



Report: Emergency Response to Disease Outbreaks in Wildlife

Covering the Period October 1 –December 31, 2022

As required by Minnesota Session Law 2021, 1st Special Session, Chapter 6

7/31/2023

Report to the Minnesota Legislature

Minnesota Department of Natural Resources
500 Lafayette Road
Saint Paul, Minnesota 55155
651-259-5024
bob.meier@state.mn.us
mndnr.gov

Pursuant to Minnesota Statutes, Section 3.197, we estimate that it cost approximately \$450 to produce this report. This includes staff time for drafting and reviewing the report.

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DNR CWD Spending Legislative Report

This report fulfills the quarterly reporting requirement of Minnesota Session Law 2021, 1st Special Session, Chapter 6, Article 1, Section 3, Subdivision 6(b) “\$1,529,000 the first year and \$2,532,000 the second year are from the general fund and \$2,425,000 the first year and \$2,425,000 the second year are from the game and fish fund for planning for and emergency response to disease outbreaks in wildlife. Of the game and fish fund appropriation, \$750,000 the first year and \$750,000 the second year are from the heritage enhancement account and are onetime (Table 1). The commissioner and the Board of Animal Health must each submit quarterly reports on chronic wasting disease activities funded in this biennium to the chairs and ranking minority members of the legislative committees and divisions with jurisdiction over environment and natural resources and agriculture.”

CWD Activities, October 1 – December 31, 2022

The Minnesota Department of Natural Resources (DNR) spent approximately \$1.2 million during the second quarter of FY23 on Chronic Wasting Disease (CWD)-related activities (Figure 1, Table 2). This spending includes the purchasing of supplies necessary for sample collection efforts planned for fall 2022, staff salary and travel expenses for collecting samples at stations, dumpsters, printing of CWD informational materials, and diagnostic testing. New activities that occurred this past quarter were focused on implementing CWD surveillance efforts for fall 2022 and the late season hunts. A detailed list of activities include:

- Sampling goals were identified for each deer permit area (DPA) involved in CWD surveillance, sufficient to detect the disease with 99% confidence if prevalent in $\geq 1\%$ (management and surveillance zones) or $\geq 0.5\%$ (control zone) of the deer population. Given historic compliance of hunters in CWD testing efforts (generally 90% in mandatory and 30% in voluntary frameworks), we predicted meeting sampling goals with a mandated sampling requirement during fall 2022 Firearms opening weekend. We used mandatory sampling for eight areas, and continued to use a weighted surveillance, point-based model in the West Central (DPAs 213, 273) and Climax (DPAs 256, 257, 262, 265) surveillance zones.
- CWD sampling stations were spatially situated, such that a hunter would not have to travel more than 20 miles to reach a station. As the footprint for CWD continues to expand, 66 stations were needed across the eight surveillance areas designated for mandatory sampling. Given the sheer number of staff and students from nearby universities this would require, we continued a hybrid approach used during fall 2021, where 35% of the stations available to hunters would be self-service, rather than staffed by DNR employees and students. This approach slightly reduced the staffing need while also providing many opportunities for hunters to comply with sampling requirements.

- From Oct 1 to Dec 31, a total of 12,751 samples were collected and submitted for CWD testing:
 - Opportunistic sampling (i.e., 294 vehicle-killed deer, 14 sick deer, 18 found dead, and 21 other): 347 samples, collected statewide (Fig 2); none of these deer were CWD-positive.
 - Hunter-harvested sampling: 12,404 samples; 26 of these deer were CWD-positive. These samples were collected from 8 areas of the state (Fig 2), including:
 - 1,724 from the East Central CWD Surveillance Zone
 - 339 from the West Central CWD Surveillance Zone
 - 1,467 from the Northwest CWD Surveillance Zone
 - 513 from the Climax CWD Surveillance and Management Zones
 - 974 from the Grand Rapids CWD Management Zone
 - 1,027 from the North Central CWD Management Zone
 - 3,743 from the Southeast CWD Management and Control Zones
 - 907 from the South Metro CWD Management Zone
 - 1,710 samples were voluntarily submitted by hunters from outside of current CWD surveillance zones through statewide, hunter-service testing options
- The 26 new cases of CWD were detected in wild deer during this quarter were all harvested by hunters and included 2 deer in Deer Permit Area (DPA) 184 in the northwest, 19 in the southeast, and 5 in the south metro (Fig 2).
- Surveillance goals were achieved in most zones except the Climax management and surveillance zones and the CWD control zone of the southeast (Table 4). With mandatory sampling on firearm opener, we anticipated 9,544 samples, but only collected 7,256 samples, likely due to poor weather conditions resulting in a lower-than-average deer harvest during opening weekend. However, additional samples that were received during voluntary periods attributed to overall goal success.
 - A total of 144 DNR staff and 142 students worked to collect samples during opening weekend.
 - Mandatory sampling compliance was expected to be at 90%, based on previous surveillance efforts; however, actual 2022 compliance ranged between 68-104%, with an 87% average across all zones (104% is an artifact of hunters registering their deer with the wrong DPA).
 - Voluntary participation in CWD sampling in our management zones outside of opening weekend was predicted to be at 30%, based on previous surveillance efforts.
 - Between mandatory and voluntary surveillance, we collected 12,751 samples during fall 2022 (Table 4).
 - The overall cost of the fall 2022 surveillance effort was \$1,781,000 or equivalent to \$140/sample.
- The expansion of the Partner Sampling Program and hunter mail-in kits resulted in 1,710 statewide samples submitted by hunters at no cost to them (Fig 2, 3). None of these deer tested positive for CWD.
- The pilot project of the hunter-mail in kits was successful. A total of 5,000 kits were distributed with 593 successful hunters submitting samples (11% error rate in tissue identification) and one new CWD positive detection.

- 2 wild deer harvested near Bemidji (DPA 184) tested positive; both were adult males. This is the first time CWD was found in this area of the state and >30 miles from a previously infected deer farm with illegal carcass dump site.
- All samples were processed, organized, and submitted to veterinary diagnostic laboratories at Colorado State University or the University of Wisconsin-Madison for testing. Results were uploaded onto the DNR website and available to hunters, typically within a week of sample submission.
- Ordering of supplies and equipment for CWD sampling stations located throughout the state.
- Dumpster sites were secured at 38 locations within CWD management zones and vendor contracts were finalized. A total of 468,130 pounds (234 tons) of deer remains were landfilled. All invoices are not yet paid, but total costs are expected to be \$300,000.
- Late CWD hunts were planned and implemented in southeast, south metro, and northwest areas of the state during December 16-18, 2023. Hunters harvested 335 deer and 3 deer were found positive for CWD (all occurred in southeastern Minnesota).
- DNR staff met with tribal biologists to coordinate sampling efforts in northwest and northcentral Minnesota. Federal funding was available to support collection and testing efforts for tribal hunters and these efforts were coordinated through University of Minnesota staff.

Planning efforts for CWD-related winter work began, based on detections of new cases of CWD this fall. Plans for agency culling efforts began with establishing a contract with USDA-Wildlife Services for deer removal work and identifying key areas this work.

Communication continued this reporting quarter to ensure hunters were aware of the mandatory CWD testing rules during the firearm season opener and how to best comply with the regulation. We wanted to ensure hunters outside of opening weekend understood the voluntary testing options available to them. Deer hunting communication intensified as hunting season approached and included the following:

- Continuous updates to the numerous deer hunting webpages, including: updating the dedicated CWD webpages to provide hunter information about the season, by area, and the resources available to them (including updating a webpage walking hunters through the process of submitting a sample); developing a new webpage to remind hunters of the importance of making a plan that highlights getting deer tested for CWD; providing information related to dumpster locations.
- Postcards were mailed to any hunter that identified a DPA within a CWD surveillance zone when they bought their license. We included information about mandatory testing requirements, carcass movement restrictions, feeding bans and deer registration reminders. On Sept 5th, 20,193 postcards were mailed to archery hunters and on Oct 17th, 108,989 postcards were mailed to muzzleloader and firearms hunters at a cost of approximately \$70,000.
- A series of news releases highlighting the importance of CWD testing in designated areas, and a CWD-specific release.
- Multiple social media posts on the DNR's Facebook page.
- CWD reminders in both weekly (Minnesota Wildlife Newsletter) and monthly (Deer Notes) newsletters.

- Numerous radio interviews with DNR staff, as well as supplied soundbites to radio stations, to support CWD messaging and urging hunters to make a plan for the hunting season.
- Local outreach, including staff interviews with local newspapers and local radio stations, in addition to paid advertisements in local newspapers emphasizing CWD-related requirements for hunters.
- Brochures were provided to every hunter that submitted a sample for CWD testing at in-person registration stations as well as self-service sampling sites.

Table 1. Chronic Wasting Disease Appropriation Allocation FY22-23.

Fund	FY22 Appropriated	FY23 Appropriated	Total App FY22-23
General Fund	1,529,000	2,532,000	4,061,000
Game and Fish-Emergency Response	1,675,000	1,675,000	3,350,000
Heritage	750,000	750,000	1,500,000
Total	3,954,000	4,957,000	8,911,000

Figure 1. Quarterly spending activity of the Chronic Wasting Disease Appropriation Allocation FY22-23.

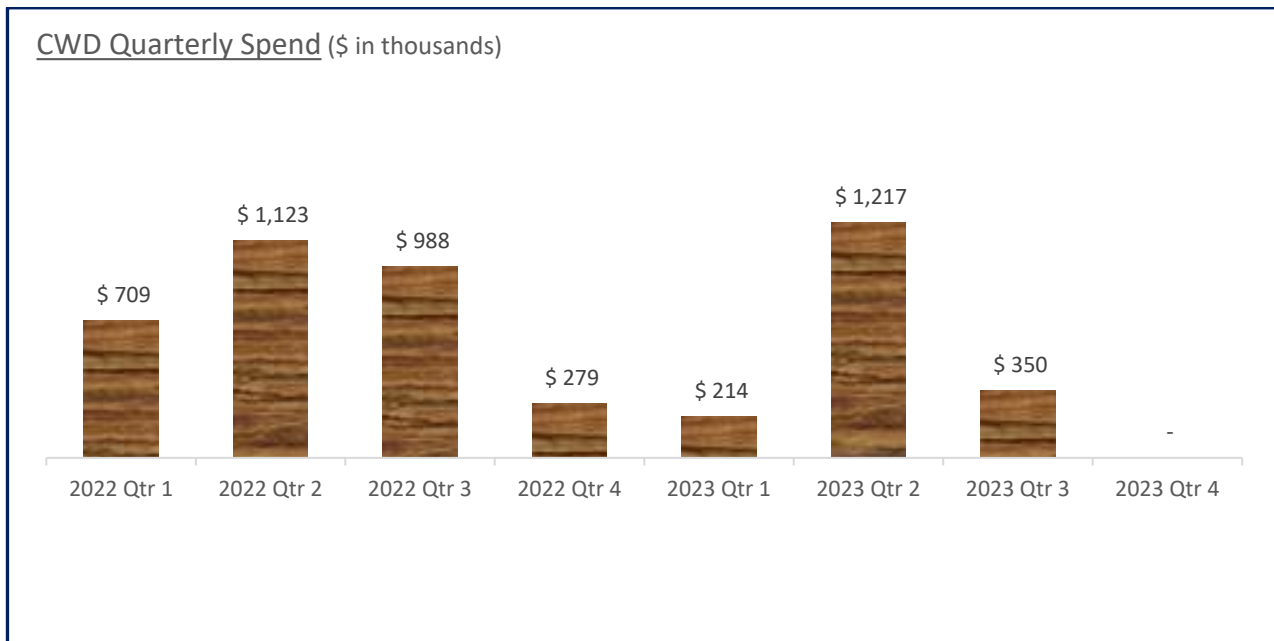


Table 2. Detailed spending by expense type for Chronic Wasting Disease Appropriation, July 1, 2022 through December 31, 2022.

Expense Type	General Fund	Game and Fish- Emergency Response	Heritage	Other**	Total Spend
Salary	618	1,680,641	-	245,063	1,926,322
CWD Sample Testing	533,954	376	-	43,665	577,994
Contracts: CWD Tissue Sampling	186,480	1,240	-	4,205	191,925
USDA-Culling Contract	-	-	378,186	-	378,186
CWD Office - Rushford	54,292	-	-	-	54,292
Dumpsters	517,738	105,594	-	9,459	632,791
Supplies	232,812	19,483	-	5,028	257,323
Travel/Fleet	91,272	251,011	-	734	343,016
Printing & Advertising	193,303	13,232	-	9,687	216,221
MSU-CWD Simulation Tool Dev't	-	-	-	93,080	93,080
PSU-CWD Relatedness Testing	-	-	-	49,958	49,958
Equipment	31,411	7,834	-	11,449	50,694
Other	71,036	2,816	-	34,309	108,161
Total	1,912,915	2,082,227	378,186	506,635	4,879,962
\$ Encumbered	1,184,829	-	425,000	-	
% of Budget Spent	47.1%	62.2%	25.2%		
% of Budget Encumbered	29.2%	0.0%	28.3%		
% of Budget Spent/Enc	76.3%	62.2%	53.5%		

** Other includes Game and Fish Operating Account, Deer Management Account, Deer/Bear Account, Cervid Health Account, and Heritage Fund.

Table 3. Detailed spending by expense type for Chronic Wasting Disease Appropriation, October 1, 2022 through December 31, 2022.

Expense Type	General Fund	Game and Fish- Emergency Response	Other**	Total Spend
Salary	-	528,917	30,939	559,856
CWD Sample Testing	100,080	-	-	100,080
Contracts: CWD Tissue Sampling	-	-	-	-
USDA-Culling Contract	-	-	-	-
CWD Office - Rushford	8,293	-	-	8,293
Dumpsters	225,631	-	6,538	232,168
Supplies	36,592	138	-	36,730
Travel/Fleet	37,098	14,310	511	51,918
Printing & Advertising	120,283	-	-	120,283
Equipment	25,229	-	-	25,229
Other	44,366	-	(790)	43,576
Total	597,571	543,365	37,197	1,178,133

** Other includes Game and Fish Operating Account, Deer Management Account, Deer/Bear Account, and Cervid Health Account.

Figure 2. Locations of deer tested for chronic wasting disease during fall 2022.

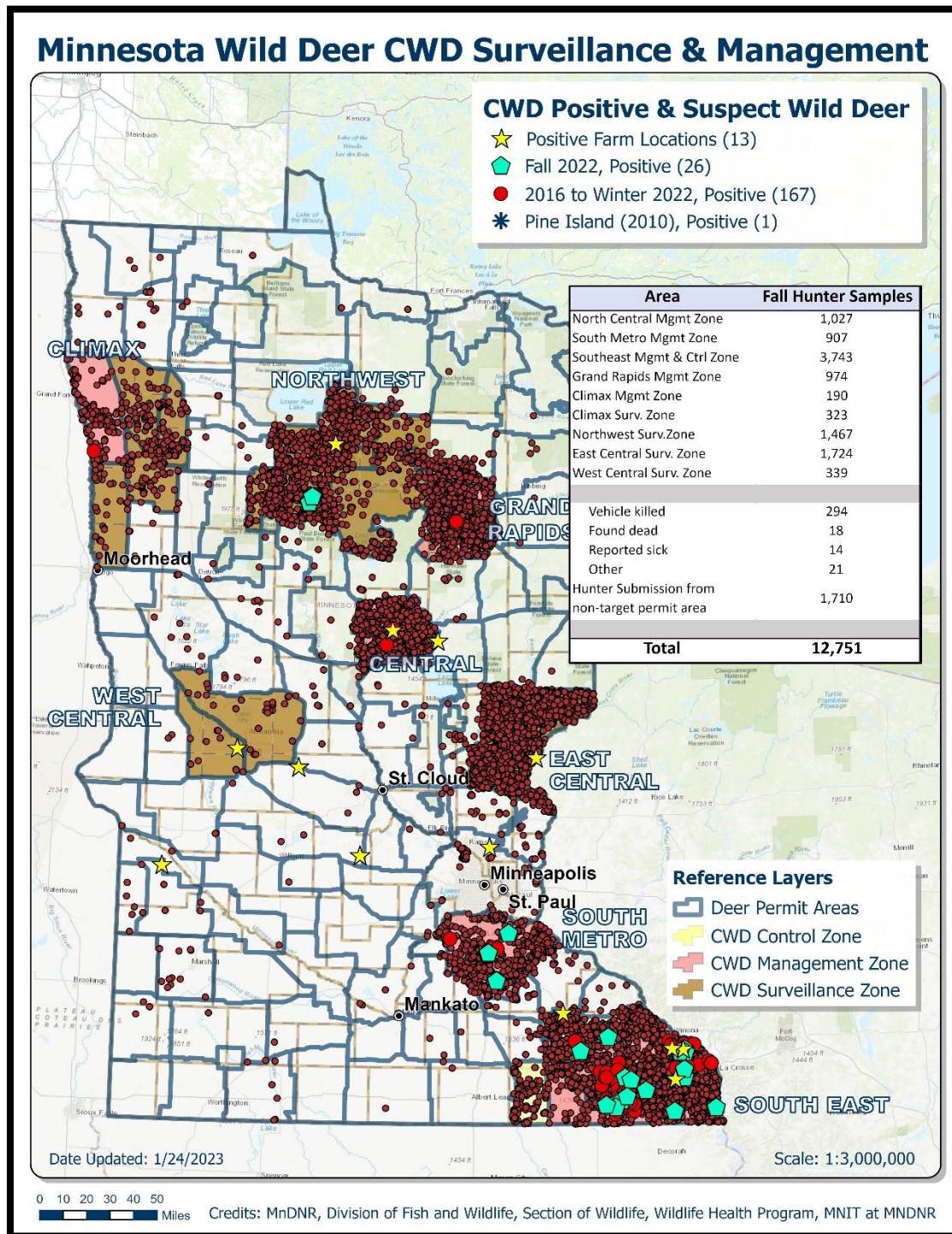


Table 4. Fall 2022 CWD Surveillance – At a Glance

Fall 2022	East Central Surv. Zone	West Central Point-Zone	Northwest Surv. Zone	Climax Mgmt. Zone	Climax Point- Zone	North Central Mgmt. Zone	Grand Rapids Mgmt. Zone	South Metro Mgmt. Zone	Southeast Control Zone	Southeast Mgmt. Zone
Sample & Point Goals	900	1,195 pts	1,575	450	2,136 pts	1,000	1,000	1,000	919	2,700
Achieved Goal?	Yes	Yes	94% of goal	No (45% of goal)	No (34% of goal)	Yes	99% of goal	92% of goal	No (72% of goal)	Yes
Mandatory A-Opener Samples	1,592	NA	1,221	89	NA	871	742	487	454	1,800
Hunter Compliance	68%	NA	80%	104%	NA	86%	98%	91%	84%	
Voluntary/ Late Hunt Samples	136	1,212 pts	260	114	728 pts	160	250	432	205	1,322
Total Samples for Fall 2022	1,728	560	1,481	203	380	1,031	992	919	659	3,122
Staff for A- Opener	27 DNR, 38 Students	Local area staff only	23 DNR, 17 Students	5 DNR, 3 Students	Local area staff only	16 DNR, 17 Students	15 DNR, 18 Students	12 DNR, 5 Students	46 DNR, 44 Students	
Sampling Opportunities by area	Firearms A opener (or by appt)	Voluntary all Seasons	Firearms A opener; Late Hunt ; (or by appt)	Mandatory A opener; Voluntary self-service stations firearms; (or by appt)	Voluntary all Seasons	Firearms A opener; Firearms voluntary self-service stations; (or by appt)	Firearms A opener; Firearms voluntary self-service stations; (or by appt)	Firearms A opener; Firearms voluntary self-service stations; Late Hunt (or by appt)	Firearms A opener; Firearms voluntary self-service stations; (or by appt)	Firearms A opener; Firearms voluntary self-service stations; Late Hunt (or by appt)

Figure 3. Deer permit areas where hunter-harvested deer were sampled for chronic wasting disease through partners (e.g., taxidermists) or by using a hunter mail-in kit, fall 2022.

