



Environment and Natural Resources Trust Fund

2021 Request for Proposal

General Information

Proposal ID: 2021-111

Proposal Title: Engaging Culturally-Diverse Hunting Communities on Chronic Wasting Disease

Project Manager Information

Name: Tiffany Wolf

Organization: U of MN - College of Veterinary Medicine

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Project Basic Information

Project Summary: This project focuses on outreach and education in culturally-diverse hunting communities to enhance community engagement in slowing the spread of CWD in Minnesota.

Funds Requested: \$288,000

Proposed Project Completion: 2023-06-30

LCCMR Funding Category: Environmental Education (C)

Project Location

What is the best scale for describing where your work will take place?

Statewide

What is the best scale to describe the area impacted by your work?

Statewide

When will the work impact occur?

During the Project and In the Future

Narrative

Describe the opportunity or problem your proposal seeks to address. Include any relevant background information.

The success of Minnesota's efforts to control Chronic Wasting Disease (CWD) in white-tailed deer 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 2021 hunting season. Our team has connected with these groups through grassroots efforts and is uniquely poised to engage them on CWD.

What is your proposed solution to the problem or opportunity discussed above? i.e. What are you seeking funding to do? You will be asked to expand on this in Activities and Milestones.

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 on Tribal reservations, with an overall goal of achieving more inclusive, community-based CWD management. 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. Note, this proposal is in lieu of the LCCMR Emerging Issues account appropriation moved by LCCMR on March 16, 2020 and approved by Governor Walz on April 9, 2020, the funds of which are subject to expire June 30, 2020. Given the significant limits the current expiration of funds puts on the project (which was projected to take place over 2 years), we are transitioning the same request of support over to the 2021 grant review cycle.

What are the specific project outcomes as they relate to the public purpose of protection, conservation, preservation, and enhancement of the state's natural resources?

Key outcomes of this work include better community knowledge of CWD and the science behind Minnesota's control strategies, which supports the key outcome of inclusive, community-based CWD management. The best way that Minnesota can fight this disease is with hunter participation and community support for adopting practices that reduce transmission and enable control. Engaging diverse communities on the importance of this disease in deer, the public health perspective, and their role in controlling this deadly disease is the best way to achieve the critical outcome of inclusive, community-based CWD management.

Activities and Milestones

Activity 1: Develop and deliver culturally-appropriate outreach materials on CWD for Native American, Southeast Asian, and Amish communities in Minnesota

Activity Budget: \$144,000

Activity 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 Milestones:

Description	Completion Date
Deliver outreach for each group leading into 2021 and 2022 hunting seasons.	2022-12-31
Characterize information sources, knowledge gaps, and effectiveness of outreach efforts for each group.	2023-05-31

Activity 2: Survey Minnesota Tribal members on hunting activities, perceptions of CWD, and responses to CWD management practices.

Activity Budget: \$144,000

Activity 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 like Tribal members. Understanding the hunting behaviors, perceptions of CWD, and responses to management among Tribal members is crucial to the development of CWD management plans on Tribal Lands as CWD surveillance is implemented. Our group is already working with Tribal natural resource managers to understand their needs and leverage existing connections with hunters and opportunities within these communities to directly connect with and gather this critically needed data from community members. To this end, we will take a grass-roots effort to engage Tribal communities and gather data on this important issue to facilitate the goals of Tribal biologists in the development of culturally appropriate CWD management plans for Tribal Lands.

Activity Milestones:

Description	Completion Date
Summarize Tribal survey responses on hunting activities, perceptions and responses to CWD management.	2023-01-31
Provide scientifically- and culturally-informed CWD management recommendations to Tribal natural resource managers.	2023-05-31

Project Partners and Collaborators

Name	Organization	Role	Receiving Funds
Grand Portage Dept. of Biology and Environment – Seth Moore	Grand Portage Band of Lake Superior Chippewa	Co-leading project partner	No
Veterinary Population Medicine; Veterinary and Biomedical Sciences; Fisheries, Wildlife and Conservation Biology	University of Minnesota	Lead project partner	No

Long-Term Implementation and Funding

Describe how the results will be implemented and how any ongoing effort will be funded. If not already addressed as part of the project, how will findings, results, and products developed be implemented after project completion? If additional work is needed, how will this be funded?

The goal of this research is to fill 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 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.

Other ENRTF Appropriations Awarded in the Last Six Years

Name	Appropriation	Amount Awarded
MITPPC - Phase III - Understanding the Benefits and Limitations of Using Goats for Invasive Plant Control	M.L. 2016, Chp. 186, Sec. 2, Subd. 06a-02	\$0
Identification of Chemicals of Emerging Concern in Minnesota Fish	M.L. 2017, Chp. 96, Sec. 2, Subd. 04g	\$400,000
Diagnostic Test for Chronic Wasting Disease	M.L. 2019, First Special Session, Chp. 4, Art. 2, Sec. 2, Subd. 03t	\$1,804,000
Understanding Brainworm Transmission to Find Solutions for Minnesota Moose Decline	M.L. 2019, First Special Session, Chp. 4, Art. 2, Sec. 2, Subd. 03f	\$400,000

Project Manager and Organization Qualifications

Project Manager Name: Tiffany Wolf

Job Title: Assistant Professor

Provide description of the project manager's qualifications to manage the proposed project.

Tiffany Wolf, Project Manager, is an Assistant Professor in the Department of Veterinary Population Medicine at the

University of Minnesota College of Veterinary Medicine. She is also an Associate Fellow of the UMN Institute on the Environment. She earned a Ph.D. in Comparative and Molecular Biosciences (University of Minnesota) and a D.V.M. (Louisiana State University). With a background in wildlife epidemiology and ecosystem health, her research focuses on understanding diseases of wildlife populations at the interface of humans, animals, and the environment. She is particularly interested in the dynamics of infectious diseases in multi-host pathogen systems and optimizing epidemiological, ecological, and molecular approaches to assess changes in health and mitigate disease impacts on populations. Current projects include understanding the role of health in a declining moose population, *Parelaphostrongylus tenuis* and *Mycobacterium tuberculosis* Complex transmission in multihost systems, human-primate disease transmission, wildlife disease surveillance, and contaminants of emerging concern in aquatic ecosystems. Dr. Wolf has strong collaborations with both the Grand Portage Band of Lake Superior Chippewa as well as the MN Department of Natural Resources Wildlife Health unit, and is currently working with 6 other MN Tribal Nations to develop CWD outreach in association with Chronic Wasting Disease surveillance of white-tailed deer through hunter harvest on reservations.

Organization: U of MN - College of Veterinary Medicine

Organization Description:

The University of Minnesota College of Veterinary Medicine affects the lives of animals and people every day through educational, research, service, and outreach programs. We are dedicated to the education of future and current veterinarians and biomedical scientists and the discovery of new knowledge and skills.

Budget Summary

Category / Name	Subcategory or Type	Description	Purpose	Gen. Ineligible	% Benefits	# FTE	Classified Staff?	\$ Amount
Personnel								
Veterinary Public Health resident		Data collection and analysis, outreach			18%	0.5		\$23,600
Graduate student		Data analysis and collection			81%	1		\$94,300
Support staff		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.			32%	0.2		\$21,800
Program manager		Manage outreach efforts			37%	0.2		\$19,500
Principle investigator		Project direction and oversight			37%	0.1		\$15,800
Co-Principle investigator		Project oversight and direction			37%	0.04		\$7,700
							Sub Total	\$182,700
Contracts and Services								
TBD	Professional or Technical Service Contract	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
TBD	Professional or Technical Service Contract	Graphical recorder to record information from community meetings that can be left in the communities as an educational artifact.				0		\$16,000
TBD	Professional or Technical Service Contract	Material translation to serve multilingual stakeholders/study participants				-		\$2,000
TBD	Professional or Technical	Data entry of research/survey data				-		\$5,000

	Service Contract							
							Sub Total	\$71,000
Equipment, Tools, and Supplies								
	Tools and Supplies	Survey supplies	This will be a combination of paper-based and electronically-delivered survey materials and survey data software to conduct survey-based research					\$8,000
	Tools and Supplies	Outreach materials for events	This will be a combination of educational materials and models and community-specific fact sheets to conduct culturally competent outreach					\$6,000
							Sub Total	\$14,000
Capital Expenditures								
							Sub Total	-
Acquisitions and Stewardship								
							Sub Total	-
Travel In Minnesota								
	Miles/ Meals/ Lodging	Travel tp 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	Planning meetings and outreach					\$17,000
							Sub Total	\$17,000
Travel Outside Minnesota								
							Sub Total	-

Printing and Publication								
	Printing	Printed survey and outreach materials	This will include the printing of surveys that will be distributed to Tribal hunters and outreach factsheets for dissemination in each community.					\$3,000
	Publication	Portion of publication fees.	These funds will contribute to a portion of the anticipated publication costs for disseminating the research products.					\$300
							Sub Total	\$3,300
Other Expenses								
							Sub Total	-
							Grand Total	\$288,000

Classified Staff or Generally Ineligible Expenses

Category/Name	Subcategory or Type	Description	Justification Ineligible Expense or Classified Staff Request
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Non ENRTF Funds

Category	Specific Source	Use	Status	Amount
State				
			State Sub Total	-
Non-State				
Cash	USFWS Tribal Wildlife Grant	These funds support the implementation of a Tribal CWD Surveillance Network and efforts to support coordination with Tribal natural resources managers on needs related to the development of CWD management plans for Tribal Lands.	Secured	\$200,000
Cash	UMN Office of Vice President of Research	These funds support the initial development of outreach and educational materials related to CWD. Support through June 2020.	Secured	\$22,440
In-Kind	Seth Moore, tribal employee (Grand Portage Department of Biology and Environment);10% FTE (\$130,000) x 2 years = \$26,000	In kind support is contributed through Co-Investigator Seth Moore's time on the project.	Secured	\$26,000
In-Kind	David Fulton is a federal employee (USGS),10% FTE (\$190,000) x 2 years = \$38,000	In kind support is contributed through Co-Investigator David Fulton's time on the project.	Secured	\$38,000
			Non State Sub Total	\$286,440
			Funds Total	\$286,440

Attachments

Required Attachments

Visual Component

File: [fef15369-cab.pdf](#)

Alternate Text for Visual Component

The visual contains basic information on the need for the work, project plans and products, and funding request.

Administrative Use

Does your project include restoration or acquisition of land rights?

No

Does your project have patent, royalties, or revenue potential?

No

Does your project include research?

Yes

Does the organization have a fiscal agent for this project?

Yes, Sponsored Projects Administration

Engaging culturally-diverse hunting communities on Chronic Wasting Disease

Minnesota's Tribal Nations, Southeast Asian, and Amish communities



A Minnesota collaborative effort

The success of Minnesota's ability to control Chronic Wasting Disease (CWD) hinges on the capacity of government agencies, researchers, policy makers, and stakeholders to work together, particularly as this issue relates to deer hunting as a CWD management tool.



Tribal CWD Surveillance Network

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 future hunting seasons.



Project plans

- Develop and deliver culturally-appropriate outreach materials
- Survey on community values/beliefs/norms, hunting activities, perceptions of CWD, information sources, and responses to management
- Assist Tribal NR managers in Tribal Land CWD management plans



Deliverables

- Summary of outreach and community perspectives
- Identified information sources, knowledge gaps, and outreach effectiveness
- Hunting activities, perceptions, and responses to CWD management
- Recommendations for community-specific outreach efforts and CWD management plans

LCCMR request: \$271,000

Committed funds: \$286,440

UMN \$22,440

USFWS \$200,000

In-kind \$64,000

An important outcome is inclusive, community-based CWD management.



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