



## Environment and Natural Resources Trust Fund (ENRTF)

### M.L. 2020 ENRTF Work Plan (Main Document)

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**Today's Date:** 3/3/2020

**Date of Next Status Update Report:**

**Date of Work Plan Approval:**

**Project Completion Date:** ~~6/1/2020~~ 6/1/2022

**Does this submission include an amendment request?** No

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**PROJECT TITLE:** Chronic Wasting Disease targeted outreach engaging culturally-diverse hunting communities

**Project Manager:** Tiffany Wolf

**Organization:** University of Minnesota

**College, Department, or Division:** College of Veterinary Medicine, Veterinary Population Medicine

**Mailing Address:** 1988 Fitch Ave, 495 Animal Science/Veterinary Medicine

**City, State, Zip Code:** St. Paul, MN 55108

**Project Manager Direct Telephone Number:** 612-625-0492

**Email Address:** wolfx305@umn.edu

**Web Address:** <https://vetmed.umn.edu/bio/college-of-veterinary-medicine/tiffany-wolf>

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**Location:** Statewide

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**Total Project Budget:** \$270,468

**Amount Spent:** \$0

**Balance:** \$270,468

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**Legal Citation:** M.L. 2018, Chp. 214, Art. 4, Sec. 02, Subd. 10 **Appropriation Language:**

**PROJECT STATEMENT:** Chronic Wasting Disease (CWD) is a 100% fatal, contagious neurological disease of wild and farmed cervids, such as deer, moose, elk, and other deer species. It is caused by a prion, which is an infectious, misfolded version of a normal protein that is found in all mammals. Since first discovery in Colorado in 1960, CWD has spread to 26 states, including MN. In heavily affected areas like Wyoming, Colorado, and Wisconsin, more than 40% of free-ranging cervids are infected; and managers and researchers have documented CWD-associated population declines in several cervid species, including white-tailed deer. Although transmission to humans has never been confirmed, the risks for human infection remain unclear. Thus the best approach we have to protecting wildlife and human health is controlling further spread.

**The success of Minnesota’s efforts to control this disease hinges on the ability of government agencies, researchers, policy makers and stakeholders to work together, particularly as this issue relates to deer hunting as a CWD management tool.** However, in December 2019, our team became aware that culturally-diverse hunting communities had not received critical information regarding CWD biology, management and potential human health risks. Special outreach efforts are needed to reach diverse stakeholders, such as our Minnesota Tribal Nations and southeast Asian and Amish communities. Additionally, the Grand Portage Band of Lake Superior Chippewa and our team have secured funding from US Fish and Wildlife Service to support the creation of a Tribal CWD Surveillance Network. A critical, yet unfunded need is simultaneous community engagement on Tribal Lands leading up to and during CWD surveillance in the 2020 hunting season. Our team has connected with these groups through grassroots efforts and is uniquely poised to engage them on CWD. Our goals for this project are to 1) engage in culturally-appropriate CWD outreach and education, and 2) learn more about community-specific hunting behavior and perceptions of CWD management, with an overall goal of achieving more inclusive, community-based CWD management.

**II. OVERALL PROJECT STATUS UPDATES:**

**First Update October 1, 2020**

**Second Update April 1, 2021**

**Third Update October 1, 2021**

**Fourth Update April 1, 2022**

**Final Report between project end (June 30) and August 15, 2022**

**III. PROJECT ACTIVITIES AND OUTCOMES:**

**ACTIVITY 1 Title: Develop and deliver culturally-appropriate outreach materials on CWD for Native American, southeast Asian, and Amish communities in Minnesota.**

**Description:** In December 2019, our team became aware that culturally-diverse hunting communities had not received critical information regarding CWD biology, management and potential human health risks. In response, our team mobilized and performed outreach events for both the southeast Asian and Amish hunting communities, which included the development of culturally-appropriate, translated fact sheets. Our goal with this activity is to transition to a more formalized, intentional approach, where we also gather data on how members of these diverse communities access CWD information, what CWD knowledge is currently lacking, best strategies for filling those gaps. We will then implement those strategies and then evaluate their effectiveness.

**ACTIVITY 1 ENRTF BUDGET: \$135,734**

Outcome	Completion Date
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1. Deliver a series of outreach activities for each group leading up to the 2020 and 2021 hunting seasons and summarize community shared perspectives.	<i>December 2022</i>
2. Characterize information sources, knowledge gaps, and effectiveness of outreach efforts for each group.	<i>April 2022</i>

**First Update October 1, 2020**

**Second Update April 1, 2021**

**Third Update October 1, 2021**

**Fourth Update April 1, 2022**

**Final Report between project end (June 30) and August 15, 2022**

**ACTIVITY 2 Title: Survey Minnesota tribal members, southeast Asian, and Amish on hunting activities and perceptions of CWD, as well as understanding of and responses to CWD management practices.**

**Description:** The Minnesota Department of Natural Resources (DNR) has surveyed hunters and landowners across Minnesota on hunting activities and CWD management perceptions, but there is recognition of under-representation of culturally-diverse groups. This is in part due to the fact that traditional, paper-based surveys that are effective in reaching masses are ineffective for more diverse groups. Thus, we will work with the MN DNR, Tribal natural resource managers and community members to leverage existing connections with hunters and other opportunities within these communities to *directly* connect with and gather this critically needed data from community members.

**ACTIVITY 2 ENRTF BUDGET: \$134,734**

<b>Outcome</b>	<b>Completion Date</b>
1. Summarize survey responses from each group on hunting activities, perceptions and responses to management practices as they pertain to CWD.	<i>March 2022</i>
2. Provide recommendations on CWD management plans to Tribal natural resource managers that combine best scientific practices with culturally-relevant feedback obtained through tribal hunter surveys.	<i>April 2022</i>

**First Update October 1, 2020**

**Second Update April 1, 2021**

**Third Update October 1, 2021**

**Fourth Update April 1, 2022**

**Final Report between project end (June 30) and August 15, 2022**

#### **IV. DISSEMINATION:**

**Description:**

An inherent part of this project is the sharing and dissemination of information pertinent to the successful control of CWD in Minnesota. Additionally, our grassroots and community engaged approach will establish a direct connection with leaders and members of our Native American,

southeast Asian, and Amish communities for continued information sharing. We will utilize a number of resources to reach our intended audiences, which includes:

- The MNPRO website <https://mnpro.umn.edu/our-vision> – this website has been established as a scientific resource for the broader community, and includes the community-specific outreach materials that have been developed for CWD education.
- Local print media (e.g. articles in local newspapers)- this is a resource our team has successfully utilized to disseminate project-related information to Tribal members.
- Graphical recordings – we will utilize the services of a graphical artists who captures real-time information discussed in group meetings through a transparent process that both engages audience participation and ensures accuracy of discussion documentation. An additional benefit is that the resulting discussion charts are left with the community to facilitate information sharing with the broader community beyond the meeting event.
- Outreach materials – our team has been developing innovative outreach materials that can be shared with diverse communities, and includes 3-D visual representations of the CWD prion and deer anatomy (for CWD sampling), translated CWD fact sheets, as well as booklets that are a low-tech visual demonstration of prion spread through a deer's body.
- MNPRO community event booth – community events (e.g. Treaty Days, Pow-wows) are a great opportunity to connect with large numbers of community members. We will work with community leaders and liaisons to identify opportunities to engage at such events.

Because we are utilizing this project to also generate new information on the needs of these diverse communities related to CWD outreach and education, as well as responses to CWD management, we also have a plan for the dissemination of these results to natural resource managers and community leaders, as well as other scientific audiences engaged in CWD management and human dimensions research. These will include:

- Reporting directly to community leaders and tribal natural resource managers.
- Scientific presentations at Tribal natural resource conferences (e.g. through the Bureau of Indian Affairs).
- Dissemination through scientific journals (e.g. Journal of Wildlife Disease, Interdisciplinary Journal of Partnership Studies) as well as other wildlife and management periodicals (e.g. The Wildlife Professional).
- Dissemination to MN DNR human dimension research team.
- Scientific presentations and discussions through USGS Wildlife Health Center and the NCD234 Multistate Research Coordinating Committee and Information Exchange Group, both of which are conducting multistate human dimensions research pertaining to CWD spread and control. Our team is coordinating research activities with USGS and the NCD234 Committee to enhance the reach and impact of our work in Minnesota. In particular, Dr. Wolf has joined the subcommittee for human dimensions CWD efforts for the NCD234 Committee, where the results of this work will be particularly relevant.

The Minnesota Environment and Natural Resources Trust Fund (ENRTF) will be acknowledged through use of the trust fund logo or attribution language on project print and electronic media, publications, signage, and other communications per the [ENRTF Acknowledgement Guidelines](#).

**First Update October 1, 2020**

**Second Update April 1, 2021**

**Third Update October 1, 2021**

**Fourth Update April 1, 2022**

**Final Report between project end (June 30) and August 15, 2022**

**V. ADDITIONAL BUDGET INFORMATION:**

**A. Personnel and Capital Expenditures**

**Explanation of Capital Expenditures Greater Than \$5,000: NA**

**Explanation of Use of Classified Staff: NA**

**Total Number of Full-time Equivalents (FTE) Directly Funded with this ENRTF Appropriation:**

Enter Total Estimated Personnel Hours for entire duration of project: 3,827.2	Divide total personnel hours by 2,080 hours in 1 yr = TOTAL FTE: 1.84
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**Total Number of Full-time Equivalents (FTE) Estimated to Be Funded through Contracts with this ENRTF Appropriation:**

Enter Total Estimated Contract Personnel Hours for entire duration of project: 1,920	Divide total contract hours by 2,080 hours in 1 yr = TOTAL FTE: 0.92
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**VI. PROJECT PARTNERS:**

Name	Title	Affiliation	Role
Veterinary Population Medicine; Veterinary and Biomedical Sciences; Fisheries, Wildlife and Conservation Biology		University of Minnesota	Lead project partner
Grand Portage Dept. of Biology and Environment – Seth Moore	Director	Grand Portage Band of Lake Superior Chippewa	Co-leading project partner

A. Partners outside of project manager’s organization receiving ENRTF funding  
Tribal/Community liaisons and survey personnel – estimated 11-12% FTE to facilitate and coordinate community engagement and outreach activities within each community.

B. Partners outside of project manager’s organization NOT receiving ENRTF funding  
NA

**VII. LONG-TERM- IMPLEMENTATION AND FUNDING:**

The proposed activities will help fill high priority outreach and research gaps in engaging culturally-diverse communities in the management of CWD. The goal of this research is to fill existing gaps in CWD-related outreach in diverse communities, as well as enhance understanding of community-specific needs in regard to CWD information and management perceptions. We expect to produce results on community-specific engagement on CWD that will facilitate MNPRO’s ongoing outreach efforts, as well as those of MN state agencies. We also expect that successful work in these communities will reveal new perspectives and questions that will inform future research efforts. In that

case, we will use data derived from this project in future proposals to NSF programs (e.g. Dynamics of Integrated SocioEnvironmental Systems, [https://www.nsf.gov/funding/pgm\\_summ.jsp?pims\\_id=13681](https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13681)).

**VIII. REPORTING REQUIREMENTS:**

- Project status update reports will be submitted April 1 and October 1 each year of the project
- A final report and associated products will be submitted between June 30 and August 15, ~~2020~~ 2022.

**IX. SEE ADDITIONAL WORK PLAN COMPONENTS:**

**A. Budget Spreadsheet**

**B. Visual Component or Map**

**C. Parcel List Spreadsheet**

**D. Acquisition, Easements, and Restoration Requirements**

**E. Research Addendum**

Attachment A: Project Budget Spreadsheet  
 Environment and Natural Resources Trust Fund  
 M.L. 2020 Budget Spreadsheet



Legal Citation: M.L. 2020, Chp. xx, Sec. xx, Subd. xx  
 Project Manager: Tiffany Wolf  
 Project Title: Chronic Wasting Disease targeted outreach engaging culturally-  
 Organization: University of Minnesota  
 Project Budget: \$270,468  
 Project Length and Completion Date: 2 years; 6/1/2022  
 Today's Date: 3/3/2020

ENVIRONMENT AND NATURAL RESOURCES TRUST FUND BUDGET		Budget	Amount Spent	Balance
<b>BUDGET ITEM</b>				
<b>Personnel (Wages and Benefits)</b>		\$ 165,693	\$ -	\$ 165,693
Veterinary Public Health Resident, \$47,270, 20% effort x 2 yrs	\$ 18,909			
MS student, \$46,176, 50% effort x 2 yrs	\$ 92,352			
Support staff, \$106,820, 10% effort x 2 yrs	\$ 21,364			
This is an administrative and communications staff person who will facilitate the creation of outreach materials that connect the science to the public, as well as managing the MNPRO website to make the produced materials more widely available.				
Marc Schwabenlander (Program Manager), \$97,100, 10% effort x 1 yr	\$ 9,710			
Tiffany Wolf (PI), \$157,565, 5% effort x 2 yrs	\$ 15,757			
Peter Larsen, (Co-PI), \$190,024, 2% effort x 2 yrs	\$ 7,601			
<b>Professional/Technical/Service Contracts</b>				
Tribal/Community liaisons and survey personnel to facilitate Tribal communications/meetings. These personnel will be community members that will be contracted for this project and not supported for work on this project through any other means.		\$ 48,000		\$ 48,000
Graphical recorder to record information from focus group meetings				
	\$ 16,000	\$ -	\$ 16,000	
Material translation to serve multilingual stakeholders/study participants				
	\$ 2,000	\$ -	\$ 2,000	
Data entry of research/survey data				
	\$ 5,000		\$ 5,000	
<b>Equipment/Tools/Supplies</b>				
Outreach materials and event, 16 events, \$450		\$ 7,200	\$ -	\$ 7,200
Survey supplies, 10,000, \$1		\$ 10,000	\$ -	\$ 10,000
<b>Travel expenses in Minnesota</b>				
Travel to 2-3 meetings in Tribal and Amish communities; Includes lodging \$80/night and M&E at \$46/day for teams of 3, \$42/day university vehicle rental		\$ 16,576		\$ 16,576
<b>COLUMN TOTAL</b>		\$ 270,469	\$ -	\$ 270,469
<b>SOURCE AND USE OF OTHER FUNDS CONTRIBUTED TO THE PROJECT</b>				
	<b>Status (secured or pending)</b>	<b>Budget</b>	<b>Spent</b>	<b>Balance</b>
<b>Non-State: USFWS tribal wildlife grant</b>		\$ 200,000	\$ -	\$ 200,000
<b>Non-State: UMN Office of Vice President of Research</b>		\$ 22,440	\$ 4,093	\$ 18,347
<b>In kind:</b> Seth Moore is a tribal employee (Grand Portage Department of Biology and Environment); this time on this project is considered an in kind contribution. 10% FTE (\$130,000) x 2 years = \$26,000		\$ 26,000		\$ 26,000
<b>In kind:</b> David Fulton is a federal employee (USGS), this time on this project is considered an in kind contribution. 10% FTE (\$190,000) x 2 years = \$38,000		\$ 38,000	\$ -	\$ 38,000
<b>Other ENRTF APPROPRIATIONS AWARDED IN THE LAST SIX YEARS</b>				
	<b>Amount legally obligated but not yet spent</b>	<b>Budget</b>	<b>Spent</b>	<b>Balance</b>
<b>Current appropriation:</b> M.L. 2017, Chp. 96, Sec. 2, Subd. 04g, Project Title: Chemicals of emerging concern in subsistence species used by Minnesota Chippewa, Project manager: Seth Moore		\$ 106,056	\$ 293,944	\$ 106,056
<b>Current appropriation:</b> ML 2016, Ch 186, Sec 2, Subd 6a, Project Title: Understanding the benefits and limitations of using goats for invasive plant control, Project manager: Tiffany Wolf		\$ 242,882	\$ 202,651	\$ 242,882
<b>Current appropriation:</b> M.L. 2019, First Special Session, Chapter 4, Article 2, Subd. 03t, Project Title: Development of advanced diagnostic tests for Chronic Wasting Disease, Project manager: Peter Larsen		\$ 606,576	\$ 511,898	\$ 685,526