

**Environment and Natural Resources Trust Fund
2014 Request for Proposals (RFP)**

Project Title:

ENRTF ID: 027-A

The Human Dimensions of Wolf Management

Category: A. Foundational Natural Resource Data and Information

Total Project Budget: \$ 144,099

Proposed Project Time Period for the Funding Requested: 2 Years, July 2014 - June 2016

Summary:

Healthy wolf populations contribute to healthy ecosystems. Controversy decreases human tolerance threatening wolf viability. Understanding human attitudes and encouraging structured discourse around management strategies can increase tolerance and wolf viability.

Name: Sherry Enzler

Sponsoring Organization: U of MN

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St. Paul MN 55108

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Email: senzler@umn.edu

Web Address:

Location

Region: Statewide

County Name: Statewide

City / Township:

_____ Funding Priorities	_____ Multiple Benefits	_____ Outcomes	_____ Knowledge Base
_____ Extent of Impact	_____ Innovation	_____ Scientific/Tech Basis	_____ Urgency
_____ Capacity Readiness	_____ Leverage	_____ Employment	_____ TOTAL _____%



PROJECT TITLE: The Human Dimensions of Wolf Management

I. PROJECT STATEMENT

In 1974, when wolves were listed as endangered, Minnesota and Isle Royal had the only viable population of wolves in the lower 48 states. Wolves’ near extirpation in the U.S. was the direct result of policies designed to remove them from the landscape, policies that arose because of intolerance for wolves and other predators. The subsequent recovery of wolf populations has corresponded with improvement in the health of northern forest ecosystems. While wolves have made a remarkable comeback human attitudes toward wolves continue to influence public discourse and policy, as illustrated by the public policy debates in Minnesota’s courts and legislature over this past year. This discourse has heightened the controversy across wider constituencies and reduced the decision space of wildlife managers. The ongoing discourse surrounding wolves has the potential to “harden” existing attitudes towards wolves impacting the long-term viability of Minnesota’s wolf population and indirectly the ecological health of forest habitats. Understanding Minnesotan’s attitudes towards wolves including their views on the full range of potential wolf management strategies is important to aid wildlife professionals and legislators as they wrestle with the political, economic and ecological implications of shaping long-term wolf management strategies post de-listing. The primary goal of this project is to provide wildlife professionals and legislators with information on and a deeper analysis of Minnesotan’s attitudes towards wolves and wolf management strategies to aid managers in developing and implementing wolf management policies and practices post delisting. This project will:

1. Identify the range of wolf management strategies identified by wildlife professionals.
2. Use a mailed survey of Minnesota residents to quantify Minnesotan’s attitudes towards wolves and various wolf management strategies and practices, identify wolf management decision-making criteria, and identify key points of conflict
3. Use focus groups comprised of diverse stakeholders and wildlife professionals to gain a more nuanced understanding of acceptable policy trade-offs for diverse stakeholders to aide the DNR and legislators in developing and implementing wolf management strategies.

II. DESCRIPTION OF PROJECT ACTIVITIES

Activity 1: Identification of Management Strategies

Budget: \$ 10,000

July 2014-October 2014

Using structured interviews of wolf managers and ecologists identify and verify the key management criteria important to maintaining a healthy wolf population across the state while minimizing adverse human-wolf interactions.

Outcome	Completion Date
1. Identify wolf management decision making criteria used by wolf managers in implementing wolf management programs	October 2014
2. Develop a catalogue of wolf management strategies	October 2014

Activity 2: Statewide Survey

Budget: \$ 79,400

October 2014 – April 2015

Conduct a mail survey of Minnesota residents, sampling across four strata: (1) rural areas of wolf management zone A (as identified by the MN DNR 2001 Wolf management plan), (2) urban/suburban areas of wolf management zone A, (3) rural areas of wolf management zone B, and (4) urban/suburban areas of wolf management zone B. Our sample will be drawn from a list of household addresses maintained by a private sampling firm. Approximately 1,200 households in each strata will be randomly selected for inclusion in the study. Our sampling goal is to provide a 5% point margin of error at the 95% confidence level, and allowing for comparisons across strata. We will follow the survey protocol outlined by Dillman (2007). The questionnaire will be developed in cooperation with relevant personnel at the MN DNR. Information obtained from interviews in phase 1 will be used to identify potential questions, including policies and practices that could be used to manage wolves in Minnesota.



Environment and Natural Resources Trust Fund (ENRTF)
2014 Main Proposal
Project Title: The Human Dimensions of Wolf Management

Outcome	Completion Date
1. Study instrument development	<i>Feb. 2015</i>
2. Data collection (mailed survey implementation)	<i>May 2015</i>
3. Data entry and analysis	<i>November 2015</i>
4. Prepare preliminary report and data for presentation in activity 3	<i>Feb. 2016</i>

Activity 3: Test Management Strategies with Stakeholders
Feb. 2015 – Oct. 2015

Budget: \$ 39,699

Using a multicriterion evaluation method we will convene four multi-stakeholder focus groups to conduct a co-operative discourse around various wolf management strategies. Multicriterion evaluation discourses are often used to identify the impact of key stakeholder values and decision-making criteria on conservation management strategies. Using this process we will also identify the value and decision-making criteria overlap between stakeholders and identify for wildlife managers and legislators management strategies that are least polarizing.

Outcome	Completion Date
1. Identify stakeholders and experts and extend invitations to focus groups	March 2016
2. Conduct focus groups	April –July 2016
3. Analyze focus group outcomes	June-Oct.. 2016

Activity 4: Prepare Project Report & Disseminate
Feb. 2015 – January 2016

Budget: \$ 15,000

Preparation of the final report will include a summary of key findings from Activities 1-3. It will also include an analysis of the intensity of Minnesotan’s attitudes towards various management strategies together with recommendations about how management strategies might be structured to reduce intense intolerance. This data will be provided to wolf managers and legislators. Data on human attitudes towards and tolerance of wolves across stakeholder groups will also be provided to wolf educational institutions to aid them in curriculum development.

Outcome	Completion Date
1. Draft Project Report	Feb. 2016
2. Disseminate Project Report to LCCMR, agencies, legislators, and educational institutions	June 2016

III. PROJECT STRATEGY

A. Project Team/Partners

Sherry A. Enzler, JD PhD, Dept. of Forest Resources, University of Minnesota will serve as project lead. She will lead and oversee Activities 1 and 3. Dr. Enzler will collaborate in Activity 2. **Jeremy T. Bruskotter**, PhD. Dr. Bruskotter will lead Activity 2 in collaboration with Dr. Enzler and collaborate in Activities 1 and 3.

B. Timeline Requirements –

This project requires 24 months of funding. Year 1 – Identify management strategies, develop survey instrument, mail survey, and begin data entry. Year 2 – Complete data entry and analyze survey data, identify key stakeholders, conduct focus groups, analyze and prepare project report.

C. Long-Term Strategy and Future Funding Needs

The data developed by this project will:

- Provide the opportunity for a more nuanced discussion of wolf management across the state. Such dialogues are known to reduce controversy across stakeholder groups.
- Will aide decision makers and wildlife managers develop and implement management strategies
- Help educational organizations structure educational efforts to appeal to the various value systems that affect Minnesotan’s perception of wolves. This data will also help to inform the wider national conversation about large carnivore management.

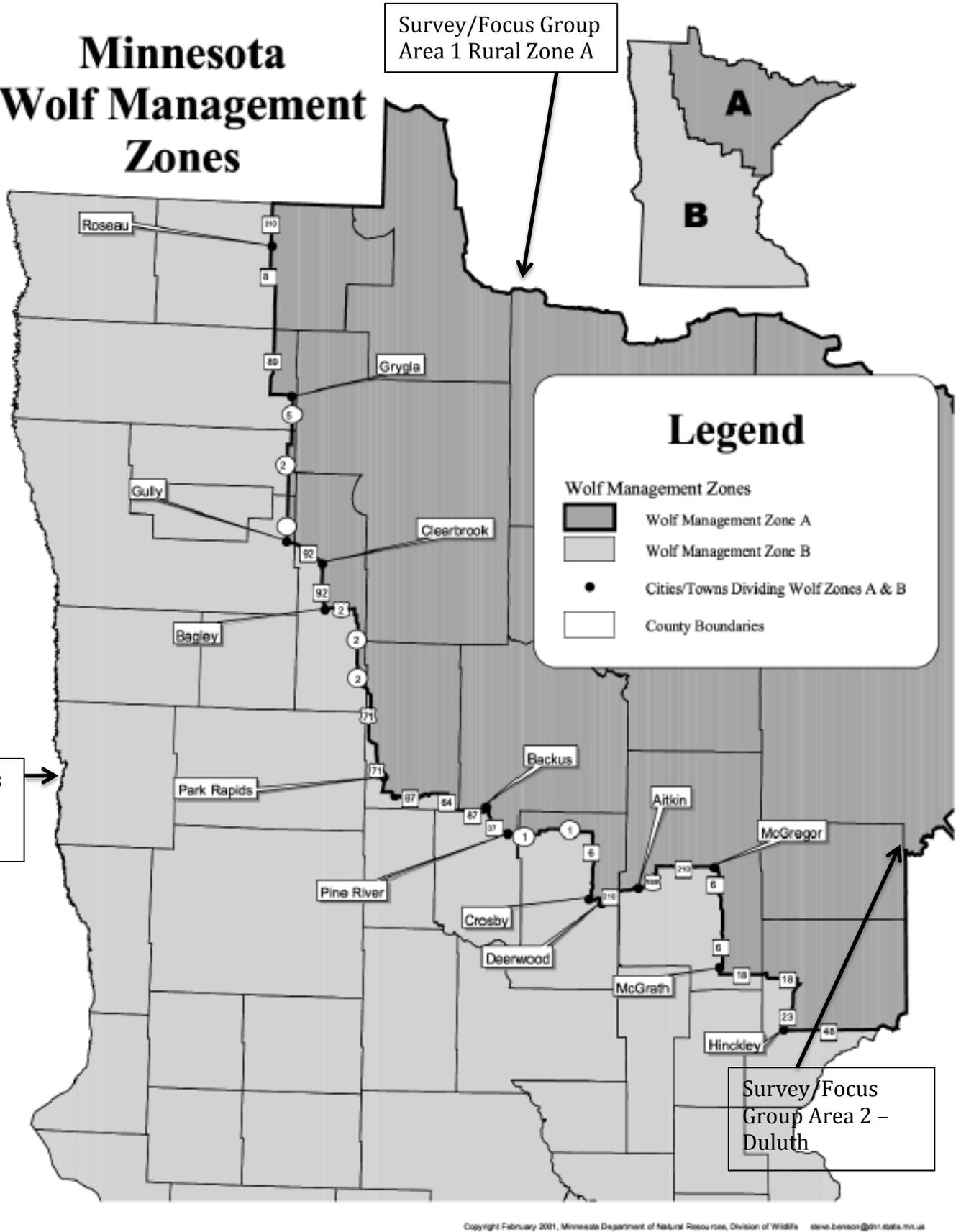
2014 Detailed Project Budget
Overall Project Budget -- The Human Dimensions of Wolf
Management

IV. TOTAL ENRTF REQUEST BUDGET: 2 years

<u>BUDGET ITEM</u>	<u>AMOUNT</u>
Personnel: 12 weeks of salary and fringe (0.336) for two years for University of Minnesota PI Enzler.	\$ 24,395
Salary and fringe (0.8636) for University of Minnesota graduate student 50% year one, 100% time year 2. Graduate fringe is budgeted at 0.8636 of salary load and includes tuition for the academic year, health care for the fiscal year, and social security and Medicare for 6.5 pay periods (summer)	\$ 65,651
Survey: Printing, sample mailing list, postage, data entry.	\$ 27,500
Contracts: 120 hours per year of salary (\$90/hr) for Bruskotter to assist in survey design, and analysis.	\$ 21,600
Travel: Travel within Minnesota to pay mileage (75%) and per diem costs (25%) for researchers, graduate students and undergraduate students to collect project data and meet with study collaborators.	\$ 3,953
Additional Budget Items: Focus group supplies, copying, printing.	\$ 1,000
TOTAL ENVIRONMENT AND NATURAL RESOURCES TRUST	
FUND \$ REQUEST =	\$ 144,099

HUMAN DIMENSIONS OF WOLF MANAGEMENT SURVEY AREAS

**Minnesota
Wolf Management
Zones**



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Survey/Focus Group
Area 4 - Twin Cities

THE PUBLIC & WOLF MANAGEMENT

Project Manager Sherry A. Enzler Qualifications & Organization Description

Professional Preparation

University of Minnesota, Duluth	Pol. Sci.	B.A. 1976
University of Southern Calif.	Pub. Admin. & Pub. Policy	M.P.A. 1978
William Mitchell College of Law	Law	J.D. 1985
Univ. of Minnesota	Nat. Resc. Sci. & Mgmt.	2012

Appointments

Research Associate	Univ. of Minnesota	2005 - Present
Resident Fellow	Inst. on Env., U of Mn.	2010 - Present
Director	Mn. Office of Env. Asst.	1999-2005
Env. Attny.	Private & Pub. Practice	1985 - 1999

Publications Most Closely Related to the Proposed Project

Jeremy Bruskotter, **Sherry A. Enzler** & Adrian Treves, *Rescuing Wolves: State's not Immune from Western Politics – a response*, 335 Science 794-95 (Feb. 17, 2012).

Jeremy Bruskotter, **Sherry A. Enzler**, and Adrian Treves, *Rescuing Wolves from Western Politics: Wildlife as a Public Trust Resource*, 333 Science 1828 (Sept. 30, 2011).

Bruskotter, J.T., Toman, E., **Enzler, S.A.**, & Schmidt, R.H. 2010. *Gray Wolves Not Out of the Woods Yet*. 327 Science. 30-31 (Jan. 1, 2010).

Jeremy T. Bruskotter, Eric Toman, **Sherry A. Enzler**, Robert Schmidt, *Are Gray Wolves Endangered in the Northern Rocky Mountains: A Role for the Social Sciences in Endangered Species Listing Determinations*, 60 BioScience 941 (2010).

Sherry A. Enzler and Jeremy T. Bruskotter, *Contested Definitions of Endangered Species: Implications for the Conservation of Threatened and Endangered Species*, 27 Va. Env. L.J. 1 (2009).

Jeremy T. Bruskotter and **Sherry A. Enzler**, *Narrowing the definition of endangered species: Implications of the U.S. government's interpretation of the phrase "a significant portion of its range"*, 14 Hum. Dimensions of Wildlife 73 (March 2009).

Project Management Experience

Minnesota Water Congress Scoping Project, Minnesota Water Resources Center, University of Minnesota.

Water Policy Team, Minnesota Water Sustainability Framework, Minnesota Water Resources Center, University of Minnesota.

Litigation and Everglades Restoration, University of Minnesota

National Electronics Product Stewardship Initiative (NEPSI), Minnesota Office of Environmental Assistance.

Solid Waste Systems Mapping Project, Minnesota Office of Environmental Assistance.

15 years experience managing complex litigation valued \$10,000 to \$50 million

ORGANIZATIONAL DESCRIPTION

The University of Minnesota has a strong tradition of education and public service through its role as both the state land-grant university, and the state's primary research university. The University and the Department of Forest Resources is the leading research and educational institution in human dimensions and natural resource related issues in Minnesota. For over 100 years the department has played a key role in discovering and fostering sustainable natural resource management activities in Minnesota.