

**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. Ineli gible** | **% Bene fits** | **# FTE** | **Class ified 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 Service Contract | Data entry of research/survey data |  |  |  | - |  | $5,000 |
|  |  |  |  |  |  |  | **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** |

### **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](https://lccmrprojectmgmt.leg.mn/media/map/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