota Forest Resources Council). Bart Richardson (DNR) provided GIS analysis.

[9] RSEAs include the MCBS-identified acreage plus additional, natural land cover meeting certain criteria, such as size and shape of the natural area and connectivity to other natural areas. See http://www.dnr.state.mn.us/rsea/index.html and http://www.dnr.state.mn.us/mlccs/index.html for more information.

Prairies

Target	1st year	5 years	10 years	25 years
Protect – acres	500	10,000	30,000	81,100 (1,400[10])
Protect – cost ($10,000 per acre)	$5,000,000	$100,000,000	$300,000,000	$811,000,000
Restore\enhance – acres	4,700	23,500	47,000	118,700
Restore\enhance – cost ($2,500 per acre)	$11,750,000	$58,750,000	$117,500,000	$296,750,000

Protection cost per acre is based on Management Analysis assuming 90% are protected at the midpoint of meeting participants' easement cost range ($5,000 to $10,000 acre) and 10 percent at the midpoint of participants' fee-title range ($5,000-$50,000). The restore and enhance cost per acre is the midpoint of participants' $2,000-$3,000 range.

Meeting participants also said that prairie acres require some type of maintenance work annually after the prairie is established. The "restore\enhance" targets exclude maintenance costs.

Wetlands

Target	1st year	5 years	10 years	25 years
Protect – acres	1,000	10,000	36,000	90,100 (25,900[11])
Protect – cost ($8,000 per acre)	$8,000,000	$80,000,000	$288,000,000	$720,800,000
Restore\enhance – acres	2,300	11,500	23,000	58,000
Restore\enhance – cost ($1,800 per acre)	$4,140,000	$20,700,000	$41,400,000	$104,400,000

Protection cost per acre based on the midpoint of meeting participants' range of $5,000 to $10,000 acre. The restore and enhance cost per acre is the midpoint of $500-$3,000.

Habitat

The shallow lakes target is based on the Duck Recovery Plan.[12] The stream and river shoreline protection target uses the Aquatic Management Acquisition Plan's recommendations. Participants discussed potential targets for lakeshore and watershed protection but said the targets need to consider water quality protection goals and addressing total maximum daily loads, and good data and staff to assemble scattered data layers are unavailable to make a recommendation.

[10] The highest-priority acreage is remaining native prairie but excludes oak savanna, which is part of the forest highest priority acreage target.
[11] Highest-priority acreage.
[12] The Duck Recovery Plan does not list spatial targets for each L-SOHC section, so DNR staff provided section estimates.

Shallow lakes (acres)

Target	1st year	5 years	10 years	25 years
Protect – acres	3,000			15,000
Protect – cost ($8,000 per acre)	$24,000,000			$120,000,000

No five and ten-year protection targets nor any restore and enhance targets were given. Protection cost per acre is based on the wetlands' figure.

Streams and rivers (shoreline miles)

Target	1st year	5 years	10 years	25 years
Protect – shoreline miles	18	45	90	176
Protect – cost ($178,000 per mile-easement)	$3,204,000	$8,010,000	$16,020,000	$31,328,000
Restore\enhance – instream miles	20	100	200	500
Restore\enhance – instream cost ($11,000 per mile)	$220,000	$1,100,000	$2,200,000	$5,500,000
Restore\enhance – shoreline miles	5	25	50	100
Restore\enhance – shoreline cost ($10,000 per mile)	$50,000	$250,000	$500,000	$1,000,000

Protection cost per mile based on the Metro section's 2008 farm and timber land values that DNR uses for stream conservation easements, per Minnesota Statute 84.0272. Restoration cost per mile provided by DNR Fisheries Section, and assumes a 25-foot buffer. No highest-priority target was developed.

Forests

Participants said Metro-area forests have a semi-natural component and the potential to restore its structure and function. Participants noted that Como and Theodore Wirth parks and the Mississippi River Gorge have forest remnants that can be restored, even if the current ground cover is turf grass. Tree-lined streets are not a forest ecosystem due to insufficient canopy cover.

Target	1st year	5-years	10 years	25-years
Protect – acres	1,000	20,000	50,000	138,100 (43,400[13])
Protect – cost ($12,000 per acre)	$12,000,000	$240,000,000	$600,000,000	$1,657,200,000
Restore\enhance – acres	4,000	20,000	40,000	100,000
Restore\enhance – cost ($3,000 per acre)	$12,000,000	$60,000,000	$120,000,000	$300,000,000

The targets include oak savanna. Meeting participants said the forest protection cost per acre ranges from $5,000 to $50,000, which has a $28,000 midpoint. DNR Forestry staff provided a smaller range of $10,000-$15,000 for fee title, and said conservation easements would be 20% lower. The table uses $12,000 per acre to reflect the midpoint of fee title and the upper end of the easement range. The restore and enhance cost per acre is the midpoint of $1,000-$5,000.

[13] Highest-priority acreage.

Several participants noted that approximately 200,000 acres of forested areas at the Metro's northern edge are in the L-SOHC's Northern Forests section. They were concerned that the Mille Lacs Uplands and St. Croix Moraines forests may be overlooked due to the dominance of larger northern forest interests. The Northern Forest Section's meeting participants said their targets include these forests.

August 6, 2009 St. Paul Meeting Participants

Andrew Arends, Supervisor Cooperative Forest Management Unit DNR Forestry Division	Brian Nerbonne, Stream Habitat Specialist DNR Fish and Wildlife Division
Paul Bockenstedt, Ecologist Bonestroo	Doug Norris, Wetlands Program Coordinator DNR Ecological Resources
Peggy Booth, Program Supervisor DNR Ecological Resources	Wayne Ostlie, Conservation Programs Director Great River Greening
Tim Bremicker, Regional Wildlife Manager DNR Fish and Wildlife Division,	Sharon Pfeifer, Community Assistance Manager DNR Central Region, Regional Operations
Susan Burks, Forestry Program Coordinator DNR Forestry Division	Dick Peterson, Program Coordinator DNR Forests for the Future
Ian Chisholm, Program Supervisor DNR Stream Habitat Program	Jay Riggs, District Manager Washington Conservation District, Stillwater
Jean Coleman, Attorney/Land Use Planner CR Planning, Inc.	Kerry Saxton, Office Manager Wright Soil and Water Conservation District,
Greg Graczyk Carver Co. Soil and Water Conservation District	Susan Schmidt, Director Minnesota State Office/The Trust for Public Land
Steve Hobbs, Executive Director Belwin Conservancy	Al Singer, Land Conservation Manager Dakota County
Steve Johnson, Chief of Resource Management National Park Service, Mississippi National River & Recreation Area	Anne Sittauer, Refuge Manager Sherburne National Wildlife Refuge Complex
Tom Lewanski, Conservation Director Friends of the Mississippi River	Arne Stefferud, Planning Analyst-Parks Metropolitan Council
Kevin Lines, Hydrologist Board of Water & Soil Resources	Sarah Strommen, Central Region Conservation Director, Minnesota Land Trust
Dan McGuiness, Interim Executive Director of the St. Croix River Association	Hannah Texler, Regional Plant Ecologist DNR Ecological Resources Division
Craig Mell, District Administrator Chisago Soil and Water Conservation District	David Thill, Department of Environmental Services, Hennepin County
John Moriarty, Natural Resources Manager Ramsey County Parks	Doug Thomas, Administrator Rice Creek Watershed District
Don Mueller, Forestry Regional Specialist DNR Central Region Headquarters	Ray Valley, Fisheries Researcher DNR Fish and Wildlife Division
Paul Nelson, Administrator, Scott County Watershed Management Organization	Dave Zumeta, Executive Director Minnesota Forest Resources Council

Public input meeting

Following is a summary of the Metropolitan Urbanizing Section's public input meeting held August 6, 2009 in St. Paul.

Participants

The table below shows the names of the participants at the public input meeting, and their organizational affiliation, if they indicated one.

Name	Organization
Andy Anderson	Minnesota Waterfowl Association
Jim Bezat	Minnesota Outdoor Heritage Alliance (MOHA)
Tom Clarke	Sierra Club/Friends of the St. Croix volunteer
Ron Cockriel	Maplewood Greenways Commission and Parks and Open Space Commission
David Hawes	Tree Trust
John Hickman	Friends of the Minnesota Valley
Katie Himanga	Minnesota Shade Tree Advisory Committee
Brian Huberty	U.S. Fish and Wildlife Service
Gail Nozol	Trees Provide Habitat
Dick Osgood	Minnesota Waters
Carolyn Peterson	Maplewood Greenways Commission and Parks and Open Space Commission
Cordelia Picron	
Mark Schnobrich	City of Hutchinson Community Forestry
Joe Settles	Hennepin County Department of Environmental Services
Barry Wendorf	Isanti County Parks

Responses to questions:

General reactions from those who observed the process during the day: Do you have any suggestions to add?

- I was most intrigued by their expressed desires to coordinate Lessard Council activities with other Councils' activities and programs. The Council has a limited focus on acquisitions and not a lot of resources for getting public engagement. There are other components of the amendment – the Arts Board, Clean Water – they may be able to coordinate more public engagement opportunities. Public engagement – for stream monitoring, water monitoring of lakes. Part of it is a public information aspect of it, so the public does not feel in the dark as to what is happening with their tax money. Outreach/education on what money is being used for and the results/outcomes of the projects. The more people are informed, the more likely they are to participate and be interested in the Council's work. The last year the Council did a wonderful job.

- The professional group is on track and was excellent. Let's not get too caught up on 25 year numbers. This should be a living document, and data should be constantly updated and improved. Restoration and protection should go hand in hand.
- This is the first step of a process which is building on a lot of planning that has already happened. Landscape plan vs. habitat types. Integrating different types of funding sources. Public engagement, integration, a landscape approach – it is building on good work that has already been done so far.
- It is refreshing and reassuring to have a room full of biologists talking about this topic. Will the money be enough to address all of the priorities addressed? We need to be flexible with the plan. Getting together is a great step.
- I see tension between the concept of being bold and "what ought to be done," versus what *can* we do – what is our capacity? It will be interesting to see how the Council will deal with this. We need to set goals high, but also want to be realistic and what can be accomplished.
- I am impressed with breaking down of silos, and the brainpower and the passion of the professionals. It was a good exercise.

Comments from all participants:

What do you think are this region's greatest needs? What would you like the counsel to accomplish for this region? Do you have any other general advice or comment for the Council?

- This is the Land of 10,000 lakes. Lakes, rivers, -- there are a lot of rivers and bluffs in close proximity to the Metro. Remaining habitats to protect in the metro area. We need to protect water features, shoreline, marshes.
- Woods and the prairies, and with them are buffers. We have an area in Maplewood that was farmland along the Fish Creek area, and that could be restored to prairie if it is preserved. It is 47 acres. We have three greenways in Maplewood, and that's a 1st ring suburb.
- Two things: 1. There are intense pressures from growth and the pace of fragmentation. We need corridors for movement and genetics. 2. This region has a greater Big Woods habitat – it is pressured from worms and deer and other pressures put upon it.
- This is a metro region. There is a lot of development. Protect what we have and restore what we protect. Restore and keep in perpetuity what we do protect. Restoration of invasive species (tree diseases). Money could be used for invasive species removal/management.
- I am a professional forester – I have a policy position statement from MNSTAC with suggested priorities for the Council's consideration on rural/forest connectivity.
- Lake City is on the Mississippi River. It has 3,500 people, and it has native green ash in landscaped areas – if we don't take care of it, we will lose it. Inoculate the forest areas to our most urban areas to rural areas if we want to protect this area of our state. The inter-connectedness to forests.

- I am frustrated that money is getting deferred to other uses that are not in the constitutional language. It doesn't matter if it is Metro or out-state. I hope the council makes sure the money is not diverted to areas that it should not go. I don't want to see it wadded down and going else where. It is all about restoring and preserving and gaining access to the people who want to joy the outdoors (hunting and fishing). Duck populations have gone down in Minnesota, when in other states the population has gone up. Put the money where it was originally intended to go. Regardless of other political pressures, etc. The council has done great job so far with projects.
- I feel the importance of protection and restoration…I don't want the forest protection piece to go forgotten. Insects and disease – as we look forward in connecting urban and rural areas – we are protecting areas from invasive species as we look at restoration efforts. There are benefits of forests in urban areas – they provide energy conservation, water protection. Trees are a very important part of the picture.
- There are many groups here, but it might be easier for the Council to put water quality at the top. Development is affecting us, too – we are putting developments on (former) crop land, with no tree plantings. As a result, the water quality drops. Grass doesn't give the water percolation benefits that trees do. By focusing on water quality, you achieve wildlife habitat, prairie restoration. The ultimate benefit is water quality. If that were at the top, all others would benefit and achieve what we want. Emerald ash borer in the black ash – if it devastates the wetland habitat and water quality – it could convert ash to marsh prairies – it affects the ecosystem.
- Aquatic invasive species. I feel like a square peg in terms of how we approach watershed management. A landscape approach – a watershed approach – these don't seem to stop these invasive species. They spread like pollution. The framework – to protect and enhance – it is not relevant to invasive species. Zebra mussels in Mille Lacs – they will grow where walleyes spawn. Some of these facilitate avian botulism and toxic algae. Minnesota waters empower citizens – money could be spent to help citizens volunteer groups protect our lakes and waters. We need to put our money in protection. Once these invasive species are in our lakes/rivers, you can't keep them out.
- It is very tough to think about the system holistically to identify problems and fix them (or slow them down) as much as we can. Dutch Elm disease. We can only slow down invasive species – we can't stop them.
- The challenge with wetlands – they are a key habitat in the landscape, but the problem is that it is public water, but private land. A key element in restoration is the Great Lakes. Another headache – is that we always assume maps are state of the art and they are not. Some of them are 30 years old, and wetlands change over time. Wetlands are four dimensional, and so are forests. The challenge of how to do this – you have to know where the wetlands are. Many groups at DNR and LCCMR are working on this. Part of the action – you gotta know what you have to know, and where you want to go in the future. With climate change, the warming of the planet will change where the "best" location is. Is the prairie pothole moving east? it is hard to peg.
- With prairie pothole – we will need to focus on how climate change affects that. Prairies – there is very little left and that's an important issue. There is a government panel on climate change – one of their last reports says globally – wetlands are most vulnerable to

climate change. This is important for habitat and water quality. A place to focus – but check "all of the above," and the challenge is how to do it.

- The impact of climate change on what you want to do. If the birds are moving 70 miles north, there is no use preserving things that can't do what you thought they would. Incorporate that into your thinking and don't do things that will be pointless.
- The emphasis is getting diluted a little bit. Habitat for fish and wildlife – you forgot to say game! The point was to improve and enhance habitat for sportsmen and citizens of the state that would benefit from doing this. We have dealt with Dutch Elm, Oak Wilt – there were agencies that were funded to do that. Of course that is a worry, but these funds were not intended to go there. We are trying to get back lands we have lost – improving wetlands will benefit the hunter, fisher, camper, hiker – everyone will benefit – don't get into areas that it wasn't intended to deal with. There are state agencies that have been funded to deal with invasive species. Let's make sure the funds go where the citizens intended them to go. A new AMA or WMA is supposed to be open to hunting – let's not lose focus of this.
- The gentleman made a good point – members have reported to us as we present this issue and concern – the legislators can say "we passed the amendment and we're done." It would help us a lot if the Council could clearly state what is in bounds and out of bounds so we know best where to go.
- It is not that we are substituting or replacing – if there is existing acquisition. Some things might have been underfunded – try to preserve and protect what we do have and collect more.
- I liked the point earlier – achievable goals for one year. DNR and others are working on all of these. That's why I voted for it – I could see it being diluted really quickly. Focus on one year goals that can be reached.
- One thing the language had was the supplement, not supplant issue. The conference committee had trouble with this. There was so much conversation about how to spend the funds in ways that wasn't intended. This started with Bob Lessard ten years ago. He said, let's do things that traditional funding sources can't reach. But not use it instead of – that's the supplant aspect of it.
- I want to bring the importance of protection. Whether invasive species are in the Metro or outstate doesn't matter. I see more similarities than differences. Protect all resources regardless of where it comes up. The emerald ash borer threatens the resource for hunting. I would caution – a response to a previous comment – how invasive species were historically handled is not true today. There was money 25 years ago for Dutch Elm disease, and we don't have it now. Let's look at how they are going to handle it for the emerald ash borer. Let's ask the folks at the University how to handle it – it (the ash borer) was found on their campus. Ask the City of St. Paul – their capacity has changed over the last 20 years.
- Consider outstate, where you can get 1,000 acres that one can enjoy, or here, where one acre a thousand can enjoy. This is for humans as well as species. We need places where we can fish – there is not much hunting in the metro.

- I am a layman, and I thought the whole idea was habitat. I have watched waterfowl habitat diminish – with invasives, the ash borer – but without habitat we don't have game. At Carlos Avery we have fox, deer, turkey – this whole thing is about habitat. Senator Lessard – he was campaigning for a fund that would finance the acquisition of habitat. Clean water and trees go with it, but you still gotta have habitat. I represent an area right by Forest Lake – we need habitat for Metro people. Not everyone has the wherewithal to go to North Dakota to hunt – they need a place to go for a one-day hunt. It is not restricted to hunting and fishing – the environment is very important to us, but they go hand and hand together. I am impressed with the capabilities here, but I am a layperson and wanted to say this.
- An example – the citizens of Maplewood 20 years ago pushed for $5 million to get some "open space." They bought property. But we have no money to manage it. Good habitat is becoming bad because we can't take care of it. You gotta have the space to make the place. We now can't figure out how to take care of what we acquired – avoid that – manage what you purchase.
- There is habitat within metro – but who would maintain it? The DNR? Parks? We have many parks in Isanti County that we manage for habitat. Some parts have hunting available. There is a need for long term management outside the DNR. I wanted to know where and when to apply for funding.[14]
- I can't miss this opportunity – I am from the Minnesota Conservation Corps – I appreciate that we would be available to contract with groups and funding recipients. We are a youth development organization but we are continuing the tradition of the CCC – to give young people the hands on resource work. We have almost 300 individuals. If you are looking for an inexpensive labor force and want to encourage young people to abandon their computer games, we are an organization that can help with that. An overture – consider us as a partner in the collaborative. We have worked with groups before – prescribed burns, exotic species – we want to give people a variety of experiences. Our web site is www.conservation.corps.org
- One last idea – this pertains to agricultural wetlands restoration – there is the potential to get a carbon trading credit. If you can measure it, it is stored carbon, and that is tradable. Something to think bout – it is easier to do and measure before than 20 years later when it is too late.

[14] The Council's Executive Director provided the participant with details on how to apply for funding, and also described the small grants program.

Comments received during draft review period

The following comments were received during the draft review period, between August 27 and September 9, 2009. They are listed in the order they were received, and the topic of each comment is shown in the first column. The third column indicates any change made to the draft document as a result of the comment, or refers readers to other sections of this report that discuss a similar topic.

Topic	Comment	Change made
Bird Habitat	Thank you for the opportunity to speak briefly at yesterday's hearing in St. Paul. The reference for the impact of global warming on bird and bird habitat is Science News, web edition, from 10 February 2009: http://www.sciencenews.org/view/generic/id/40713/title/Winter_birds_shift_north Winter birds shift north - New Audubon report suggests climate change is the culprit By Susan Milius Richard Newmark St. Paul Audubon Society August 7, 2009 *Commenter attended public input meeting*	
Restoration targets	Thanks to all for pulling this all together. The big issue I raise - and I raised it at the August 6 meeting - is the discrepancy between prairie protection and restoration/enhancement. My argument is that restoration is woefully under-represented here, and actually should be greater than the acquisition numbers, especially if this is to represent the work of all conservation practitioners. That would include, in addition to public lands under formal protection, private lands addressed by NRCS, SWCDs and others. My biggest point is that if management and restoration are not part of the equation on every acres of remaining prairie land at least once over the coming 25 years, it won't be prairie any more. If we are protecting 81K acres, then our restoration target ought to be at least double that. Perhaps I'm missing something? Wayne Ostlie Great River Greening August 27, 2009 *Commenter attended conservation professionals meeting*	Restoration targets were increased based on comments from numerous participants
Section boundary	The only thing that I did not see in the attached goals and objectives was the discussion by the group of changing the boundary line to include all of Isanti and Chisago County into the metro region. Craig Mell Chisago Soil and Water Conservation District *Commenter attended conservation professionals meeting*	Included under "Suggestions for future planning processes"
Restoration targets	Our small group spent much of our time working on the protection acres, and I don't think we thought the restoration/enhancement goals through as much as we should have. I think Wayne is right when it comes to prairie. We should up our restoration goals considerably since all prairies/grasslands need active management. If we add the acres protected acreage to the currently public land acreage, we get about 108,000 acres, which might make sense.	Restoration targets were increased based on comments from

Topic	Comment	Change made
	For forests and wetlands, there would be more acres that would not need restoration/enhancement. We may want to consider upping our forest restoration/enhancement acres, since that number includes oak savanna in this calculation, and we also have a lot of forests in need of invasive species control and/or controlled burning. Perhaps we could up the 25-year restoration/enhancement goal to 100,000 acres. Hannah Dunevitz Texler DNR Ecological Resources September 1, 2009 *Commenter attended conservation professionals meeting*	numerous participants
Restoration targets	I agree. Every acre that is protected should be a target for restoration. Otherwise, why the heck did you protect it? There should still be a restoration goal for "unprotected" privately owned sites. The numbers Hannah is proposing sound fine. Steve Hobbs Belwin Conservancy September 1, 2009 *Commenter attended conservation professionals meeting*	Restoration targets were increased
Restoration targets and wetland protection	A couple of comments… First off, I'd just like some clarification as to how final numbers where ultimately determined? Did it go by a percentage of what's been inventoried I'm assuming? How did restored or basically "new" acres get figured in? A percentage of what's out there now? Just curious. **Prairie**…I agree with previous comments that the restored/enhanced acres are too low. Long term (25yr) I'd have to say that at a minimum, the rest./enhance acres should be even if not tilted more towards the rest./enhance (as Hannah has stated in her Sept. 1 e-mail). **Wetlands**…basically the same thing but as discussed Aug. 6th…unlike the prairies there is some level (at times multiple levels) of protection for existing wetlands. My thoughts for the utilization of these funds would be for protection of those existing unique/rare wetland communities (not necessarily just a "high quality" ranking) where it would be very difficult to replace the functions/values/unique vegetation of the system. I was thinking that the restoration/enhance acres should be the main focus for funding spent on wetland projects and that there is going to have to be a very clear and obvious need to spend the taxpayers dollar on existing wetlands purely for "protection." With that said however, the protect acres and the rest./enhance acres are above what's recommended by the duck recovery plan, ring-necked pheasant plan and covers the rest/enhance acres for the Upper Mississippi Venture. Greg Graczyk Carver County Soil and Water Conservation District September 1, 2009 *Commenter attended conservation professionals meeting*	

Topic	Comment	Change made
Habitat Protection	Under the heading "Habitat Protection in the Metro-Urbanizing Section" Edit: The sub-header is incorrect – it states "Give priority to Wetland protection programs with the following features." It should read "Give priority to *aquatic habitat projects or programs* with the following features." Add: ▪ Use TNC's Identifying Lake Conservation Priorities report A comment on the bullet point: ▪ Focus on Total Maximum Daily Loads If I recall, the argument went that TMDL's focus on primarily impaired (and arguably permanently so) water bodies, are very expensive, and will have only marginal aquatic habitat benefits. I may be misinterpreting, but what I recommended was for the LSOHC to focus primarily on unimpaired water bodies of high integrity. A comment on the bullet point: ▪ Carp management If I recall, only one person brought this up in passing. Despite promising new research focused on reducing carp impacts, carp management is an ongoing process that must have a strong evaluation, if not long-term research component to it. If I recall, LSOHC isn't interested in supporting long-term management. Add the underlined text to the bullet point: ▪ Consider the scale of impact <u>and source of aquatic habitat threats</u>. A comment on the bullet point: ▪ Professional Judgment Given the lack of polished GIS products of high priority shorelines or watershed parcels for maximum gain of fish habitat, I suggest technical review of proposals by a panel of experts (that include one well versed in fish habitat and one in watershed processes) and have them answer the question: will the project as proposed lead to protected, restored, or enhanced fish habitat? Add a new bullet point: ▪ Consider whether upland/wetland proposals could lead to aquatic benefits downstream. Prioritize proposals that generate greatest mutual benefit to upland, wetland, and aquatic habitats. In the "Habitat" category, add the underlined text to the below sentence: Some participants said the targets need to consider water quality protection goals and addressing total maximum daily loads, and good data <u>or staff to assemble scattered data layers</u> are unavailable to make a recommendation. Ray Valley DNR Fish and Wildlife Division September 1, 2009 *Commenter attended conservation professionals meeting*	Change made Change made Re-worded to clarify – a close tie to the TMDL process and coordinated targets with the Clean Water Council Did not remove – many other suggestions were made by one person Change made. Change made – consistent with discussion Change made

Topic	Comment	Change made
Shallow lakes targets	Your table in regards to shallow lakes is not correct. We did provide goals and they were recorded by you and your staff. I know that fisheries staff struggled a bit with lakes but Wildlife was firm in regards to shallow lake projects. Year 1 was 5 (lakes), year 5 was 25 (lakes), from my memory. Tim Bremicker DNR Fish and Wildlife Division September 2, 2009 *Commenter attended conservation professionals meeting*	Shallow lakes targets were added: 25-year goal was 25 lakes.
Numerous topics – see headings	Thank you for the opportunity to participate in the Lessard – Sams Outdoor Heritage Council planning meeting with conservation professionals. I concur with the need a plan. However, I am concerned about the planning process being used and the basic premise of the meetings being target acreages for the various categories. I also got the sense at the meeting that other professionals were uncomfortable as well. I think that one participant said it best at the meeting when she said that you should instead think in terms of programs. I have been doing natural and water resources type of planning for over 20 years. Working on a program basis you can evaluate existing program, assess their gaps and then better utilize the new Lessard – Sams funding to fill these gaps, and complement the existing program such that the whole outcome is better advanced. While I don't necessarily agree with the approach used for developing the plan, I have reviewed the August 27, 2009 Preliminary Goals and Objectives, 25-Year Targets for the Metro-Urbanizing Section, and offer the following comments. These comments are organized according the sections in the document. I also offer a few additional thoughts at the end for the Council to consider. **Comments Regarding the Discussions at the Meetings** In general the draft document is missing many of the most important discussions that we had at the meeting. These include: 1. The discussion of the need for maintenance of land "protected" or restored is not documented in the report. A row was added to the tables at the meetings for maintenance and is now missing. We understood that this was a common theme at the New Ulm meeting as well. As pointed out by the professionals at the meeting the Council should plan for and should set aside some funds for maintenance. If land is important enough to acquire/protect, it's important enough to then maintain. Otherwise there is a good chance of losing that initial value for which the land was obtained. I personally would rather have fewer acres "protected" and know that they will be maintained, rather than more acres "protected" but at risk of losing their value. 2. The discussion of building programs and staffing capacity is missing. This is a critically important discussion to document. As discussed at the meeting – things don't just happen to get acquired. You need the capacity and staffing to get things done. 3. The discussion about spending money on wetland "protection" is not documented. Many participants thought that it was not a good use of public money to buy "protection" for wetland areas when there are current regulatory controls protecting wetlands, unless they are unique and of exceptional quality.	Maintenance footnote was added. Maintenance and staffing capacity are summarized in the "common discussion themes" section There were differing views, but protection of wetlands that are of high quality is indicated.

Topic	Comment	Change made
	Comments on Target Acreages 1. Target acreages were changed since the meeting per recommendations of the subgroup to reflect MCBS and RSEA acreage data updated with MLCCS and included some restored agricultural land. I'm not sure that these acreages represent a desired outcome. At the larger group discussion acreages from various plans were considered to guide the targets towards some strategic outcomes. I don't know if that is the case with the revised targets. Either way I'm uncomfortable with the numbers, and don't believe the numbers have much meaning unless a significant amount of additional thought and research is put into the process. 2. When I add the numbers up I get roughly 309,000 "protection" acres for the metropolitan area. That's roughly the size of Scott County and seems impractical. 3. I do not agree with purchasing to "protect" 90,000 acres of wetland. I think money would be better spent on restoring wetlands, and the target numbers here do not represent that philosophy as discussed by the larger group. As many pointed out, more should be spent on restoration than protection.	
	Comments on Priority Characteristics and Actions 1. Forest Protection subsection is missing a comment made to the meeting regarding large tracts of forest along the Minnesota River corridor particularly in the Blakely bluffs area, and consideration of connecting the floodplain forests along the River and the terraces with those remaining on the bluffs.	Change made.
	Comments Priority Restoration and Enhancement Actions 1. The discussion about the Council supporting restoration on private land at the meeting was deeper than just urging the commission to support restoration on private lands. What was said was that private citizens and land owners in many cases are good stewards of the land, but many need help with planning, implementation and maintenance. Just purchasing easements or titles is a very expensive way to do conservation. More cost effective approaches could be implemented that assist private land owners with stewardship.	See "common discussion themes" section.
	Comments on Spatial Target Development Process 1. Third paragraph of this section talks about "unprotected" acreage. As worded this is very condescending toward private property owners. Many private property owners are good stewards of their land. The whole definition of "protection" as presented in this document I think is wrong. I don't think that the only lands that are "protected" are those under some sort of restriction or ownership of the government. I don't know how or when this definition was hi-jacked, but it is very demeaning to private landowners, and is a very expensive way to do conservation. 2. I do not agree as is started in the first sentence of the fourth paragraph that restore and enhance targets could or should only be on current publically owned lands. I would hope that much of the publically owned land was already acquired knowing that they had restoration to complete, and that new funds would allow us to expand beyond into new lands.	Paragraph was re-worded. See also discussion about definitions and work with private landowners in "common discussion themes."

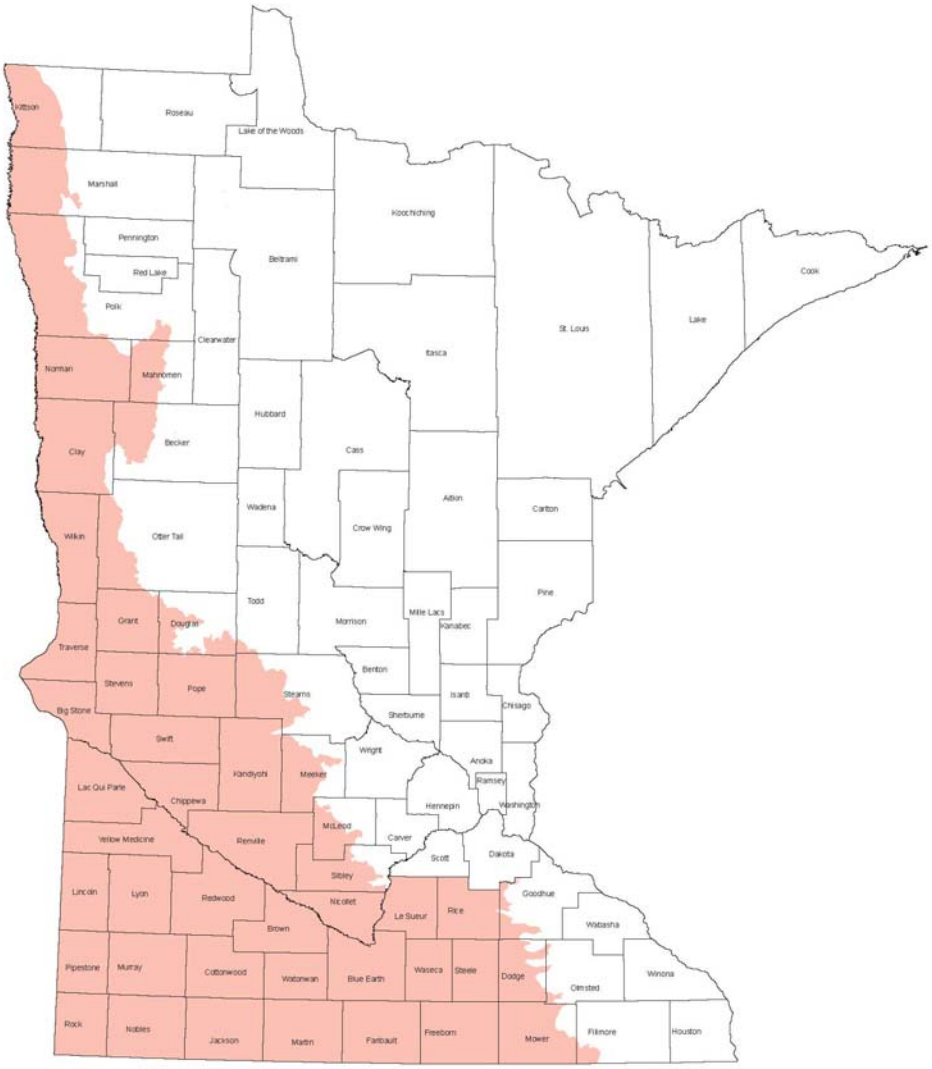
Topic	Comment	Change made
	Other Comments 1. Purchasing title or easements is an expensive way to do conservation. In the Metro Area much can be done with zoning and land use authority. I would think that funds to kick start Transfer of Development Rights (TDR) programs, or to enable local Purchase of Development Rights (PDR) programs could be used to complement local Comprehensive Land Use Plans, and wildlife habitat protection. 2. I was the only person at the meeting who represented an organization with land use authority. Consideration of Comprehensive Land Use Plans and land use authority is critical for being strategic. I would think it would be good to know what the surrounding land use is guided for when making plans for acquisitions. Comprehensive Plans within the metro area are a good tool that should be considered as part of the process. Paul Nelson Scott County September 9, 2009 *Commenter attended conservation professionals meeting*	See discussion about state law and local ordinance use and enforcement in "common discussion themes. See "suggestions for future planning processes"
Numerous topics	Dear Council Members, Having reviewed the draft Preliminary Goals and Objectives for the Metro-Urbanizing Section, I would like to make a few suggestions. First, I think it should be noted that it was an assemblage of some of the most experienced conservationists in the state and many there commented that it was great to get everyone together and many were surprised at how much agreement there was on many issues. That having been said, I think it might be a misleading to say (as the draft does in the second paragraph under "Method") that the "debate created "reasonable" targets for a 25-year planning horizon with some degree of uncertainty." Some of the Council members were there and I think you would agree that there were many conservationists in the room who felt uncomfortable trying to come up with numbers in this forum and that there was a high degree of uncertainty about the validity of the estimates folks were making. Most said that there was a good deal of planning that had been done and that it was not constructive to just conjure up numbers at this meeting when we could use that data to come up with much better targets. That is why the group asked Hannah Texler of DNR to go back through the data and pass that information to LSOHC. The group Hannah convened was able to give more accurate estimates for wetland, forest and prairie targets, but it was much more difficult for aquatic areas due to sparse ecological data. I think when one looks at the numbers coming from these meetings it is important to note that there was a lot of guesswork involved. In speaking to people that attended other meetings, there seemed to be similar frustration with the process. Also, there's a difference between consensus about the numbers because participants feel like they're based on sound data versus capitulation to an urgency to come up with a number and I think the latter was the case with the Metro meeting at least. I would encourage the Council to use these numbers only as a rough guide to the	See "suggestions for future planning processes"

Topic	Comment	Change made
	magnitude of protection that is needed. Numerical targets for different habitat types might be important for accounting purposes, but to achieve meaningful conservation of our natural resources, it is much more important that a process for evaluating potential projects be developed. This process should be based upon the best science available and should have the necessary criteria that will focus funds towards projects where each site has been thoroughly vetted for its importance, sustainability and how well it compliments existing or proposed conservation. There are many excellent examples of such evaluation systems across the country and I hope that the Council will look to these examples for guidance. I am encouraged by the strong desire of the participants at the Metro meeting to make a lasting and positive impact in our state. I am also encouraged by the Council's willingness to listen to these individuals so that we can be successful in fulfilling the voters aspirations for this landmark program. Thank you for your contribution and your time. Sincerely, Steve Hobbs Belwin Conservancy September 9, 2009 *Commenter attended conservation professionals meeting*	
Numerous topics	Thank you for providing an the opportunity for me to participate in the August 6, 2009, Lessard - Sams Outdoor Heritage Council (L-SOHC) planning meeting with conservation professionals to provide preliminary goals, objectives and 25-year targets for the Metro-Urbanizing Area. The number and quality of the participants who attended was outstanding and attests to the importance being placed on developing a strategic plan for the use of the Legacy funds. I think the staff from Management Analysis and Development did an admirable job in facilitating a meeting designed in consultation with L-SOHC members and staff. I think without exception, the participants recognize and applaud the development of a strategic plan with aspiring, yet realistic goals and a set of measures or indicators to assess progress. However, during the course of the meeting, there was inherent conflict between the goals of the facilitators to develop numerical targets in the four habitat categories and the reality of how integrated land conservation (acquisition and management) takes place. In my opinion, the August 27, 2009 meeting summary does not fully capture this and other significant issues. Over the past ten years, a tremendous amount of planning and progress has been made in significant portions of the Metro Urbanizing Area that has created the scientific foundation for advancing the conservation goals of the L-SOHC. The work of the collaborative Metro Greenways program, the use of the Minnesota Land Cover Classification System, the development and implementation of the Metro Conservation Corridors through numerous partners, the continued implementation the Metropolitan Park and Open Space System, and many other efforts have created a solid framework for the L-SOHC strategic plan. Even with this work, and as part of the small group assembled to refine the “targets,” more work needs to be done in the metro urbanizing area to refine and prioritize the data before they should be used to establish targets and related strategies.	

Topic	Comment	Change made
	Through these continuing efforts, we have learned several important and fundamental principles:	
	▪ Conservation lands and associated projects do not neatly separate into prairie, forest, wetlands and aquatic habitat. It is critical to recognize that that these plant communities blend with each other within property boundaries and function as part of a larger system. Although convenient, using the different habitat acres as the principle metric for targets and to evaluate the Council's goals is problematic. From a very practical standpoint, most projects will involve multiple habitat types which have implications as to how the funds to protect or restore an entire property will be initially allocated or eventually accounted for.	See "suggestions for future planning processes"
	▪ Land conservation projects have the potential for providing many more public benefits than simply protecting and restoring habitat primarily for hunting and fishing purposes. Protecting and enhancing surface and ground water quality and quantity, providing a wide variety of outdoor recreational opportunities, protecting scenic views, creating economic development opportunities, carbon sequestering, etc. are also important considerations-especially if the state wishes to leverage non-state funds and other resources to accomplish its goals. Maximizing comprehensive benefits will not be achieved by narrowly focusing the targets and subsequent strategies on the four separate habitat types.	
	▪ Staff and landowner capacity is critical if the targets are to be achieved. Significant resources will have to be devoted to existing organizations and agencies to increase their abilities to conduct all of the activities associated with acquisition, restoration and management. Even when these resources become available, it will take time to build the staff numbers, skills, processes, etc. to effectively manage complicated real estate transactions and long-term management objectives. Devoting resources to these critical needs will reduce the amount of funds available for on-the ground conservation needs. It will also affect the target amounts at least during the initial years as the implementation infrastructure is being assembled.	See "organization-al capacity and workforce planning concerns" in the "common discussion themes" section
	▪ A better and more creative process for prioritizing and protecting the critical areas should be developed. Too often acquisition follows a response to a willing landowner of marginal land when funds should be allocated for a higher priority project that may not be currently available. Similarly, often entire large properties are acquired when only portions of the property will provide or meet the conservation goals. Expenditures on lands that are already and highly likely to remain protected through regulations, such as wetlands, should be limited.	See "suggestions for future planning processes."
	▪ True land protection does not end with the legal acquisition of fee title or a permanent easement. It is critical that projects comprehensively address and build in the resources necessary for the short-term restoration and enhancement, as well as monitoring. The fact that these considerations will be requirements of all new acquisition projects is extremely important. However, there are two aspects of comprehensive land conservation that is not addressed by this requirement. First is the on-going management of these new projects.	See "ongoing maintenance" in the "common discussion themes" section

Topic	Comment	Change made
	The resources to continue long-term maintenance of these projects needs to be included in the calculations for establishing targets. Second is the need to address the significant backlog of natural resource management of previously protected property. Serious consideration must be given on how much to allocate for this purpose. This, too will significantly, impact how much funding is available for acquiring and managing new properties. Relying on the acreage metric addresses qualitative measures but does not measure the qualitative considerations. ▪ While the above mentioned aspects apply primarily to publicly held lands or private lands encumbered by permanent easements, there will be a significant amount of private land that is set aside for regulatory reasons or will simply not be acquired in full or in part. Yet, these areas provide very important habitat and many other benefits. Strong consideration needs to be made for providing resources to inform and incentivize private landowners to increase their stewardship responsibilities. Thank you providing an opportunity for me to share my perspective regarding the development of the L-SOHC strategic Plan. I look forward to working with the L-SOHC, many professional colleagues and citizens in advancing land conservation throughout the state of Minnesota. Sincerely, Alan Singer Maplewood, MN September 9, 2009 *Commenter attended conservation professionals meeting*	See "working with private landowners" in the "common discussion themes" section

Prairie section summary



Conservation professionals' meeting

Following is a summary of the Prairie Section's conservation professionals' meeting held August 4, 2009 in New Ulm.

Summary Table

	Target	1st year	5 years	10 years	25 years
Prairie	Acres protected	82,500	345,000	700,000	1,472,000
	Acres restored\enhanced	30,000	149,000	350,000	763,000
	Cost (all fund sources)	$342,750,000	$1,433,300,000	$2,920,000,000	$6,177,700,000
Wetlands	Acres protected	7,400	37,000	74,000	178,500
	Acres restored\enhanced	9,000	45,000	74,000	216,000
	Cost (all fund sources)	$38,600,000	$193,000,000	$370,000,000	$930,000,000
Aquatic habitat	Acres protected	0	0	500	2,000
	Acres restored\enhanced	2,000	20,000	40,000	100,000
	Shoreline miles protected	1,055	5,335	10,610	26,380
	Shoreline restored\enhanced	160	1,500	3,000	5,260
	Number of dams, bridges and culverts modified	12	62	275	1,050
	Cost (all fund sources)	$126,400,000	$682,200,000	$1,356,400,000	$3,269,000,000
Forest	Acres protected	750	2,100	4,200	8,500
	Acres restored\enhanced	750	2,100	4,200	8,500
	Cost (all fund sources)	$3,375,000	$9,450,000	$18,900,000	$38,250,000
Total cost (all fund sources)		$511,125,000	$2,317,950,000	$4,665,300,000	$10,414,950,000

Priority Characteristics and Actions

The professionals provided landscape characteristics that should be the highest funding priorities and priority actions for protection, restoration and enhancement. These are summarized below, in the order they came up in discussion.

Priority landscape characteristics

For Prairie Protection in the Prairie Region

Give priority to prairie protection programs with these features:

- Minnesota County Biological Survey biodiversity ranking should be high or outstanding.
- Rare features, such as sandy prairie soils.
- Flat geography, so can easily remove vegetation for restoration.
- Focus on wetlands and prairies together for biodiversity.
- Landscape level approach – large tracts of land for prairie (may contradict biodiversity).
- Include working lands to keep people on them: grass-based economies.

- Four to nine square-mile complexes, at least 20 percent wetlands (at least 50 percent are seasonal) and 40 percent grasslands (Duck Plan).
- Larger grasslands/wetland complexes (2,000 acres plus) to benefit grassland species and near other public lands to create corridors (Wildlife Management Acquisition Plan).
- Farmlands containing a mixture of cultivated grains, undisturbed grasslands, and wetlands. Undisturbed grass habitats for nesting and brood rearing. Dense, woody habitats nearby for winter cover (Pheasant Plan).
- Native prairie and savanna and areas that link large, intact ecosystems (Statewide Conservation and Preservation Plan).

For Wetland Protection in the Prairie Region

Give priority to wetland protection programs with these features:

- Provide water quality benefits to downstream lakes.
- Minnesota County Biological Survey biodiversity ranking should be high and outstanding.
- Within shallow-lake catch basins.
- Proximity to impaired waters.
- Wetland/grassland complexes.
- To support threatened and endangered species.
- Help Total Maximum Daily Load (impaired waters) projects.
- Many small basins (9 acres each, on average) and permanent wetlands for migration (Duck Recovery Plan).
- Provide winter cover (Pheasant Plan).

For Habitat Protection in the Prairie Region

Give priority to habitat protection programs with these features:

- Land rights of shallow-lake outlets.
- Areas threatened by high-population growth.
- Support for endangered species.
- Help Total Maximum Daily Load (impaired waters) projects.
- Habitat corridors and complexes.
- Watershed to lake ratio.
- Lakeshed/watershed priorities.
- Prevent encroachment of floodplains.
- Spawning and breeding areas.
- Overgrazing of pasture areas.
- Wild rice lakes, shallow areas of deeper lakes, and shallow lakes (15 foot maximum depth and 50 or more acres (Duck Recovery Plan).
- Provide winter cover (Pheasant Plan).

For Forest Protection in the Prairie Region

Give priority to forest protection programs with these features:

- Big Woods is the highest priority. Look for the best quality, restored forests. Prefer blocks of 500 acres.
- Buy any 500-acre block of oak savanna.
- Use the Scientific and Natural Area priorities.

Priority Restoration and Enhancement Actions

For Prairie Restoration and Enhancement in the Prairie Region

Give priority to prairie restoration and enhancement programs with these features:

- Control of invasive species.
- Create buffers for high-quality areas.
- Located within existing habitat complexes.
- Develop available, cheaper source of biodiversity seed.
- Restore to historical use of land/land type.
- Water quality function.
- Most acres protected through conservation easement or Conservation Reserve Program (per reviewed conservation plans).

For Wetlands Restoration and Enhancement in the Prairie Region

Give priority to wetland restoration and enhancement programs with these features:

- Protect first, then restore and enhance.
- Remove drain tiles.
- Enhance downstream waterfowl lakes.
- Restore stream hydrology.
- Shoreline habitat restoration (Duck Recovery Plan).
- Control structures and ditch plugs (Duck Recovery and Prairie Pothole Joint Venture plans).
- Most acres protected through conservation easement (per reviewed conservation plans).

For Habitat Restoration and Enhancement in the Prairie Region:

Give priority to habitat restoration and enhancement programs with these features:

- Steeper slopes.
- Use assessment (define shoreland use).
- Preparation work for shallow lake acquisition.
- Leverage Farm Bill program and Clean Water Legacy funds.
- Carbon sequestration.
- Outreach to landowners.
- Fish barriers and water control structures (Duck Recovery Plan).
- Protect through management and conservation easements (Aquatic Management Acquisition Plan).

For Forests Restoration and Enhancement in the Prairie Region

Give priority to forest restoration and enhancement programs with these features:

- Riverine forest: upslope for buffer zone (strips); use perennial cover or savanna; and do not plow up to the ravine edge.
- Reforestation is primarily exotic-species control.
- Perform complementary watershed management actions (restore forest and benefit water quality).
- Restore forests and ecosystems on glacial lakes and moraines.
- Protect mostly through easements (Forests for the Future Plan).

Prairies

The professionals created three prairie categories:

- **Native:** remnant prairie from pre-settlement times.
- **Restored:** agricultural lands restored to prairie using native species.
- **Surrogate grasslands:** agriculture lands converted to grasslands (native grass species with minimal variation).

The native prairie protection target was based on protecting half of the remaining native prairie in 25 years, assuming some of it will be converted to other land uses and some owners unwilling to sell their property. The restored prairie and surrogate grassland protection targets are based on the Duck Recovery and Pheasant plans.[15]

Meeting participants estimated that 25 percent of the prairie acres require some type of maintenance work annually after the prairie is established. Maintenance activities include burning, livestock grazing (fencing and water source), vegetation cutting, tree removal, and invasive-species removal. The "restore\enhance" targets exclude maintenance costs. Participants also noted that prairie restoration would be slowed due to insufficient native seed stock during the first five years.

Native Prairie

Target	1st year	5 years	10 years	25 years
Protect – acres	2,500	20,000	50,000	88,000
Protect – cost ($2,700 per acre)	$6,750,000	$54,000,000	$135,000,000	$237,600,000
Restore\enhance – acres	5,000	24,000	50,000	113,000
Restore\enhance – cost ($700 per acre)	$3,500,000	$16,800,000	$35,000,000	$79,100,000

Professionals set a 25-year target range of 75,000 to 100,000 acres to protect and 100,000 to 125,000 acres to restore\enhance. This table shows the midpoint targets. Native prairie also requires restoration (tree and exotic species removal and burning).

Restored Prairie

Target	1st year	5 years	10 years	25 years
Protect – acres	50,000	175,000	350,000	884,000
Protect – cost ($4,000 per acre)	$200,000,000	$700,000,000	$1,400,000,000	$3,536,000,000
Restore\enhance – acres	10,000	50,000	150,000	400,000
Restore\enhance – cost ($500 per acre)	$5,000,000	$25,000,000	$75,000,000	$200,000,000

The restore\enhance acreage is less than the protect acreage because more than half of the newly protected acres would be agricultural land with expiring Conservation Reserve Program contracts.

[15] The plans do not list spatial targets for each L-SOHC section. DNR staff provided section estimates for the Duck Recovery Plan. The Pheasant Plan target was allocated by this section's proportion of acres in the state's pheasant range. After the meeting, a Pheasants Forever conservation professional provided a slightly lower estimate with a wetlands target; the spatial target here uses the original number from the meeting (884,000 acres).

Surrogate Grasslands (Prairie)

Target	1st year	5 years	10 years	25 years
Protect – acres	30,000	150,000	300,000	500,000
Protect – cost ($4,000 per acre)	$120,000,000	$600,000,000	$1,200,000,000	$2,000,000,000
Restore\enhance – acres	15,000	75,000	150,000	250,000
Restore\enhance – cost ($500 per acre)	$7,500,000	$37,500,000	$75,000,000	$125,000,000

The restore\enhance acreage is less than the protect acreage because half of the newly protected acres would be agricultural land with expiring Conservation Reserve Program contracts.

Wetlands

Agricultural lands would be converted to wetlands, so acres require both protection and restoration. The protection target is based on the Duck Recovery Plan. The restore and enhance target includes the 178,500 acres plus another 37,500 acres of currently protected wetlands (assuming restoration of 1,500 acres per year over 25 years).

Target	1st year	5 years	10 years	25 years
Protect – acres	7,400	37,000	74,000	178,500
Protect – cost ($4,000 per acre)	$29,600,000	$148,000,000	$296,000,000	$714,000,000
Restore\enhance – acres	9,000	45,000	74,000	216,000
Restore\enhance – cost ($1,000 per acre)	$9,000,000	$45,000,000	$74,000,000	$216,000,000

The targets exclude 111 fens and rare wetland sites of unknown acreage that should also be protected.

Habitat

The professionals created three aquatic habitat categories:

- **Lakeshore miles:** a 200-foot wide buffer strip along a lake.
- **Shallow lakes:** lakes less than 15 feet deep.
- **Streams and rivers:** a 25-foot wide buffer strip along each side.

Lake shore (miles)

Target	1st year	5 years	10 years	25 years
Protect – miles	40	210	410	1,030
Protect – cost ($1 million per mile)	$40,000,000	$210,000,000	$410,000,000	$1,030,000,000
Restore\enhance – miles	10	50	100	260
Restore\enhance – cost ($250,000 per mile)	$2,500,000	$12,500,000	$25,000,000	$65,000,000

Meeting participants provided acreage spatial targets but Management Analysis converted them shoreline miles assuming a 200-foot buffer strip. The restore and enhance cost per mile uses the Forest\Prairie Section's figure.

Shallow lakes (acres)

Target	1st year	5 years	10 years	25 years
Protect – acres	0	0	500	2,000
Protect – cost ($4,000 per acre)	$0	$0	$2,000,000	$8,000,000
Restore\enhance – acres	2,000	20,000	40,000	100,000
Restore\enhance – cost ($1,000 per acre)	$2,000,000	$20,000,000	$40,000,000	$100,000,000

Most of the activity would be restoring shallow lakes. The professionals believe 2,000 acres of agricultural land in former lake basins could be protected but it would more than five years to protect the first acres due to scarcity.

The stream and river protection targets were considered "ambitious" but meeting participants assumed Clean Water Legacy funds would help meet them. The shoreline miles include ditches.

Streams and rivers (shoreline miles)

Target	1st year	5 years	10 years	25 years
Protect – shoreline miles	1,000	5,000	10,000	25,000
Protect – cost ($68,000 per mile-easement)	$68,000,000	$340,000,000	$680,000,000	$1,700,000,000
Restore\enhance – instream miles	0	200	400	1,000
Restore\enhance – instream cost ($11,000 per mile-easement)	$0	$4,400,000	$8,800,000	$22,000,000
Restore\enhance – shoreline miles	250	1,250	2,500	6,000
Restore\enhance – shoreline cost ($10,000 per mile-easement)	$5,000,000	$25,000,000	$50,000,000	$120,000,000

Protection cost per mile is based on the Greater Minnesota's 2008 farm and timber land values that DNR uses for stream conservation easements, per Minnesota Statute 84.0272. Meeting participants had provided a $100,000 cost per mile estimate. Restoration cost per mile provided by DNR Fisheries Section, and assumes a 25-foot buffer.

The Forest-Prairie Transition meeting participants developed the following Red River Basin targets for both sections.

Red River Basin (river and stream miles)

Target	1st year	5 years	10 years	25 years
Protect – coldwater stream miles	5	25	50	100
Protect – coldwater stream cost ($50,000 per mile)	$250,000	$1,250,000	$2,500,000	$5,000,000
Protect – high gradient reaches (miles)	10	100	150	250
Protect – high gradient reaches cost ($50,000 per mile)	$500,000	$5,000,000	$7,500,000	$12,500,000
Restore – channel miles	50	250	500	1,000
Restore – channel cost ($100,000 per mile)	$5,000,000	$25,000,000	$50,000,000	$100,000,000
Restore – riparian buffer miles	100	1,000	2,000	3,000
Restore – riparian buffer cost ($50,000 per mile)	$5,000,000	$50,000,000	$100,000,000	$150,000,000
Number of dams removed or modified for fish passage	2	12	25	50
Dam removal or modification cost ($250,000 per dam)	$500,000	$3,000,000	$6,250,000	$12,500,000
Number of bridges\culverts modified for fish passage	10	50	250	1,000
Bridges\culverts cost ($15,000 per structure)	$150,000	$750,000	$3,750,000	$15,000,000

Costs assume a 100-foot wide buffer on each side for coldwater streams, high gradient reaches and riparian buffers. The riparian buffer restoration target includes private lands. A 100-foot buffer was used to address the level of concentrated flow into the river basin.

Forests

Professionals recommended protecting as many remaining acres of Big Woods, riverine and oak savanna forests as possible, and set specific targets for each forest type. They noted that future carbon sequestration credits could be leveraged as a funding source. The group used a pre-settlement map provided by the Minnesota Forest Resources Council as a guide, to ensure that they would only target areas that were forested pre-settlement. They professionals also noted that less than 500 acres of remaining old growth forests would be picked up within the goal for the Big Woods.

Forests

Target	1st year	5-years	10 years	25-years
Big Woods	400	1,200	2,500	6,000
Riverine	300	600	1,200	2,000
Oak savanna	50	300	500	500
Total protect-acres	750	2,100	4,200	8,500
Protect-cost ($3,000 per acre)	$2,250,000	$6,300,000	$12,600,000	$25,500,000
Restore\enhance-acres	750	2,100	4,200	8,500
Restore\enhance -cost ($1,500 per acre)	$1,125,000	$3,150,000	$6,300,000	$12,750,000

The 1st-year Big Woods target ranged from 300–500 acres. The participants provided 1st year and 10-year targets, and said to "split the difference" for the 5-year targets. Cost per protected acre is based on $2,000-$3,000 for an easement and $5,000-$6,000 for fee title and assuming most acres protected through an easement. Approximately 3,000 to 5,000 oak savanna acres may require restoration. The $1,000 per acre restoration cost is based on the Southeast Forest Section meeting because the Prairie Section's participants did not provide a cost estimate.

August 4, 2009, New Ulm Meeting Participants

Marilyn Bernhardson District Administrator Redwood Soil and Water Conservation District	Jack Lauer Regional Fisheries Manager DNR Fish and Wildlife Division
Carmen Converse Natural Resources Program Supervisor DNR Ecological Resources	Michelle Legatt Program Specialist Natural Rescores Conservation Services
Dr. Shannon Fisher Biological Sciences Minnesota State University, Mankato	John Maile The Nature Conservancy
Jason Garms Natural Resources Program Coordinator DNR Ecological Resources	Becca Nash Project Manager The Trust for Public Land
Scott Glup Project Leader Litchfield Wetland Management District	Ray Norrgard Wetland Wildlife Consultant DNR Fish and Wildlife Division
Nicole Hansel-Welch Shallow Lake Program DNR Fish and Wildlife Division	Brian Nyborg District Manager Jackson Soil and Water Conservation District
Justin Hanson, Resource Specialist Mower County Soil and Water Conservation District and Administrator for Turtle Creek Watershed District	Dick Peterson Forests for the Future Program Coordinator DNR Forestry Division
Ryan Heiniger Director of Conservation Programs in Minnesota & Iowa, Ducks Unlimited	John Schladweiler Regional Manager DNR Division of Ecological Resources
Tabor Hoek Project Team Leader Board of Water and Soil Resources	Lee Sundmark Area Supervisor for Fisheries DNR Fish and Wildlife Division
Matt Holland Senior Field Coordinator Pheasants Forever, Inc.	Molly Tranel Natural Resources Specialist, Wildlife Research DNR Fish and Wildlife Division
Tom Kalahar Conservation Technician Renville County Soil & Water Conservation District	Hugh Valiant Area Fisheries Supervisor DNR Fish and Wildlife Division
Joe Kristoff Natural Resources Conservation Service	Ken Varland Regional Wildlife Manager DNR Fish and Wildlife Division
Dr. Margaret Kuchenreuther Associate Professor of Biology Division of Science and Mathematics University of Minnesota, Morris	Dave Zumeta Executive Director Minnesota Forest Resources Council

Public input meeting

Following is a summary of the Prairie Section's public input meeting held August 4, 2009 in New Ulm.

Participants

The table below shows the names of the participants at the public input meeting, and their organizational affiliation, if they indicated one.

Name	Organization
Kevin Auslund	Minnesota Deer Hunters Association
Tom Clarke	Sierra Club; CURE
Les Heen	Pioneer Public TV
Loran Kaardal	Tatanica Bluffs Corridor/Green Corridor Committee
Tom Kraus	
Mark Ponisch	North Mankato Parks and Green Space Commission
Jim Zimmerman	

Responses to questions:

Are the *long term* species, habitat and resource goals that were identified reasonable? Do you have any suggestions to add?

- A participant asked what percent of the protection goals would be accomplished by means of acquisition versus easement. The response was that is would depend on the resource and what the professionals thought they would need to do to get the resource under protection.

Are the *2011* accomplishment targets reasonable? Accomplishable?

- A participant noted that everything on the board (posted flip chart sheets) had to do with restoration of grass, etc. But what about enhancement for wildlife such as providing food plots, wintering areas and brooding areas for roughland game. – the participant did not see an acreage or number goal for those actions. The response was that particular actions were prioritized, and that when people respond to the call for requests, they can include actions such as these.

Are the *priority actions* consistent with your sense of this region's needs? Do you have any additional resource needs to note?

- I am clueless in Redwood Falls for the tip of "Idaho" (the map of the region looked like the state of Idaho, with the Red River Valley at the tip) – there needs to be better communication within this region – we need to care about this – we are really disconnected across this large landscape. There needs to be a presence where we can be one. I don't know what a prairie chicken looks like – I chase Chinese chickens.

- I live next to 2,000 acres of shallow wetlands that used to be full of ducks. Now it is pelicans and cormorants. I can't get anyone to designate lakes – do they need more people to manage these wildlife areas? What is the problem? One of these was manmade under the 566 program – the landowners have to maintain this. We have lost ducks due to carp coming in.[16]
- Citizens request to have this done. There is no public meeting to move forward on lake designation. They talk about drawing the water level down and it doesn't happen. We don't have decent fish, no decent waterfowl. No ducks out there. Nothing going on – there are areas where you can draw down the water, but we can't get the authority to draw down the lake water, draw down these carp.
- There is one area that we don't see covered there – the idea of the riparian – the river corridors – the tributaries. This needs to be acknowledged and we don't see it here.

Do you have any other general advice or comment for the Council?

- What an impossible task – the law passed, and you had to get doing by December 1. You made some good decisions, and thank you for all of the hours you are putting in. And thank you for the small grants program. It is important for funds to be available for that.
- Thank you for the half hour presentations – you pinch yourself – no one in the other 49 states has this opportunity. As you move forward, you need some big pegs – what did you accomplish? Focus on the larger landscape. In each of these five regions. Projects are fine, but people can't see them. When you create a program and people look back – my children and grandchildren will need to renew this program.
- I wish the professionals were still here – I need to teach everyone the "green corridor math": 1+1+1: Trust research, and trust the pros, and get them to trust each other inter-divisionally – one plus one plus one equals five.
- A key issue that will be debated is acquisition versus easement – these areas will stick out – as we start driving around we will see Lessard signs and "no hunting" or "no trespassing." We will see so many of these – people will say, "what's happening?" There was discussion of access last time around. There was not much action taken on it. I do feel that the Lessard-Sams Council should revisit that thinking, especially regarding the easement lands and some access component. It is disconcerting to know money is going to easements – with nothing offered to these landowners. Especially with absentee landowners – they might be willing to open the land to access for hunting. There is a sense that access isn't part of what we do when it comes to easements – they serve a purpose to enhance and protect lands. If you open access, there is a habitat provision. Look at the Nebraska model – for their easement program. I am concerned that we will see easement land – private – you will see a "no trespassing sign" – no question. Have a

[16] Note: The Executive Director informed the participant that the group today talked about shallow lake management and the need to identify projects and get funding, but that they didn't talk about the politics of declaring a lake a "fishing lake" or a "waterfowl lake." He noted that the DNR is promulgating rules that should make this easier, but if you have a lake that could be either, that is a problem. Once designated, the DNR could put in draw down structures, and lessen the carry over of carp. The participant noted that he couldn't get the DNR to designate the lake, noting that they had been trying for years. The Executive Director provided the participant with contact information at the DNR to address his issue.

voluntary participation from landowners and explore that possibility. Especially in the prairie.

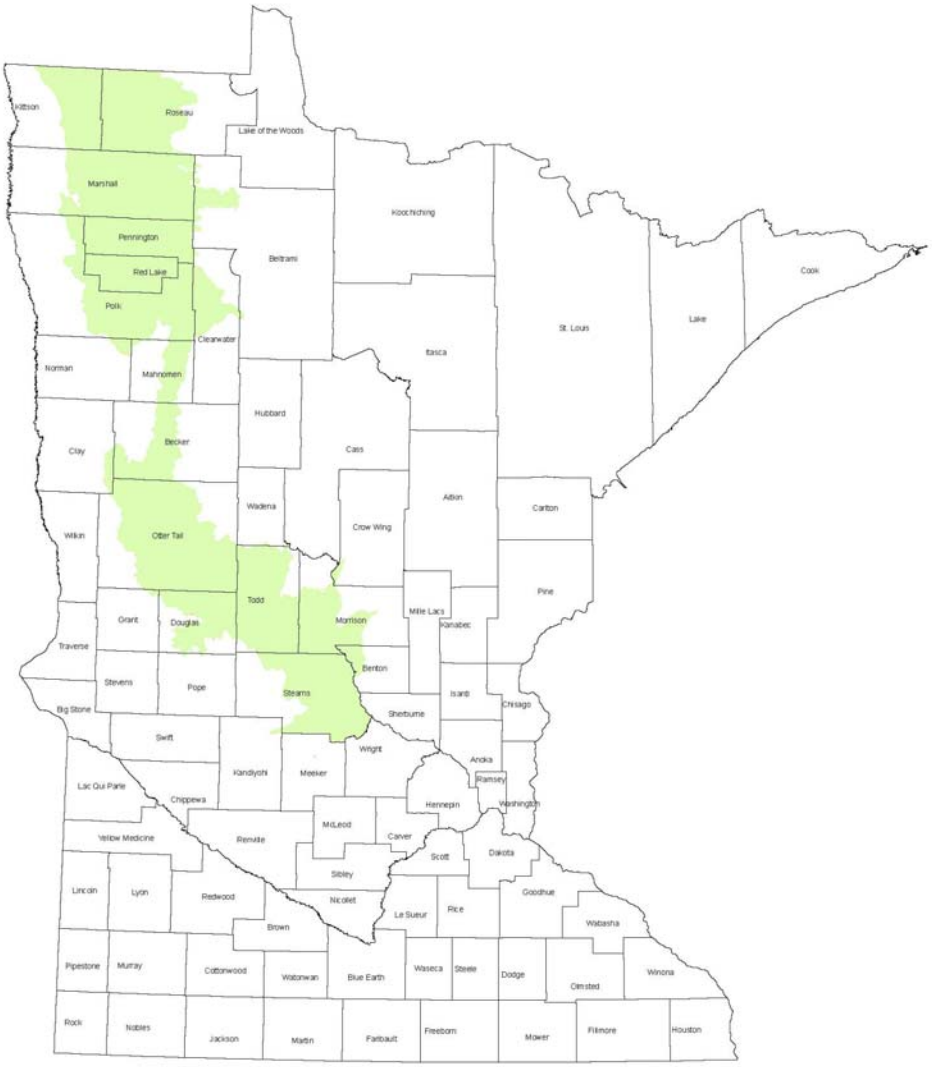
- There are 87 counties, not everyone loves the DNR. There is a lot of fee title on the screen – talk to county boards. Our county boards would like more public access, but two counties over they are not interested. They need to see the economic benefits. Some type of communication or PR campaign to accomplish what we need.

Comments received during draft review period

The following comments were received during the draft review period, between August 27 and September 9, 2009. They are listed in the order they were received, and the topic of each comment is shown in the first column. The third column indicates any change made to the draft document as a result of the comment, or refers readers to other sections of this report that discuss a similar topic.

Topic	Comment	Change made
Grasslands restoration	Would it be possible to include some allocation with the grassland restoration projects for restoration of the northern bob white quail? Thank you. Virginia Wright-Peterson September 1, 2009 *Public comment*	

Forest /Prairie Transition section summary



Conservation professionals' meeting

Following is a summary of the Forest/Prairie Transition Section's conservation professionals' meeting held August 17, 2009 in Detroit Lakes.

Summary Table

	Target	1st year	5 years	10 years	25 years
Prairie	Acres protected	3,000	515,000	835,000	835,000
	Acres restored\enhanced	75,000	525,000	1,050,000	1,050,000
	Cost (all fund sources)	$60,600,000	$1,773,000,000	$3,019,500,000	$3,019,500,000
Wetlands	Acres protected	5,000	50,000	100,000	175,000
	Acres restored\enhanced	5,000	25,000	50,000	75,000
	Cost (all fund sources)	$16,500,000	$150,000,000	$300,000,000	$517,500,000
Aquatic habitat	Acres protected	1,000	10,000	20,000	25,000
	Acres restored\enhanced	2,100	9,500	21,000	68,000
	Shoreline miles protected	35	225	350	550
	Shoreline restored\enhanced	177	1,385	2,770	4,550
	Number of dams, bridges and culverts modified	12	62	275	1,050
	Cost (all fund sources)	$35,900,000	$231,500,000	$430,000,000	$702,500,000
Forest	Acres protected	6,500	70,000	196,000	403,000
	Acres restored\enhanced	4,000	42,000	140,000	343,000
	Cost (all fund sources)	$15,800,000	$169,400,000	$490,000,000	$1,046,100,000
Total cost (all fund sources)		$128,800,000	$2,323,900,000	$4,239,500,000	$5,285,600,000

The prairie targets would be met in 10 years. The 25-year target repeats the ten-year target numbers, it is not an addition to them.

Priority Characteristics and Actions

The professionals provided landscape characteristics that should be the highest funding priorities and priority actions for protection, restoration and enhancement. These are summarized below, in the order they came up in discussion.

Priority landscape characteristics

For Prairie Protection in the Forest/Prairie Transition Section

Give more priority to prairie protection programs with these features:

- Link habitats.
- Coordinate with water quality efforts.
- Address invasive species.
- Protect oak savanna.
- For bird conservation – 50 percent of target in priority areas for grassland birds and 50 percent in priority areas upland nesting waterfowl.

- MCBS biodiversity ranking should be “high” or “outstanding.”
- Protect four to nine square-mile complexes, at least 20% wetlands (at least 50% are seasonal) and 40 percent grasslands (Duck Plan).
- Protect larger grasslands/wetland complexes (2,000 acres plus) to benefit grassland species (sharp-tailed grouse, prairie chicken and others) and near other public lands to create corridors (Wildlife Management Acquisition Plan).
- Protect farmlands containing a mixture of cultivated grains, undisturbed grasslands, and wetlands. Undisturbed grass habitats for nesting and brood rearing (Ringed-neck Pheasant Plan).
- Protect native prairie and savanna and areas that link large, intact ecosystems (Statewide Conservation and Preservation Plan).

For Wetland Protection in the Forest/Prairie Transition Section

Give more priority to wetland protection programs with these features:

- Flood mitigation.
- Protect flood-plain, saturated, and fen wetlands.
- Extend protection on existing Conservation Reserve Program acres that are expiring.
- Address watersheds and advance the number of projects being done – thousands of acres of flood damage reduction that would fit inside this.
- Concentrate work on riparian wetlands, which serve as essential habitat for early life history stages of many aquatic organisms including fish, invertebrates, and amphibians.
- Protect groundwater recharge and source-water protection.
- Wetlands in high density areas of breeding waterfowl pairs.
- Wetlands located in uplands (grassland nesting habitat) – don’t be mutually exclusive and protect wetlands in the middle of crops.
- Temporary, seasonal wetlands less than two acres in size (not protected by Wetlands Conservation Act).
- Create a higher percentage of grass cover.
- Protect wetlands with high water quality that are fishless to avoid competition between waterfowl and fish for food resources. Many type IV and V wetlands are infested with fathead minnows and other invasive fish.
- Concentrate on isolated wetlands – not affected.
- Promote carbon sequestration – wetlands are rich in carbon.

For Habitat Protection in the Forest/Prairie Transition Section

Give more priority to habitat protection programs with these features

- Landowner incentives.
- Protect high gradient stream reaches (spawning habitat).
- Create fish passages and connectivity for mussels and other species.
- Allow public access.
- Control invasive-species.
- Restore hydrology to enhance wild rice lakes and recreate fluctuations.
- Augment water flow.
- Protect rare and culturally significant species.
- Address impaired waters – definite partnership with the total maximum daily load (TMDL) process, and include habitat as a portion.

- Pinpoint high quality resources.
- Protect many small basins (9 acres each, on average) and permanent wetlands for migration (Duck Recovery Plan).
- Provide winter cover (Pheasant Plan).

For Forest Protection in the Forest/Prairie Transition Section

Give more priority to forest protection programs with these features

- Address impacts of climate change.
- Access to in-holdings.
- Target sensitive resources – everything from lakeshores, to deepwater lakes, to watershed lakes of concern, to oak savanna patches. Select forest acres that meet multiple objectives.
- Advance working lands initiatives.
- Partnerships with private
- Young forest initiatives
- Rapid rotation harvesting for biomass fuel.
- Incentives for planting trees and for taking down trees consistent.
- Prevent parcelization and forest fragmentation.
- Control exotic species and diseases, sometimes related to climate change.
- Stand-age management.

Priority Restoration and Enhancement Actions

For Prairie Restoration and Enhancement in the Forest/Prairie Transition Section

Give more priority to prairie restoration and enhancement programs with these features:

- Explore public, private cooperative relationships for Integrated resource management
- Have the option to continue to use own lands after an easement, such as biofuels as a means to maintain.
- Restore sites within the large landscape context [in this section]
- Have requirements for biodiversity of species used in restorations – minimum standard required for diversity and local eco-type seed.
- Encourage high-forb abundance and density.
- Buffer aquatic resources.
- Coordinate actions – working lands initiative.
- Protect the most acres through conservation easement or Conservation Reserve Program (per reviewed conservation plans).

For Wetlands Restoration and Enhancement in the Forest/Prairie Transition Section

Give more priority to wetland restoration and enhancement programs with these features:

- Take advantage of the window of opportunity as Conservation Reserve Program acres become available. comes out –good opportunity because the media has been informing people.
- Restoration of large-drained wetland basins – value in and of itself.
- Restore small drained basins
- Not only restore wetlands, but manage wetland conditions, such as impoundments.
- Wetlands ranked high in biodiversity by the county biological survey.

For Habitat Restoration and Enhancement in the Forest/Prairie Transition Section

Give more priority to habitat restoration and enhancement programs with these features:

- Addressing degraded aquatic systems needing management – prairie lakes infested with carp or hydrologically altered.
- Restore stream meander – looking at channelized systems. Reconstruct flood plain.
- Original channel restoration – buffers.
- Landowner incentives
- Restore the natural hydrology – not so much the "flow"
- Invasive species control
- Take a watershed approach and restore upstream or up-watershed areas.
- Address the five components of stream health: biology, hydrology, connectivity, water quality, and geomorphology.
- Restore systems to deal with landscape stresses before symptoms appear. A healthy ecosystem is a good buffer against invasive species.
- Build integrity and resiliency in the system – so that invasions are less likely to be successful.

For Forests Restoration and Enhancement in the Forest/Prairie Transition Section

Give more priority to forest restoration and enhancements with these features:

- Buckthorn mitigation.
- Mitigate effects of the emerald ash borer.
- Reforestation in this section's central area.
- Use prescribed burns.
- Reduce fuel load.
- Reduce fragmentation – has implication for large area wildlife species.
- Repair beach ridges damaged by private acquisition and development.
- Oak savanna improvements or enhancements.
- Target riparian zones and stream corridors.
- Create corridors – make contiguous across landscape.
- How the restoration will impact water, fire, grazing – many things.

Prairies

The professionals created two prairie categories:[17]

- **Native:** remnant prairie from pre-settlement times.
- **Restored:** agricultural lands restored to prairie using native species.

The native prairie protection target was based on protecting all remaining concentrations of unprotected native prairie and prairie brushlands within the next ten years, to ensure protection and take advantage of low land prices. The restore and enhance target includes currently protected native prairie, with 10 percent of acres restored and enhanced annually so that all are completed within ten years. Meeting participants said restore and enhance includes activities that the other sections' participants called "maintenance."

Native Prairie

Target	1st year	5 years	10 years	25 years
Protect – acres	1,000	15,000	35,000	35,000
Protect – cost ($2,700 per acre)	$2,700,000	$40,500,000	$94,500,000	$94,500,000
Restore\enhance – acres	25,000	125,000	250,000	250,000
Restore\enhance – cost ($500 per acre)	$12,500,000	$62,500,000	$125,000,000	$125,000,000

The restored prairie target is the Minnesota Forest Resources Council's West Central Plan's total (300,000 acres) plus 500,000 soon-to-expire Conservation Reserve Program acres. As with native prairie, all restored prairie acreage would receive restoration and enhancement within ten years.

Restored Prairie

Target	1st year	5 years	10 years	25 years
Protect – acres	2,000	500,000	800,000	800,000
Protect – cost ($2,700 per acre)	$5,400,000	$1,350,000,000	$2,160,000,000	$2,160,000,000
Restore\enhance – acres	50,000	400,000	800,000	800,000
Restore\enhance – cost ($800 per acre)	$40,000,000	$320,000,000	$640,000,000	$640,000,000

Cost per restored\enhanced acre is the midpoint of $250-$1,250.

[17] Due to time constraints, participants omitted a third category (surrogate grasslands) used in other section meetings. Participants also felt it was important to protect "what has already been restored," though some agricultural lands may need restoration to create connecting corridors.

Wetlands

The protection target is based on the U.S. Fish and Wildlife Service's estimated goal of 100,000 acres of existing, type I, III, IV and V wetlands and the Duck Recovery Plan goal of converting 75,000 acres of agricultural lands to wetlands, which are also the entire restore and enhance target.[18]

Target	1st year	5 years	10 years	25 years
Protect – acres	5,000	50,000	100,000	175,000
Protect – cost ($2,700 per acre)	$13,500,000	$135,000,000	$270,000,000	$472,500,000
Restore\enhance – acres	5,000	25,000	50,000	75,000
Restore\enhance – cost ($600 per acre)	$3,000,000	$15,000,000	$30,000,000	$45,000,000

Habitat

The professionals created four aquatic habitat categories:

- **Lakeshore miles and watershed acres:** a minimum 25-foot wide buffer strip along a lake and 1,000 acres of land, on average, to protect its watershed.
- **Shallow lakes:** lakes larger than 50 acres and less than 15 feet deep, including wild rice lakes.
- **Streams and rivers outside the Red River Basis:** a 100-foot wide buffer strip along each side.
- **Red River Basin:** a 100-foot wide buffer strip along each side of selected basin streams and rivers, mostly east of the watershed's beach ridge line.

Aquatic habitat conservation professionals reviewed and discussed DNR Northwest Fisheries data to develop the stream and Red River Basin targets. The shallow lakes target is based on the Duck Recovery Plan.

[18] The Duck Recovery Plans does not list spatial targets for each L-SOHC section, so DNR staff provided section estimates.

Lake shore (miles and acres)

Target	1st year	5 years	10 years	25 years
Protect – miles	20	100	150	200
Protect – cost ($700,000 per mile)	$14,000,000	$70,000,000	$105,000,000	$140,000,000
Restore\enhance – miles	2	10	20	50
Restore\enhance – cost ($250,000 per mile)	$500,000	$2,500,000	$5,000,000	$12,500,000
Restore\enhance – watershed acres	1,000	5,000	10,000	25,000
Restore\enhance – cost ($1,000 per acre)	$1,000,000	$5,000,000	$10,000,000	$25,000,000

The watershed restoration target would restore approximately 1,000 acres per lake, on average, for 25 lakes.

Shallow lakes (acres)

Target	1st year	5 years	10 years	25 years
Protect – acres	1,000	10,000	20,000	25,000
Protect – cost ($5,000 per acre)	$5,000,000	$50,000,000	$100,000,000	$125,000,000
Restore\enhance – basin acres	1,000	4,000	10,000	40,000
Restore\enhance – basin cost ($1,000 per acre)	$1,000,000	$4,000,000	$10,000,000	$40,000,000
Restore\enhance – lakeshore acres	100	500	1,000	3,000
Restore\enhance – lakeshore cost ($1,000 per acre)	$500,000	$2,500,000	$5,000,000	$15,000,000

The 25-year target assumes that 200 basins of 200 acres each, on average, would be restored and enhanced through water level controls, fish barriers and reclamation.

Participants said their non-Red River Basin stream and river restore and enhance targets were "conservative," with many more miles possible.

Streams and rivers outside the Red River Basin (shoreline miles)

Target	1st year	5 years	10 years	25 years
Protect – shoreline miles	No target developed.			
Restore – channel miles	25	125	250	500
Restore – cost ($100,000 per mile)	$2,500,000	$12,500,000	$25,000,000	$50,000,000

Channel restoration includes in-stream restoration and modifying the existing channel to look and function like a natural one.

The Red River Basin targets are included in the Prairie Section targets, too. The professionals emphasized that riparian buffer restoration must include private lands to be effective, and that a 100-foot wide buffer on each side is necessary to address the level of concentrated flow into the river basin.

Red River Basin (river and stream miles)

Target	1st year	5 years	10 years	25 years
Protect – coldwater stream miles	5	25	50	100
Protect – coldwater stream cost ($50,000 per mile)	$250,000	$1,250,000	$2,500,000	$5,000,000
Protect – high gradient reaches (miles)	10	100	150	250
Protect – high gradient reaches cost ($50,000 per mile)	$500,000	$5,000,000	$7,500,000	$12,500,000
Restore – channel miles	50	250	500	1,000
Restore – channel cost ($100,000 per mile)	$5,000,000	$25,000,000	$50,000,000	$100,000,000
Restore – riparian buffer miles	100	1,000	2,000	3,000
Restore – riparian buffer cost ($50,000 per mile)	$5,000,000	$50,000,000	$100,000,000	$150,000,000
Number of dams removed or modified for fish passage	2	12	25	50
Dam removal or modification cost ($250,000 per dam)	$500,000	$3,000,000	$6,250,000	$12,500,000
Number of bridges\culverts modified for fish passage	10	50	250	1,000
Bridges\culverts cost ($15,000 per structure)	$150,000	$750,000	$3,750,000	$15,000,000

Costs assume a 100-foot wide buffer on each side for coldwater streams, high gradient reaches and riparian buffers. The riparian buffer restoration target includes private lands.

Forests

The Minnesota Forest Resources Council's West Central Plan's protection target of 245,000 acres was increased 40 percent to account for the excluded part of this L-SOHC section. An additional 60,000 acres were added for the Minnesota Department of Natural Resources' aspen forest target. The restore and enhance target is based on the West Central Plan target with the 40 percent increase.

Participants discussed whether some of the forest acre targets overlapped with the aquatic habitat's watershed and riparian restoration targets and prairie target (oak savanna). They noted that protecting forests near lakes and rivers provides a double benefit. The overlap's extent will ultimately depend on how many forest acres are protected and restored in riparian and oak savanna landscapes.

Target	1st year	5-years	10 years	25-years
Protect – acres	6,500	70,000	196,000	403,000
Protect – cost ($2,000 per acre)	$13,000,000	$140,000,000	$392,000,000	$806,000,000
Restore\enhance – acres	4,000	42,000	140,000	343,000
Restore\enhance – cost ($700 per acre)	$2,800,000	$29,400,000	$98,000,000	$240,100,000

The first-year protection target is the midpoint of 5,000-7,500 acres. The first-year restore and enhance target is the midpoint of 3,000-5,000 acres. These targets may include oak savanna and riparian acres also included in the prairie and habitat categories. Easement cost per acre is the midpoint of $500-$3,500. Cost per restored\enhanced acre is the midpoint of $250-$1,000.

August 17, 2009, Detroit Lakes Meeting Participants

Luther Aadland, Natural Resources Program Consultant, DNR Ecological Resources Division,	Rex Johnson, Leader, Habitat and Population Evaluation Team, US Fish and Wildlife Service
Don Bajumpaa, Manager Wilkin County Soil and Water Conservation District	Erik Jones, Project Engineer Buffalo-Red River Watershed District
Shelley Becklund, Senior Natural Resources Specialist, DNR Ecological Resources Division	Beau Liddell, biologist and Board Member, Minnesota Wildlife Society
Kevin Brennan, Project Leader Fergus Falls Wetland Management District	Mike Locke, Forestry Regional Specialist DNR Forestry Division
Henry Drewes, Regional Fisheries Manager DNR Fish and Wildlife Division	Russ Reisz, Land Steward The Nature Conservancy
Bruce Cox, Land Commissioner Clearwater County, Bagley	Jon Roeschlein, Administrator Bois de Sioux Watershed District
Mike Duval, Natural Resources Field Supervisor and Lakes Program Coordinator DNR Fish and Wildlife Division	Jon Schneider, Manager of Conservation Programs – Minnesota, Ducks Unlimited
Lindberg Ekola, Landscape Program Manager Minnesota Forest Resources Council (MFRC)	Robert Sip, Environmental Policy Specialist Agriculture Development and Financial Assistance Division, Minnesota Department of Agriculture
Brad Grant, Administrator Becker County Soil and Water Conservation District	Bob Sonnenberg, Tree Farmer and Chair of the Minnesota Forest Resources Partnership (MFRP)
Tom Groshens, DNR Red River Watershed Coordinator, DNR Fish and Wildlife Division	Dan Svedarsky, Director, Center for Sustainability University of Minnesota
Fred Harris, Senior Natural Resources Specialist, DNR Ecological Resources	Mike Swan, Director White Earth DNR
Dan Hertel, Habitat and Population Evaluation Team, U.S. Fish and Wildlife Service, Fergus Falls	Kari Tomperi, Water Resources Technician Wadena County Soil and Water Conservation District
Greg Hoch, biologist and President-Elect Minnesota Wildlife Society, Moorhead, MN	Henry Van Offelen, Natural Resource Scientist, Minnesota Center for Environmental Advocacy
Bob Honeman, Conservationist Natural Resources Conservation Service	Pete Waller, Water and Soil Conservationist Board of Water and Soil Resources
Pete Jacobson, Program Supervisor, Fish Research, DNR Fish and Wildlife Division	John Williams, DNR Assistant Regional Wildlife Manager, DNR Fish and Wildlife Division
Myron Jesme, District Administrator Red Lake Watershed District	

Public input meeting

Following is a summary of the Forest/Prairie Transition Section's public input meeting held August 17, 2009 in Detroit Lakes.

Participants

The table below shows the names of the participants at the public input meeting, and their organizational affiliation, if they indicated one. In addition to these participants, there were two observers – one conservation professional who had participated in the daylong meeting, and an observer from the Minnesota Conservation Corps who had observed the daylong meeting.

Name	Organization
Bill Henke	Izaak Walton League
Hank Ludtke	City of Frazee; Red River Basin Association
Carol McCarthy	KDLM Radio
Clarence W. Suvanto	

Introductory comments

- My concern is access to public properties. I've told my county commissioners to give access to public lands. I want to see a color coded system of state, local, federal land, so you know what I can access for berry picking, hiking, etc. There are public lands that are now surrounded by private lands. Our public officials don't like to use eminent domain to get us access to public lands.
- It's hard to use eminent domain.
- Use the tools that you have. What good is the land you acquire if you can't access it?

Comments on the daylong meeting (from an observer and a participant)

- It was very interesting to see things split into prairie, forest, wetlands, and habitat. To me, it all goes together. It is difficult to split things out. It will make things more difficult when you look at the numbers.
- As the water guy, particularly for this landscape, water is very important resource and stressor on this landscape. We identified a number of things. I would echo what Anna said, it was very hard to put things into bins. For example, watersheds have forests, too. They complement each other.

Comments from all participants:

What do you think are this region's greatest needs?

- Sustainable water in 25 years. When you look at the basin, we either have too much or too little. You need water quantity and water quality. We are trying to reduce the pollution through trees and buffers. By sustainable, I mean we need to have the drinking

water we need and be careful on what industries we have, and if they are working towards our green goals.

- Water management is the low hanging fruit. We need to relearn how to manage it. The floods of the past spring show that we need to learn how to handle the volume. How do we re-learn how to manage: how it jets off the landscape, how cities use it, they are hastily putting up diversions, dikes and walls that make it someone else's problem. There's a little bit of time crunch given what is happening with greater frequency. Is it land restoration or wetlands, or handle the water in the channel.
- Let's monitor what we've got – the water that we have. Is it polluted by farmers, animals, wildlife? By the air, with burning garbage? That is a big issue in Becker County. How does it affect my air? Is there a study done before they go ahead and do it? (Note: In Perm, there is a garbage incinerator). We should all have meters on our wells indicating the usage and how we can conserve. The irrigation systems are improving. 10 years ago, 50 percent of the irrigated water went into the air, not the ground. Enforcement of irrigation wells. Counties need to make sure they are performing well and the irrigation well should be included in the assessed value of the property.
- Our forest is the next big thing for animal habitat. We have a good corridor from Smokey Hills to the Highway. I have another water issue: you shouldn't be allowed to keep building things in harms' way. Fargo-Moorhead keeps building in each direction. Either we need a long range solution for them to stay there, or development should happen elsewhere. FEMA tells Frazee to get flood insurance, but it is not feasible.
- Buckthorn has overridden the landscape. People need help managing it. Why do we spend gas and money to mow road ditches, while the DNR is trying to provide habitat? Can't the ditches be used as habitat?

What would you like the counsel to accomplish for this region?

- I'm hoping to access money for trails. Bring the North County trail here and the Heartland trail from Park Rapids. (Bill Becker noted that this request might go to the Parks and Trails fund established by the constitutional amendment).
- This ties to your 1- and 25-year goals. Look at this area and pick out a watershed model where you can make an impact on. For example, could the Wild Rice River have an impact on the Red River? Do some pond and wetland restoration. Target something that promotes long range change. I like to hunt ducks and bird watch. In 25 years, I don't want a piecemeal process, but something that shows how you tied things together. We could say in this area, we mitigated flooding, the birding areas were restored, and we are not jetting water into the Fargo area. Detroit Lakes should be a model of how you connect these things and make long term change. As you do this, you don't range out so far that you don't have enough money to manage what you did. Have measurement tools.
- Water quality again. What I see is that people want dust free roads, and so they spray them. Some counties are doing it 100 percent and in Becker County a township went in that direction. When people bought the property they should have known it will be a dusty road. Or put a sign out that says this road has been treated with calcium? I'm fussy when I buy a car about what I drive on. When it rains, the stuff flows into a ditch. Counties say they save money by not putting down gravel.

- Have our counties and cities work better with the council on a long range plan. The county is starting to look at a long range park plan and the forest issue with biomass, but we have not been able to get the nail into the box: to get to the planning stage.
- Forest management: blend old and young forests to cater to different types of wildlife. Don't let forests fall into disrepair due to lack of thoughtful management.
- Better use of timber that is logged. There is timber left behind from logging processes. Find a use for the short pieces.
- (Les Bensch): As a council member and resident, we've heard very little from the agriculture industry. I wonder if some of these goals will be hard to accomplish. The heart of the problem is flushing the water from one area to another. One of the things we have to change is agriculture policy and miles of ditches that move the water away. We need to start talking to the agriculture industry. We restored 300 acres on one side of the road, and on the other side they spent three months tiling.
- Here is my thought on that. Can you improve the economics to get them to change? And what about the farmer with the self determination, how do you change him? There may be some farmers who can be given incentives and are willing to be a model. If you can prove the economics of scale are there and you are shooting the water off less quickly or you can show that some types of crops that can live in impounded waters. Perhaps you can prove to the farmers that it is possible. It might take increments rather than do it all in 25 years.

Do you have any other general advice or comment for the Council?

- It is amazing that the voters dedicated money to this and you can develop a working document. The best to you.
- The public should be informed of projects and how they are progressing, what is the council spending. People are always interested what it is going to cost. Even in church people want to know what a project costs.
- Be true to your goals. Don't let the self serving aspects take you off track. Let science and biology trump all the other noise.

Comments received during draft review period

The following comments were received during the draft review period, between August 27 and September 9, 2009. They are listed in the order they were received, and the topic of each comment is shown in the first column. The third column indicates any change made to the draft document as a result of the comment, or refers readers to other sections of this report that discuss a similar topic.

Topic	Comment	Change made
Definitions	Thanks for the opportunity to meet and discuss the implementation of the Lessard-Sams Fund. To be sure, there were some struggles here and there to set goals and objectives in investing these resources, but what a good problem to have! As I mentioned towards the end of our session, I have a bit of difficulty with two of the definitions as noted in the backup materials; those being enhancement and restoration. I've worked a fair amount with wetlands over the years and make a couple of suggestions based on that experience. Please see my comments in italics amongst the cut and pastes: Definitions: The Council's definitions for protect, restore and enhance are: **Protect:** action to maintain the ability of habitat and related natural systems to sustain fish, game or wildlife through acquisition of fee title or conservation easements. *This is pretty clear cut; you either buy a habitat or protect it with an easement.* **Restore:** action to bring a habitat back to a former state of sustaining fish, game or wildlife, with an ultimate goal of restoring habitat to a desired conservation condition. *This definition is a little fuzzier in differentiating it from enhance. In my experience, when you "restore" a habitat, you bring back a wetland or forest to a particular place where it used to be after it has been obliterated. For example, plug a drainage ditch or tile to restore a wetland or replant an open field to bring back a forest which used to be there.* **Enhance:** action to increase the ability of habitat and related natural systems to sustain and improve fish, game or wildlife in an ecologically sound manner. *This definition is perhaps the most troublesome of the three because of the subjectiveness of, "an ecologically sound manner." Here, one improves the function of commonly one function in an existing habitat, like adding nest boxes to improve the nesting function. This typically does not increase the size of a habitat. Other examples listed below are increasing open water in a vegetation-choked marsh, dredging a wetland partially filled by erosion, or removing exotic species. To dredge a partially filled wetland might very well fit into the definition of "restore" above. I suspect that this one could be interesting when proposing the lowering of water levels in shallow lake management.* Thanks again, and perhaps these definitions could be clarified by simply adding a few examples. On the other hand, maybe it's just me who thinks there is the potential for some interpretation issues. W. Daniel Svedarsky, University of Minnesota, Crookston August 27, 2009 *Commenter attended conservation professionals meeting* Staff note: Professor Svedarsky's references for definitions are provided following this summary of comments	

Use of funds for "mainten-ance"	I am grateful for the opportunity to participate in the discussions regarding the planning session for the L-SOHC. I was honored to be asked. I thought all went fairly well in the discussions and I am hopeful that the information collected will provide guidance for the Council. It is still very complex but I hope that it will be productive. I have only one concern stemming from the discussions held that day, where some were indicating that management tools such as fire were being touted as an "enhancement" tool and not a "management" or "maintenance" tool when doing prairie establishment. In my professional opinion, prescribed burning of a prairie does not "enhance" the prairie. Fire is part of the life cycle of the prairie. Prairies experienced fires naturally long before man settled here and evolved with fire as part of the cycle. Yes, one does achieve tremendous response in plant diversity when a timely burn is conducted, but it is not an "enhancement" tool, rather it is "maintenance." In looking at the projected costs to do all the things we discussed at our planning session, it is very apparent that funding is going to be very competitive in order to achieve these goals. I would advise the L-SOHC to carefully review proposals and make determinations that the requested funds are not appropriated for "management" or "maintenance" items. Entities or organizations submitting their requests should have a plan on how they intend to manage and/or maintain the projects into the future, including not only what they plan to do for management, but also who will do it and how it will be paid for without L-SOHC money. My concern is we could use up a large amount of L-SOHC money on "maintenance" when we really want to invest it in developing more habitat and fixing man's mistakes from the past. My comments are not intended to upset anyone but I feel it is my responsibility to convey them, especially when the L-SOHC has asked for my input. I hope it is helpful. Thank you for the opportunity and I look forward to working with the L-SOHC and all of you in the future. Jon Roeschlein Bois de Sioux Watershed District August 28, 2009 *Commenter attended conservation professionals meeting*	
Wetland protection and restoration	I have the following comments on your L-SOHC draft goals and objectives for the Forest/Prairie Transition Section: Page 5, Under heading - For Wetland Protection in the Forest/Prairie Transition Section Protect wetlands with high water quality and no minnows to compete for food with ducklings. Many type I and II wetlands are infested with stickleback and fathead minnows. *This should be changed to read:* Protect wetlands with high water quality that are fishless to avoid competition between waterfowl and fish for food resources. Many type IV and V wetlands are infested with fathead minnows and other invasive fish.	Changes were made with the understand-ing that they did not change the overall meaning of the group's recommenda-tion

	Page 9 Under heading – Wetlands The protection target is based on the U.S. Fish and Wildlife Service's area goal of 100,000 acres of existing, emergent (saturated) wetlands and the Duck Recovery Plan goal of converting 75,000 acres of agricultural lands to wetlands, which are also the entire restore and enhance target. *This should be changed to read:* The protection target is based on the U.S. Fish and Wildlife Service's estimated goal of 100,000 acres of existing, type I, III, IV and V wetlands and the Duck recovery Plan goal of converting 75,000 acres of agricultural lands to wetlands, which are also the entire restore and enhance target. Kevin Brennan Fergus Falls Wetland Mgt. District August 31, 2009 *Commenter attended conservation professionals meeting*	
Native Prairie Protection target, biodiversity rankings, and use of money for mainten-ance	Thank you for inviting me to the planning meeting. I had the following comments. 1. I reviewed the GIS data for the prairie and savanna polygons mapped by MCBS (MN County Biological Survey) in the L-SOHC Forest/Prairie Transition section. In the section, MCBS mapped 71,468 acres of prairie and savanna communities in the section. (About 42,000 acres of this are mosaics of brush prairies, savannas, and aspen groves in Kittson County). Of these acres in the Section, approximately 45,818 acres are protected (in preserves or easements) and approximately 25,650 acres are not protected. Thus, I think our preliminary 25 year goal of 25,000 acres is close, but I would suggest increasing it to 35,000 acres to include areas that did not meet MCBS criteria for mapping. 2. Under "Priority landscape characteristics for Prairie Protection," I see that the other L-SOHC sections have the following as one of the bulleted priorities: "MCBS biodiversity ranking should be high or outstanding." I recommend that this also be included in the priority characteristics for the Forest/Prairie Transition section. The intent of this criterion is that high quality native prairies and savannas should be a priority for protection. 3. I have some concern about the notion that L-SOHC funds should not be used for "management" or "maintenance" of restorations once land has been acquired and prairie species have been planted. As we all know, you cannot successfully restore a prairie without 10+ years of follow-up actions to control weeds, invasive species, etc. In my experience, a chronic problem for organizations that restore native habitats is that they can get grant money for the initial establishment planting but have a much, much harder time coming up with funds to maintain the initial planting to make it "stick." I think the L-SOHC should allocate a portion of its restoration funds for maintenance. Fred Harris DNR Ecological Resources Division September 3, 2009 *Commenter attended conservation professionals meeting*	Change made. Change made. Concern is noted in "Common discussion themes" section

Additional definition references

References provided by Dan Svedarsky, University of Minnesota, Crookston

From: *Wetlands Restoration Strategy - A framework for prioritizing efforts in Minnesota.* January 2009. Supplement to the Minnesota Wetlands Conservation Plan of 1997. (interagency report) http://www.bwsr.state.mn.us/wetlands/Restoration_Strategy.pdf

Activity	Included in this strategy?
RESTORATION involves re-establishment or rehabilitation (further defined below) at the site of a former or degraded wetland, with the goal of restoring natural, historic wetland functions. **RE-ESTABLISHMENT**: Restoring wetland functions lost due to conversion of a wetland that existed within the last 100-200 years. Provides a gain in wetland acres. **REHABILITATION**: Repairing or increasing the functionality of an existing degraded wetland. Does not provide a gain in wetland acres.	**Yes**
ENHANCEMENT involves heightening, intensifying or improving a single, specific function of an existing wetland, potentially to the detriment of other functions. It does not provide a gain in wetland acres.	**Yes**
CREATION involves converting an upland site to a wetland where no wetland has existed within the last 100-200 years. While it may provide a gain in wetland acres and functions, it is not considered a "restoration" activity.	**No**

From: *An Introduction and User's Guide to Wetland Restoration, Creation, and Enhancement: A Guide for the Public Containing: Background on wetlands and restoration, Information on project planning, implementation, and monitoring, Lists of resources, contacts, and funding sources.*
Developed by the Interagency Workgroup on Wetland Restoration: National Oceanic and Atmospheric Administration, Environmental Protection Agency, Army Corps of Engineers, Fish and Wildlife Service, and Natural Resources Conservation Service. 2003
http://www.epa.gov/owow/wetlands/pdf/restdocfinal.pdf

Definitions
The terms "restoration", "creation", and "enhancement" have been defined a variety of ways. The following commonly-accepted definitions for these terms, based on Lewis (1990), will be used in this document:

- **Restoration** - Returning a degraded wetland or former wetland to a pre-existing condition or as close to that condition as is possible.
- **Creation** - Converting a non-wetland (either dry land or unvegetated water) to a wetland.
- **Enhancement** - Increasing one or more of the functions performed by an existing wetland beyond what currently or previously existed in the wetland. There is often an accompanying decrease in other functions. A similar set of definitions was adopted by a number of federal

agencies in 2000 to keep track of federal wetland conservation projects. This set of definitions distinguishes between two types of restoration - “rehabilitation” (restoration in an existing wetland) and “reestablishment” (restoration in a former wetland). These definitions are in Appendix T-V. Restoration and enhancement projects may be difficult to distinguish from each other, because both can encompass activities in existing degraded wetlands. According to the definitions above, restoration entails returning a wetland to a former state (e.g., filling a ditch so that a drained wetland becomes flooded again), while enhancement means changing the wetland so that one or more functions are increased beyond their original state. An example would be diverting a small stream into a wetlandso that the area has deeper water. Enhancing a wetland in one way often degrades it in another way. For example, adding more water to a wetland may create better habitat for fish, but it will decrease the ability of the wetland to hold flood waters. This trade-off is particularly true for enhancement in relatively undisturbed wetlands. Some common examples of the trade-offs that can occur with wetland enhancement include loss of fish habitat when salt marshes are impounded to provide waterfowl habitat, decreased water storage when seasonal wetlands are flooded to increase aquatic habitat, and loss of colonial waterbird habitat when mangroves are removed to provide shorebird habitat. When wetland enhancement is undertaken, the project goals should include minimizing any decrease in existing wetland functions.

- **Wetland creation** - putting a wetland where it did not exist before - is usually a difficult undertaking. The primary challenges in creation projects are bringing water to a site where it does not naturally occur and establishing vegetation on soils that are not hydric. While creation is possible, it typically requires significantly more planning and effort than restoration projects, and the outcome of the effort is difficult to predict. Many attempts to convert uplands to wetlands result in ecosystems that do not closely resemble natural wetlands and that provide limited wetland functions (valuable upland habitat might be lost in the process as well). Creating wetlands from open water is less difficult with respect to establishing a water source, but it often requires placing dirt or other fill into existing aquatic habitats, which means destroying one kind of aquatic habitat to create another. While this trade-off sometimes can be justified ecologically, the engineering and regulatory challenges of these projects are so complicated that professional expertise and oversight are almost always required.

The outcome of a creation and enhancement project is often difficult to predict because these projects essentially try to produce a new ecosystem. With restoration projects, outcomes are more predictable, although there may still be uncertainty depending on the type of wetland, extent of degradation, and many other factors. Under certain circumstances, creation or enhancement may be the best option (see Box 2 for an example) but for the most part, restoration is more likely to have a positive outcome in terms of improving wetland resources

From: a Michigan wetlands document:
http://www.deq.state.mi.us/documents/deq-water-wetlands-chap8.pdf

Terms like wetland restoration, enhancement, and creation mean different things todifferent people. For the purposes of this discussion, commonly accepted definitions are noted below. In this chapter, the term .wetland project. is used as a general term to refer to a restoration, enhancement, or creation project.

Wetland Restoration is a term used to describe activities that seek to return wetlands to a previously existing natural condition from a disturbed or totally altered state. It is not necessary to have complete knowledge of the preexisting conditions. Rather, it is enough to know a wetland of a certain type was there and have as a goal the return to that same wetland type. Most wetlands were converted to uplands by ditching, tiling, stream channelization, or other hydrologic manipulation. Drained sites will retain hydric

soils and likely retain a wetland vegetation seed bank for many decades. Wetland hydrology can often be restored by plugging drainage ditches or removing segments of drain tile. If the original wetland hydrology can be restored, then the site can again become a functioning wetland.

Wetland Enhancement is the improvement, maintenance, and management of existing wetlands and/or associated uplands for a particular function or value, possibly at the expense of others. For the purposes of this book, wetland enhancement activities are divided into two categories: high impact and management. High impact enhancement involves changing the physical characteristic of the wetland from what it was historically. Examples of high impact enhancement activity include dredging to create a pond for waterfowl in a wetland that currently does not have open water, or impounding water at a greater depth or duration than what occurred historically. High impact activities usually require permits and result in enhancing one wetland function at the expense of others. Management activities are those which do not involve changes in soils or hydrology of wetlands. Examples of management (or low impact enhancement) activities include installing nest boxes for wildlife, controlling the spread of exotic species such as purple loosestrife, maintaining greenbelts around wetlands, and planting upland habitat with food cover. These and other management activities are addressed in Chapter 7.

Wetland Creation is the conversion of an area that was historically upland into a wetland. Wetlands are most commonly created by impounding water or excavating surface soils. This usually involves intensive, costly efforts, such as earth movement, dam construction, and vegetation planting. The most common, successfully created wetlands have been shallow impoundments and shallow excavations in areas adjacent to existing wetlands where the ground water table was already fairly close to the soil surface. In these situations, hydrology and wetland vegetation can often be easily established and revegetation can occur quickly. As a general rule, created wetlands do not function as well as restored wetlands. Furthermore, wetland creation is the most expensive of the three processes and has the greatest chance for failure

Comments – Not section-specific

The following comments were received during the draft review period, between August 27 and September 9, 2009. They are listed in the order they were received, and the topic of each comment is shown in the first column.

Topic	Comment
Aquatic habitat	Dear Members of the Lessard-Sams Outdoor Heritage Council: Attached please find a set of comments and recommendations developed by the Minnesota Chapter of the American Fisheries Society in reference to funding of aquatic habitat projects through the Clean Water, Land, and Legacy funds, as well as some observations on the process to date. As the organization representing fisheries and aquatic science professionals throughout Minnesota, we recognize the incredible opportunity this action has given us to restore, protect, and enhance aquatic habitats over the next 25 years. We appreciate the opportunity our members have already had to participate in these discussions, and remain readily available and willing to continue to provide our best advice to the Council, as fisheries and conservation professionals. Thank you for your attention. Sincerely, Kristen Blann, President-elect Minnesota Chapter of the American Fisheries Society (MNAFS) [please distribute to all members of the Council] September 1, 2009 *Public comment* Staff note: The document is provided following this summary of comments
Minnesota River Valley and general comment	I am excited about the things I am hearing that the Lessard Council is doing. Especially important in future years will be the efforts to improve water quality in our Rivers and Lakes. I am especially interested & supportive of efforts to clean up the Minnesota River & the Valley that feeds into the River. The runoff and other pollutant sources need to be curtailed. The Minnesota River Valley is an overlooked GEM in Minnesota – it's beauty far surpasses the more often visited & spoken about Mississippi River. Please focus some attention on moving ahead with preserving and enhancing this wonderful Natural Resource that we have. As it relates to the Lessard Council activities... Please ensure that the Legislature & the Politicians keep their fingers out of these funds. I am fed up with their rhetoric and unfulfilled promises. They passed a Minnesota River Cleanup effort a number of years ago & have done their usual Political thing - No or Minimal funds to get the job done. Please Keep the Legislature & Politicians OUT of this new Dedicated source of Funds that we have designated to get the job done all around the State! Steve Schultz Litchfield, Minnesota September 6, 2009 *Public comment*

General comments on planning process	Thank you for the opportunity to provide these tardy comments on the draft plan. The Council has accomplished some amazing work in assembling these draft documents. Because of their scope, detail and comprehensiveness, and given staff limitations to deliberate on these, we can regrettably only offer very general comments, as listed below. 1. The Nature Conservancy lauds the Council on developing a comprehensive strategic framework upon which to direct investments for the next 24 years. A succinct description of priorities is essential. 2. We are very concerned that the plan currently lists numbers that are simply unattainable. Even with funding from other sources, the combination of all goals is well beyond the conceivable capacity of all natural resources funding sources. While this may serve to identify the scale of need, it will also alarm constituencies that are not in favor of conservation or opposed to specific conservation tools (like acquisition) because of the scale of activities proposed. 3. The plan lists desired goals without consideration for possible funding sources. Given that the magnitude of funding from the Amendment is reasonably ascertainable (25 years times $90 million/year in today's dollars), it seems much more reasonable to start a plan with the expected number of dollars that will be available, and develop habitat goals based upon current costs. Using this approach will provide much more reasonable - and much less alarming - habitat goals. 4. Further, by working within the likely 25-year budget, the Council will identify at the front end (i.e., in the plan), the required tradeoffs in desired accomplishments among the habitat types (e.g., how much forest should be protected vs. freshwater habitat with limited dollars). The current draft poses no such limitations, so doesn't give any indication of the Council's priorities for how funds should be spent. 5. The plan should recognize the contributions to conservation from other sources, but it should be clearly presented as likely accomplishments from other sources (e.g., WRP from USDA dollars). 6. The plan doesn't identify likely overlap (where acres to accomplish one outcome - say pheasants - will also accomplish another outcome - say ducks), and the synergies that result. This would likely also reduce the number of acres needed in each of the habitat categories and ecoregions. This would be useful information, even if only educated speculation, as it will suggest efficiencies that can be achieved and reduce total needed activity levels. A useful plan for the Council will identify attainable goals for conservation, clearly outline priorities, articulate how synergies and efficiencies can/will be attained, and give readers and constituents a good vision of how Minnesota will look after 25 years of Amendment expenditures. That is not possible with the current draft, so we encourage some good editing by the Council to significantly polish the document before considering it a working plan. Thank you for your consideration, and please do feel free to contact me for more information. Tom Landwehr, Assistant State Director MN, ND, SD, The Nature Conservancy September 10, 2009 *Public comment*

RECOMMENDATIONS TO THE LESSARD-SAMS OUTDOOR HERITAGE COUNCIL

In 2008, Minnesotans made a clear statement that they value habitat and clean water when they overwhelmingly approved the Clean Water, Land, and Legacy Amendment As the organization representing fisheries and aquatic science professionals throughout Minnesota we recognize the incredible opportunity this action has given us to restore, protect, and enhance aquatic habitats over the next 25 years. As the Lessard-Sams Outdoor Heritage Council makes plans for allocating dedicated funds in 2010 the Minnesota Chapter of the American Fisheries Society provides the following background information and recommendations for your consideration.

Minnesota's lakes, rivers and streams support and sustain diverse aquatic communities and healthy populations of 158 fish species. Economic activities directly associated with Minnesota's lakes, rivers and streams contribute $321.7 million annually to state and local tax revenue in addition to hundreds of millions of dollars from water related recreation and tourism. These waters are enjoyed by Minnesota's 1.43 million licensed resident and non-resident anglers who spend over $2.5 billion annually. Fish populations depend on clean, naturally connected, and healthy aquatic habitats.

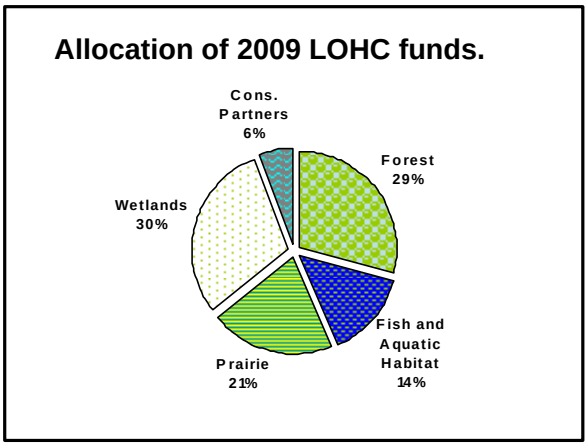
Minnesota has incurred significant losses in the quantity and quality of aquatic habitats. Entire lake basins have been drained, more than 22,000 miles of rivers and streams have been channelized and rerouted, thousands of miles of shoreland and nearshore habitats have been dramatically altered, and fish habitats have become disconnected by dams and culverts. In addition, the cumulative impacts of development, wetland drainage, and agricultural drainage (surface and subsurface) have significantly altered the hydrology of most lakes, rivers, and streams, resulting in increased sediment and nutrient loads, altered water quality and physical habitat. All these changes have chipped away at the integrity and sustainability of Minnesota's aquatic habitats and significantly altered the fish and wildlife communities that depend on them.

Management of aquatic habitat is recognized as an important and effective tool for protecting, restoring, and enhancing fish and other aquatic communities. For example, almost 46% of coldwater stream miles have been protected in public ownership. About one-fourth of these protected stream reaches (600 miles) are part of the Aquatic Management Area Program (AMA). This program, based on a public-private partnership, has also worked in parallel with the trout stream habitat improvement program which restores and enhances trout waters. The Aquatic Management Area model has also been applied to lakeshore and some warmwater streams; however, as noted in the 2008 AMA acquisition plan only about 0.3% of shoreline along Minnesota's lakes, warmwater streams and rivers are protected through AMA. Other ongoing habitat efforts in place include aquatic plant restoration, river and stream restoration, dam removal and modification, and the shoreland habitat program. Although these activities and programs are effective and generate significant benefits, they are relatively underfunded and overshadowed by short-term management activities like regulations and stocking.

Restoration, protection, and enhancement of aquatic habitats are accomplished in a different landscape and management context compared to wetlands, prairies, and forests. Traditionally, direct acquisition has been the primary first step in managing these other habitat types. Last year's funding decisions by LOHC demonstrates this approach. It makes sense that a first step in the 25 year journey to restore, protect, and enhance prairies, wetlands, and forests is to focus on acquisition. In contrast to wetlands, prairies, and forests, the restoration, protection, and enhancement of lake, river, and stream habitats requires a different approach because they (1) are a publicly owned resource, (2) are subject to degradation and loss primarily from actions outside their footprint including areas immediately adjacent to them (e.g. shorelands) or elsewhere in their watershed, and (3) have largely not been drained, filled, or converted to some other land use.

MN AFS Recommendations

1. **The Council should adequately fund aquatic habitat restoration, protection, and enhancement projects and programs.** Aquatic habitat programs and projects were under represented in the 2009 portfolio of projects funded by LSOHC. Aquatic habitat projects were included in the category "fish, game, and wildlife habitat." When the conservation partners funding is separated from this category, only 14% of the total recommended allocation was designated for projects or programs primarily for fish and aquatic habitat. Funding aquatic habitat projects and programs at this low level for 25 years will not protect, restore, or enhance fish habitat to the degree expected by the citizens of Minnesota.



2. **The Council should find a way to fund aquatic habitat restoration and enhancement activities on private shoreland, especially for lakes.** Nearly 2/3 of lakeshore in the state is in private ownership, and management of these private shorelands and associated uplands has enormous implications for aquatic habitat. Programs and projects that target private land management and stewardship will be essential to achieving long-term conservation goals and outcomes for aquatic habitat.

3. **The Council should fund projects and programs that achieve measurable long-term goals and objectives, and habitat outcomes.** We generally support the actions LSOHC has taken this summer to develop a process to establish a long-term strategy and goals with input from technical resource professionals. Minnesota has a strong base of resource professionals at the local, county, and state level. In addition to the various state and regional plans, their knowledge, experience, and pragmatic approach to implementing projects and programs based on sound science should be useful to help guide funding decisions in the future. In addition to funding projects that make sense on paper, some effort must also be put into evaluating the relative success of funded programs to achieve intended habitat outcomes.

4. **The council should recognize the importance of protecting high-integrity aquatic systems and develop a strategy to fund their protection.**
An old adage states that an "ounce of prevention is worth a pound of cure". Minnesota is still blessed with many high quality lakes and streams; however, human population growth and climate change threaten the future of many of these systems. Strategic acquisition of shorelands, forest lands, prairie and wetlands in priority watersheds will have the most long term fish and wildlife habitat benefits. The forests for the future program, funded in 2009, is an example of this type of approach although there is no strategic connection to priority aquatic habitats in that program. We urge the council to continue these types of efforts and to consult with state and local resource professionals to identify priority lakes and streams and ways to protective them as part of a comprehensive watershed approach.

5. **The council should establish a technical review committee to ensure funded programs and projects are based on sound science and consistent with long-term goals.** Several of our members were directly involved in the project selection process last year. Based on their experiences, we strongly recommend that the council establish a technical review process for proposed projects. A technical review process could give council members guidance on whether proposed projects are consistent with current science and long-term goals and would give project proponents an opportunity to refine their proposals, if needed, to make them more consistent with current science and long-term goals. For example, projects focused on aquatic plant management should express familiarity with up-to-date research findings (e.g. best practices for chemical versus mechanical versus

watershed-based approaches) and be able to take advantage of emerging science and experience in other places. Funding projects that treat symptoms without addressing root causes fails to incorporate best available science and will not help achieve long-term goals.

6. **The Council should aggressively supplement funding for existing acquisition, easement, and stewardship programs that are targeted to protect, restore and enhance key shoreland habitats.** As recommended by the 2008 AMA plan, acquisition efforts should be accelerated over the next ten years. The AMA program and trout habitat improvement program are key existing programs to fund; however, the DNR's Shoreland Habitat Program, which provides block grants for public and private shoreland and nearshore habitat enhancement should also be funded at a higher level. These programs should concentrate their efforts in the north central lakes and transition area between the prairie/grassland and forested portions of the state where development and land use pressures, habitat fragmentation, and increased demand for outdoor water-based recreation are expanding most rapidly.

Overview of Existing Aquatic Habitat Programs

Name	Responsible Organization	Approach	Status
Aquatic Management Area Program	DNR	Fee acquisition of priority undeveloped shorelands to conserve and protect existing lake and river habitats.	Underfunded to meet needs and interest.
Various acquisition and easements programs for lands adjacent to lakes, river, and streams	Local governments, BWSR, NRCS, USFWS, Watershed Districts, Lake Improvement Districts, Lake Associations, Minnesota Land Trust, TNC, TPL, etc.	Fee or easement acquisition of priority shorelands to conserve and protect existing habitats	Underfunded to meet needs and interest.
Shoreland Habitat Program	DNR	Provide competitive block grants to local sponsors for public and private shoreland stewardship projects.	Underfunded to meet needs and interest.
Trout Habitat Improvement Program	DNR and Trout Unlimited	Rehabilitate stream channels and install structures in streams that provide habitat.	Underfunded needs and interest.
Other private land programs that directly and indirectly benefit aquatic habitats.	Local governments, BWSR, NRCS, USFWS, Watershed Districts, Lake Improvement Districts, Lake Associations, Minnesota Land Trust, TNC, TPL, etc.	Promote land and water stewardship practices that improve water quality, reduce hydrologic changes, and stabilize lake, river, and stream riparian areas.	Various programs are funded but most often are not targeted or given credit for aquatic habitat related benefits.

7. **The council should work with agencies and organizations to identify gaps in aquatic habitat programs, establish new programs where needed, and fund them.** Outside of the AMA program, the trout habitat program, and the shoreland habitat program, no other substantive programs are in place to protect, restore, and enhance aquatic habitats. We suggest the council work with BWSR and DNR to identify program needs and create programs to fill existing aquatic habitat needs. For example, there is not a well established stream restoration program in Minnesota despite clear needs. Similarly, there is no established program for removal and modification of dams and other barriers which disconnect habitats. Finally, something like a Shoreland Reserve Program could be established with base funding for protection, restoration, and enhancement of lake, river, and stream habitats. New tools and strategies are needed to significantly improve shoreland stewardship and aquatic habitat in the next 25 years.

8. **The Council should clarify the interaction and overlap between LOHC and the Clean Water funding.** Clean water is a more integral part of protecting, restoring, and enhancing aquatic habitats than clean air or clean soil is for protecting, restoring, and enhancing wetlands, prairies, and forests. In recognition of this, the council should recognize a need to work collaboratively with the clean water council and the legislature so that projects that have both clean water and aquatic habitat benefits are able to leverage both habitat funds and clean water funds. For example, the AMA program fits into a protection strategy for aquatic habitat and water quality. Similarly, stream restorations restore and enhance habitat and provide water quality benefits. Proposals that protect, restore, or enhance aquatic habitats and also contribute to clean water goals should be given a high priority for funding because they achieve multipurpose benefits. Experiences this past year suggest that the habitat and clean water funding sources were exclusionary of each other. A system should be established so that multipurpose projects that clearly provide both habitat and clean water benefits should be rewarded not penalized.

For more information, contact the following members of the Minnesota Chapter of the American Fisheries Society: Kristen Blann, President-elect, MN AFS, kblann@umn.edu, 218-330-9612. Henry VanOffelen, Past-President, MN AFS, vanoff@arvig.net, 218.849.5270. *Produced August 14, 2009.*