

USDA APHIS Tribal Nations Wild Cervid Chronic Wasting Disease Opportunities 2024 Cooperative Agreements

2024 Project Executive Summaries

October 2024

Project Summaries for the USDA APHIS Tribal Nations Wild Cervid Chronic Wasting Disease Opportunities 2024 Cooperative Agreements

USDA Animal Plant Health Inspection Service (APHIS) Wildlife Service (WS) awarded \$500,000 through 9 Cooperative Agreements to 9 Federally recognized Native American Tribal governments. These projects will allow Tribal Nation recipients to further develop and implement Chronic Wasting Disease (CWD) management, response, and research activities in wild cervids, including surveillance and testing on lands owned or managed by Tribes. The Executive Summaries provided by the Tribal Nations are below.

Funded Projects
Implementation of the Keweenaw Bay Indian Community Chronic Wasting Disease (CWD) Response Plan, Keweenaw Bay Indian Community (Johnston, E.)
<p>This project will focus on increasing the Keweenaw Bay Indian Community's capacity to monitor for and respond to the presence of chronic wasting disease (CWD) in the Western Upper Peninsula (UP) of Michigan. Specific activities include estimating deer densities within the L'Anse Indian Reservation, understanding habitat use and deer movements within and surrounding the Reservation, collection and testing of hunter harvested and road-killed white-tailed deer, and creation and dissemination of outreach and educational materials that meet the needs of the local community. The target audience is the Keweenaw Bay Indian Community/tribal hunters. However, the footprint of tribal harvest of deer is likely small compared to the vast landscape of the Western UP. With that in mind, deer harvested from non-tribal hunters will also be collected and information/educational materials will be shared widely. Deer move across political boundaries (ownership, Reservation, Counties) and likely use several known deer wintering yards/complexes just off Reservation. While the Reservation is the focal area, we will work with adjacent landowners to investigate deer use and deer movement within their lands.</p> <p>Deer are highly valued by the KBIC for their presence on the land, as sources of food for subsistence, and for deer skins and bones for clothing and ornamentation. This region is abundant with white-tailed deer due to our mature mesic conifer and early successional regenerating aspen stands. CWD poses a direct threat to the KBIC's treaty rights through its potential to negatively impact access to a treaty resource, white-tailed deer.</p> <p>CWD was confirmed in Michigan in 2015 and has since been identified in twelve (12) counties in the Lower Peninsula and one (1) in the Upper Peninsula near the Wisconsin border. CWD has been confirmed in 64 Wisconsin counties, four (4) of which border the Upper Peninsula. With CWD surrounding the UP and the known seasonal migrations of the local deer herds, it is only a matter of time before CWD is found in higher prevalence in this region. Widespread surveillance is currently the best tactic to control further spread and protect tribal citizens from this potentially harmful disease. However, testing by the MDNR is currently localized to known CWD positive areas. A better understanding</p>

of deer densities, deer movements, and increased surveillance is needed in the Upper Peninsula for early detection and rapid response to CWD.

Maintaining Chronic Wasting Disease Sampling Capacity and Developing a Tribal Management Plan for the Jamestown S’Klallam Tribe, Jamestown S’Kallam Tribe (Hals, H.)

The Jamestown S’Klallam Tribe has wildlife co-management responsibilities across thousands of square miles and manages natural resources with the goal of preserving wildlife and habitats for future generations. There was no systematic testing for CWD in Washington between 2012 and 2023, with testing limited to symptomatic individuals. Very few local wildlife managers have CWD management plans in place, so any detection of CWD would have to be addressed without response plans in place. We intend to jointly solve a lack of tribal planning for CWD by writing a CWD management plan, and a lack of testing capacity by training staff to take samples.

Our short-term goal in applying to this grant is to bolster our existing sampling gear, train personnel (refresh those who trained 2 years ago) to take and submit samples, develop educational materials for Tribal citizens, and to develop a CWD management plan. The sampling efforts will be led by PNPTC’s wildlife biologist and the natural resources law enforcement staff from the Tribe. By training so many staff members, all of whom work outdoors and actively work with wildlife and interact with hunters, our sampling area will be over 2,000 square miles. By equipping, training, and keeping our staff up to date on taking CWD samples, we will have sampling capabilities for years to come. This testing is also critical to determining if CWD is present now and for catching cases early when it arrives. The CWD management plan will be developed in conjunction with educational materials for Tribal citizens and staff and written with Tribal input. The educational materials and management plan will outline methods of slowing/stopping the spread of CWD that individuals can help with. The management plan will also include an emergency response plan for handling the first local cases of CWD and a long-term plan to guide human practices and wildlife management if/when CWD becomes locally established.

The long-term goal of applying to this grant is to ensure that our CWD management plan is a living document that is periodically revisited and updated to reflect the needs of JST and our co-managers and includes the best available science on CWD management, plus local, state, and national conditions. We will send our management plan to our fellow co-managers, in hopes that they will develop similar and cohesive management plans.

Continuation of Chronic Wasting Disease Testing on the Muscogee Creek Nation Reservation in Oklahoma, Muskogee Creek Nation (Rippy, J.)

This project seeks to fill the gap in knowledge about the prevalence of Chronic Wasting Disease in East Central Oklahoma on the Muscogee (Creek) Nation Reservation. Due to the low quantities of testing that has been done in the past we are seeking to continue this collection and to continue to grow our CWD program in the future, even outside of this

funding opportunity. The Muscogee Nation will be testing our hunter harvested wild cervids to provide a more complete picture of its prevalence on our reservation for the health and well-being of our wildlife and our people.

Antemortem Testing and Management of Wild Cervids, Sauk-Suiattle Indian Tribe (Grant, M.)

The Sauk-Suiattle Indian Tribe's Natural Resources Department will be conducting antemortem testing of cervids utilizing RT-QuIC assays. Currently, there are no known cases of CWD in the State of Washington, however, the neighboring Province of British Columbia has positive cases and so does the state of Idaho. With the proximity of these locations, monitoring wild cervids for CWD in surrounding areas is vital for the Sauk-Suiattle Indian Tribe to maintain this invaluable resource.

As hunting and fishing are a tribal right, the main audience of this project will be the indigenous peoples of the Sauk-Suiattle Indian Tribe, and in turn other tribes in the surrounding areas. When CWD inevitably spreads to Washington, SSIT will be prepared to manage the spread by keeping knowledge of the places cervids frequent and monitoring intermingling of herds through migratory patterns.

As stewards of the land, the Natural Resources Department will be aiming to sample 40 individual cervids, with a mix of both elk and deer being tested. To complete this, Tribal Wildlife Biologist, Michael Grant, will be working with a team of two Wildlife Technicians to capture cervids, collar them, chemically immobilize them, and take antemortem rectal biopsies to test for CWD. The chemical immobilizer being used, BAM, has been noted as being highly effective and includes a reversal reagent to limit the effects of the immobilizer after sample collection (NexGen Pharmaceuticals & Pharmaceuticals, 2021). The Natural Resources Department will be conducting the trapping and tests from August 2024 until February 2025 and will continue monitoring these cervids throughout the period of performance.

Monitoring Chronic Wasting Disease on the Yakama Nation Reservation, Yakama Nation Wildlife Resource Management Program (Roebuck, K.)

Currently Washington State is one of the few states where CWD is not prevalent, but that doesn't indicate CWD can't and won't establish in the cervid population. The Yakama Nation Wildlife Resource Management Program has not tested cervid populations within the Yakama Nation Reservation for many years. Without consistent testing there is no evidence that the disease is present or absent. Cervids are a First Food and if the spread of CWD were to integrate into the population, a decline would significantly impact the Yakama Nation. This study will benefit Yakama Nation resources by proactively protecting these significant species from CWD. The study would also benefit the state and federal agencies, NGOs, and the local communities of central Washington State. The sample will be sent to the Washington Animal Disease Diagnostic Laboratory to be tested for CWD. Because the project heavily relies on tribal hunter participation, there is always the possibility that we run into noncooperation from hunters. To ensure cooperation from the Yakama community, we will create brochures

educating people on the importance of monitoring for CWD and inform the community how important this project is and offer \$30 fuel cards to the first 40 Tribal hunters to bring in their harvest to be sampled by the Wildlife Resource Management Program staff. Staff will also be detailed to the main guard station in the closed area of the Yakama Nation Reservation to request samples of Tribal hunters' harvest throughout the hunting season. Samples will be analyzed by our team, and the data will be compiled into a final report and shared with state and federal agencies, and NGOs if CWD is present or absent within the Yakama Reservation.

Waawaashkeshi Health Initiative: Cultivating Community Stewardship through Enhanced Chronic Wasting Disease Surveillance and Tribal Hunting Practices, Red Cliff Band of Lake Superior Chippewa Treaty Natural Resource Department (Huinker, A.)

The Waawaashkeshi Health Initiative aims to leverage the hunting practices of Red Cliff Tribal members within the Ceded Territories to enhance Chronic Wasting Disease surveillance efforts. This initiative addresses the need for more comprehensive and continuous surveillance of CWD in waawaashkeshi populations within the Ceded Territory. By capitalizing on the extended harvest period, we can ensure a more effective and timely detection of CWD, a critical aspect of managing and mitigating its spread.

The project focuses on two primary objectives: (1) expanding surveillance and sampling efforts for waawaashkeshi harvested by tribal members, and (2) increasing CWD sampling participation from tribal hunters through incentives. These objectives will be achieved through strategic collaborations with tribal biologists, wardens, and the Great Lakes Indian Fish and Wildlife Commission (GLIFWC).

Key deliverables include a comprehensive report summarizing the findings from collected data, an outreach campaign to promote participation in CWD sampling initiatives, and an evaluation of the effectiveness of outreach incentives by comparing participation rates before and after their implementation.

The Waawaashkeshi Health Initiative primarily benefits the Red Cliff tribal community, including hunters, wildlife professionals, and the broader ecosystem that relies on the health of waawaashkeshi populations. By fostering community stewardship and encouraging active involvement in CWD management, the project ensures long-term sustainability and empowers tribal members to protect their treaty harvest rights for future generations.

Cherokee Nation CWD Testing Demonstration Project, Cherokee Nation (Chapman, S.)

The project addresses the absence of CWD testing initiatives within the Cherokee Nation (CN) Reservation and builds capacity for the tribe to develop and implement CWD surveillance and management plans. CWD has been confirmed in cervids within all neighboring states of Oklahoma, including in counties bordering the CN reservation, emphasizing the urgent need for testing efforts. Despite this, there is currently no established testing infrastructure within the reservation. This deficiency not only poses

significant risks to public health but also threatens enduring Cherokee hunting traditions, which have been integral to the community for generations. In 2019, over 200,000 hunters participated in deer hunting activities annually within the state of Oklahoma, with a substantial portion residing in Northeast Oklahoma.

These hunters rely on cervid resources for sustenance and cultural practices tied to hunting, making them particularly vulnerable to the risks associated with CWD transmission.

This project will utilize funding support and CN staff resources to establish the 4,300-acre CN Sequoyah Hunting Preserve as a Selective Surveillance Area for CWD. CN Wildlife Conservation staff will collect lymph node samples from all deer harvested from the preserve for CWD testing, implementing the collection, storage, shipping, and reporting processes into the department's standard operational procedures. Furthermore, the project will develop and disseminate outreach and educational resources, including on-site CWD education, to hunters at the preserve. These efforts will raise awareness about the importance of CWD testing, the potential risks associated with CWD transmission, and the measures individuals can take to protect themselves and their communities. By addressing the critical need for CWD testing, our initiative aims to enhance disease surveillance and control measures within the CN Reservation. Proactive interventions, such as comprehensive testing protocols and community engagement, will contribute to the preservation of public health and Cherokee cultural heritage and will enable the tribe to develop informed CWD management and surveillance plans in accordance with the prevalence of the disease.

In summary, the project delivers a data-driven solution to the lack of CWD testing initiatives within the CN Reservation, leveraging established hunting traditions and community networks. Through targeted interventions and evidence-based strategies, we aim to mitigate the risks associated with CWD transmission and safeguard the long-term well-being of both human and animal populations within the reservation.

Quapaw Nation Wild Cervid CWD Testing Program, Quapaw Nation (Kitchen, T.)

Given Quapaw Nation's location in the northeast corner of Oklahoma, it should be noted that Chronic Wasting Disease (CWD) has been identified in bordering cervid populations in Kansas, Missouri, Colorado, Arkansas, and Texas, and, in June of 2023, the first case of CWD was discovered in a wild white-tailed deer in Texas County, Oklahoma. Of note, Oklahoma's Wildlife Department has monitored this disease since 1999 and has collected tissue samples from more than 10,000 deer and elk with no positive results until June 6th of 2023.

It will be of utmost importance to monitor the potential spread and incorporate management techniques that may be available to help assure the health of Oklahoma's deer herd. Quapaw Nation wishes to pursue CWD testing of deer that are processed in Quapaw Nation's processing plant. Last year was the first year that deer had been processed at the facility, but they were not tested for CWD. It is estimated that, should funding be secured, approximately 50-100 deer would be tested during the 2024 deer season.

Samples of formalin-fixed tissues would be sent to Kansas State Veterinary Diagnostic Laboratory for immunohistochemistry (IHC) testing to determine whether they are positive or negative for CWD. IHC is a confirmatory testing methodology versus a screening methodology, such as enzyme-linked immunosorbent assay (ELISA). Currently, IHC of the medial retropharyngeal lymph nodes (MRPLN) is considered the “gold standard” for testing for CWD in deer. An ear punch would also be collected and sent for genetic testing to the North American Deer Registry to help determine genetic susceptibility to CWD. Gathering this genetic information could help determine whether acquisition of deer that has been subjected to selective breeding for higher immunity to CWD may be able to be introduced to the wild population in an attempt to curb the spread of CWD. Additionally, our data will be shared with the North American Deer Registry to contribute to greater understanding of the science related to CWD. However, Quapaw Nation will also be creating a proprietary database through coordination with North American Deer Registry to continue to track tribal data and maintain it confidentially. Results will be shared with the multiple local tribes as deemed beneficial to protection of the joint tribal initiatives of protecting area deer populations.

Quapaw Nation personnel will be trained in sample collection methods and proper protective measures by Oklahoma State Veterinary staff and will be in communication and consultation with them throughout sample collection and data interpretation phases of the project. Collection will occur at Quapaw Nation’s USDA inspected processing plant facility. Educational materials approved by Animal and Plant Health Inspection Service (APHIS) will be provided as outreach to tribal members, the local community including other tribes, and other interested parties to spread the latest information available for proper practices relating to cervid harvesting, testing, and reporting regarding CWD. This will be accomplished through publications, in-person meetings, and other means, as necessary.

Chronic Wasting Disease Outreach, Engagement, and New Carcass Disposal Option on the Leech Lake Band of Ojibwe Reservation, MN, Leech Lake Band of Ojibwe Division of Resource Management (Roerick, T.)

The Leech Lake Band of Ojibwe (LLBO) is an indigenous nation located in north-central Minnesota. Through a series of treaties LLBO ceded title to some of the lands, but never relinquished management authority of resources and retained the rights to hunt, fish, and gather on those lands. Maintaining the health and integrity of our natural resources is of utmost importance to LLBO. Diseases, like CWD, threaten our resources. We must be proactive about educating our community of these threats and putting measures in place to act quickly when they are found. This project will provide community engagement and outreach materials to our tribal community and a new, safe way to dispose of deer carcasses with the CWD dumpster rental.