PURPOSE

This report is intended to provide a general summary of chronic wasting disease (CWD) management and data collected by Montana Fish, Wildlife and Parks (FWP) from the Libby CWD Management Zone (LMZ) and Libby Surveillance Area (LSA) which encompass portions of hunting districts (HD) 100, 103 and 104 within Region 1 (R1) of northwest Montana. Data is used to inform the wildlife biologist, fish and wildlife commissioners and members of the public on harvest and ongoing management efforts regarding CWD in the Libby area. All data is preliminary and subject to change.

MANAGEMENT STRATEGY

In Montana, CWD is managed in accordance with the FWP Chronic Wasting Disease Management Plan (The Plan, 2020), which provides guidelines of logistical details necessary for executing CWD surveillance, management and communications. The intent of the plan is to 1) manage any new detections of CWD where it has not been previously found in Montana, 2) limit the spread of CWD in Montana, 3) maintain or reduce prevalence in specific locations once detected, 4) improve communications and educational outreach on CWD with the public, other agencies and within FWP, and 5) provide hunters opportunities to have their harvested animal tested for CWD. There are currently no effective treatments or vaccines for CWD, and once CWD is present in a wild population it is extremely difficult if not impossible to eliminate. Once CWD is discovered it has likely been established for some time in that area as the disease is often not visibly apparent in sick individuals until late stages, and sick individuals are not always

observed prior to death. If left unmanaged, the prolonged presence of CWD and its growth in prevalence in an area increases the likelihood that environmental transmission will play a greater role in the disease dynamics. Infected animals shed prions through saliva, urine, feces, and other tissues upon death. Prions can persist in the environment and remain infectious for many years, making environmental transmission a substantial management challenge.

FWP's CWD Management Plan directs management of CWD statewide. Following the discovery of any initial CWD-positive animal, the Plan calls for establishing a Management Zone (MZ), which is roughly a 10-mile radius around the location of the CWD-positive animal. Within the MZ, the goal is to collect enough samples to estimate prevalence and distribution of CWD within the population. The Plan calls for collecting enough samples to determine CWD prevalence in cervid populations within a 3% margin of error using a 95% confidence interval. The number of samples required differs depending on the size of the population and prevalence of CWD. Increasing the number of samples increases confidence and helps to reduce the margin of error. CWD prevalence estimates are calculated using samples from adult aged deer, as yearling and young of the year age classes typically have lower prevalence, which can bias estimates.

When left unmanaged, CWD can cause population declines, as observed in mule deer populations in Wyoming (21%) and Colorado (45%) and white-tailed deer populations in Wyoming and Arkansas. FWP utilizes best-known management tools, recommended by the Western Association of Fish and Wildlife Agencies (2017), such as population density reduction, increased male harvest (generally males more likely to be infected than females), targeted hot-spot removal and reducing artificial aggregations of deer. FWP's goal, as written in the Plan, is to reduce CWD prevalence and/or maintain it at or below 5% within the affected population to minimize population effects and geographic spread.

CWD IN LIBBY

CWD was discovered in Libby in 2019. Although CWD had been detected in other wild populations in Montana as early as 2017, its discovery in a white-tailed deer (WTD) in Libby was the first time the disease had been found within a Montana urban area. After initial testing efforts following detection, CWD prevalence in the Libby Surveillance Area (LSA) was estimated at over 13%, the highest in the state at that time. Montana FWP responded quickly and began collaborating with Libby City officials to develop plans to reduce urban deer density and to manage CWD prevalence in and around Libby city limits, where hunting is not permitted.

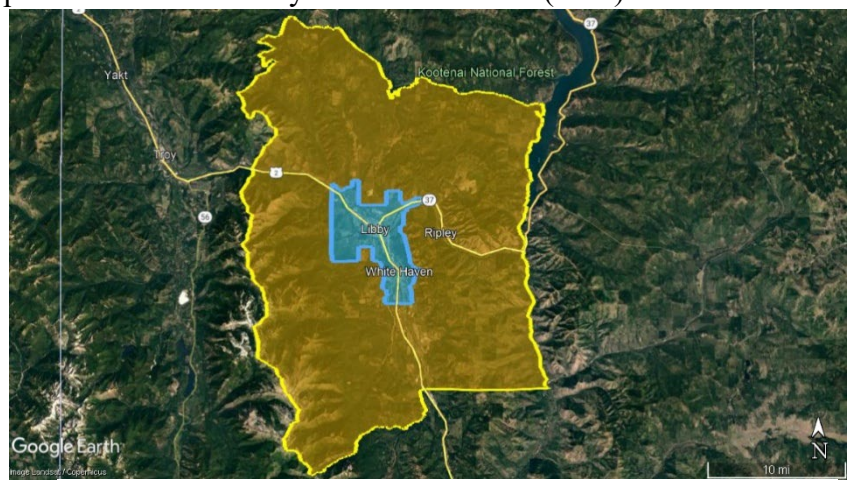

Figure 1. Libby CWD Management Zone (LMZ, yellow) and Libby Surveillance Area (LSA, blue).

Following the 1st CWD-positive detection in Libby, FWP created two scales (Figure 1) at which

management would occur. First, the Libby CWD Management Zone (LMZ), which includes portions of hunting districts (HDs) 100, 103 and 104, utilizing data from increased hunter harvest via additional license opportunity to reduce densities and estimate prevalence. At a second scale, the Libby Surveillance Area (LSA), to assist with the surveillance of CWD in areas in and around Libby city limits, where legal means of harvest are low or impossible. Following protocol established in the Plan, CWD samples are collected from all management-removed (via trapping or cull) and legally harvested deer to estimate CWD prevalence within both the LMZ and the LSA. Management removed individuals included for testing are only those which are trapped or culled, as symptomatic animals euthanized and sampled may bias estimates and are not included in calculations.

CWD SPECIAL MANAGEMENT HUNT INSIDE THE LMZ

In accordance with the Plan, FWP works to keep prevalence low where CWD exists and to limit its spread using multiple methods of management, including increased harvest. Increasing hunter opportunity by offering additional licenses has allowed FWP to obtain enough random samples to provide a prevalence estimate with a lower margin of error. Following the establishment of the LMZ in 2019, FWP began a special management hunt within its boundaries, initially offering 600 over-the-counter (OTC) licenses for antlerless WTD.

Since the creation of the Libby CWD management hunt in 2019, regulations have changed regarding license quantities and sampling requirements. In 2019, all deer, elk and moose harvested within the LMZ were required to be checked and sampled within three days of harvest. During the 2020 and 2021 hunting seasons, FWP offered unlimited OTC either-sex WTD licenses inside the LMZ (199-20 license), selling 2,142 and 2,678 total licenses respectively. Although hunters were no longer required to submit samples from WTD, mule deer, elk or moose harvested within the LMZ for CWD testing, hunters were still encouraged to test any animal harvested in the area. Following the 2021 hunting season and incorporating input from public concerns regarding overcrowding, FWP and the Fish and Wildlife Commission supported capping CWD license sales for the Libby area at 2,000, which began for the 2022 hunting season and became available through a drawing. Beginning in 2024 following commission approval, hunters who harvested WTD using the 199-20 license were subject to mandatory CWD sampling to aid FWP in increased sample sizes for prevalence estimates.

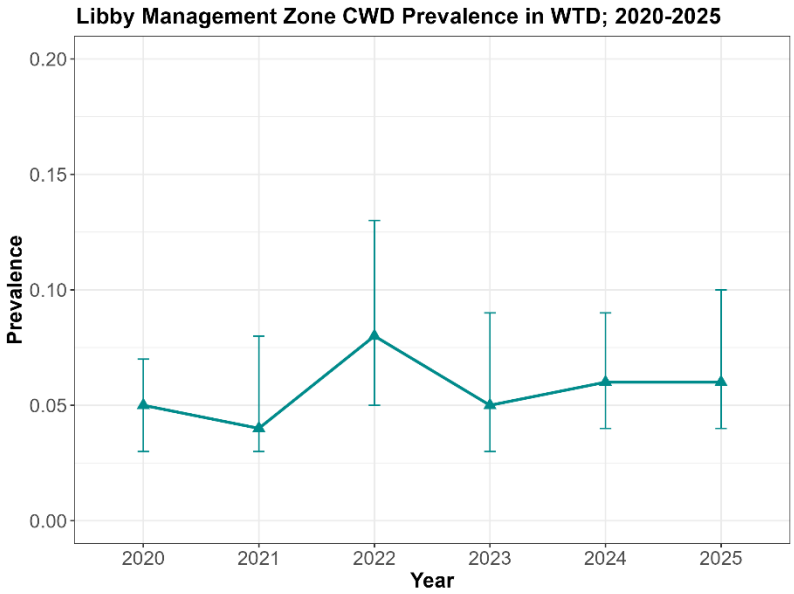

Figure 2. Libby Management Zone (LMZ) adult white-tailed deer CWD prevalence estimates with 95% confidence intervals, 2020-2025.

CWD prevalence within the LMZ has remained relatively stable since 2020, with minor fluctuations in prevalence of adult aged WTD year to year (range = 0.04 – 0.08, Figure 2). To capture variation between years and fluctuations in prevalence, FWP typically reports prevalence in 3-yr averages. During the 2023-2025 hunting seasons, CWD prevalence of WTD harvested within the LMZ is estimated to be 0.06 (95% CI = 0.04 – 0.08, N = 770). Since the implementation of mandatory testing for WTD harvested on the 199-20 license in 2024, total adult samples collected from hunters have increased 68.3% during the combined 2024-2025 (N = 589) license years when compared to the prior two license years total samples collected (2022-2023, N = 350). During the 2025 hunting season, 293 CWD samples were collected adult WTD via hunter harvest from within the LMZ. Though annual prevalence has remained relatively stable within the LMZ, estimated rates when considering sex have remained consistently higher amongst sampled males than females (Figure 3), as males have been documented to generally be infected at higher rates, which has been frequently documented throughout the US.

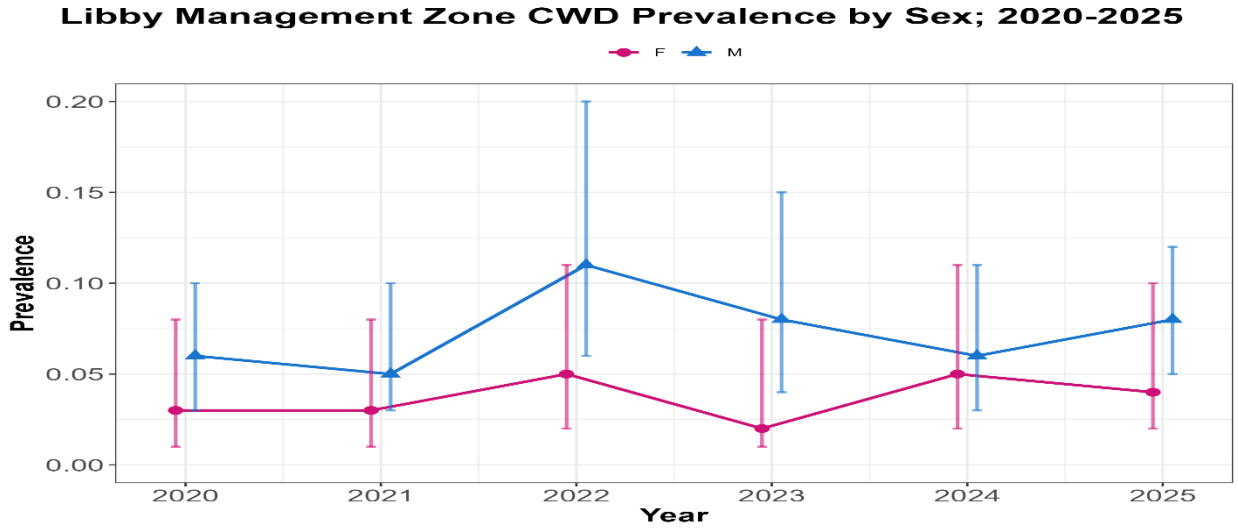

Figure 3. Libby Management Zone (LMZ) CWD prevalence estimates of adult white-tailed deer by sex (F = female, M = male) with 95% confidence intervals, 2020-2025.

Statistical modeling of CWD statewide (FWP CWD Annual Report, 2024) found that despite the LMZ being identified as a WTD CWD hot spot, the LMZ has experienced a significantly lower annual growth rate in prevalence than expected based on trends observed elsewhere throughout the state. Though FWP does not have experimental controls to allow personnel to measure the impacts of CWD management efforts within the LMZ, there is a likelihood that the quick and aggressive response to the first detection in the Libby area has allowed for more effective management of CWD.

LIBBY SURVEILLANCE AREA AND URBAN DEER

Although FWP prioritizes hunting as a primary tool for CWD management, and hunting is considered to be among the most effective tools, hunting is not allowed inside Libby city limits. Following coordination with Libby city council during the initial pilot project, FWP hired seasonal technicians annually to assist the area biologist in actively trapping/culling WTD from the LSA since 2020. Urban trapping efforts typically occur from December – mid March,

dependent on snow conditions. FWP staff coordinate with members of the public and private groups to secure access in areas where WTD frequently use and are located within cover and away from potential disturbances. Once sites have been identified, traps (Figure 6) are placed and baited with apples from local grocery stores that would otherwise be discarded. Traps are set in the evening and checked each morning for any potential captures, once checked, traps are closed during the day to limit any potential non-target captures. WTD that are trapped and removed are sampled for CWD and processed for meat donation, with quarters and backstraps stored until CWD results are received. WTD that test negative for CWD are donated to the public through local food banks and test-positive individuals are properly disposed of at the Lincoln County Landfill. Since 2019 when the initial pilot test and removals occurred, 403 CWD negative deer have been donated to the public. Initial trapping efforts were aimed at spreading removals as evenly as possible across the LSA, with 50 from HD 103 and 25 from each of HD 104 and HD 103 in 2020. This effort of evenly distributed trapping within the LSA was continued throughout the 2024 winter season.

Beginning in winter 2024 - 2025 with input from the City of Libby, trapping efforts were focused within Libby city limits as removals targeted deer that are believed to be residents (residing predominantly within city limits) and creating conflict issues within city limits. Urban trapping poses its limitations, because not all areas are suitable to place traps for deer. Ideal trap locations include areas with cover that are not subject to high public use, which reduces stress on trapped deer and limits disturbance. The shift in focus to areas within city limits, coupled with recent mild winters, has led to a decline in the number of individuals removed annually, but it has helped identify areas with high CWD prevalence amongst likely resident deer. Of 50 removed deer during the 2025 - 2026 season, 19 tested positive for CWD, highest since the pilot project began in 2019 (Table 1). Future efforts will continue to focus on potential CWD hot spots while also returning to previous methods of uniform sampling across the LSA to limit sampling bias. Trapping within the LSA would not be possible without the support from the city of Libby, Lincoln County Port Authority, Lincoln County Landfill and dozens of members of the public who have allowed FWP to trap on private property.

*Table 1. Summary of white-tailed deer removed and CWD status during Libby urban trapping, 2021- 2026. Data is collected during January – March and incorporated into estimates for the prior calendar year. * Denotes deer removed during winter 2026 are included in 2025 estimates.*

Libby Surveillance Area Urban CWD Removals										
Year	**Deer Removed**	**(+) Deer**	**Adults**	**YRLG**	**YOY**	**(+) Adults**	**(+) YRLG**	**(+) YOY**	**(+) Males**	**(+) Females**
2020-2021	100	7	37	13	50	4	1	2	3	4
2021-2022	99	6	35	10	54	2	1	3	3	3
2022-2023	75	7	22	9	44	2	0	5	3	4
2023-2024	60	7	25	9	26	4	2	1	2	5
2024-2025	43	12	23	3	17	9	1	2	5	7
2025-2026*	50	19	22	14	14	11	5	3	8	11

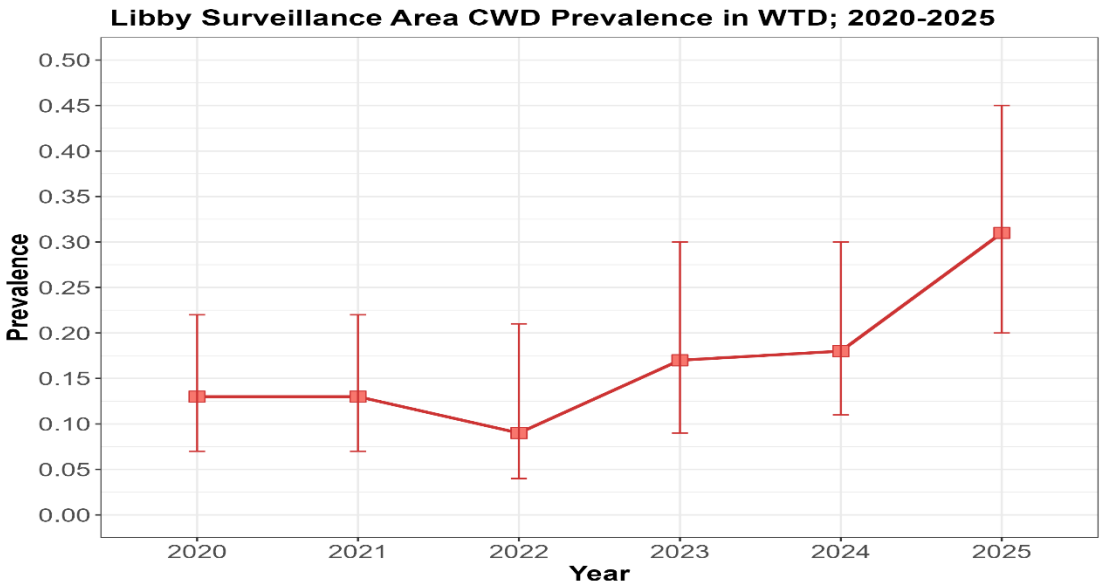

Figure 4. Libby Surveillance Area (LSA) adult white-tailed deer CWD prevalence estimates with 95% confidence intervals, 2020-2025.

Adult prevalence within the LSA has fluctuated since 2020 (Figure 4), with the lowest estimated prevalence occurring in 2022 (0.09, 95% CI = 0.04-0.21) and the highest since the initial detection in 2025 of 0.31 (95% CI = 0.20-0.45). It is unclear how much the large increase in prevalence during the 2024 and 2025 seasons resulted from a true increase in CWD prevalence within the population versus potential introduced bias by the recent focus in targeting highly urban deer. Additionally, small sample sizes collected during these years decrease the certainty in annual prevalence estimates. Continued removals, uniform sampling and increased samples sizes during future efforts will help to better inform trends within the LSA and reduce uncertainty. Despite this increase in prevalence, similar trends have not been observed in the surrounding LMZ from sampled individuals. FWP plans to continue urban removals to limit the spread of CWD to more “wild” WTD and other cervids in the surrounding areas.

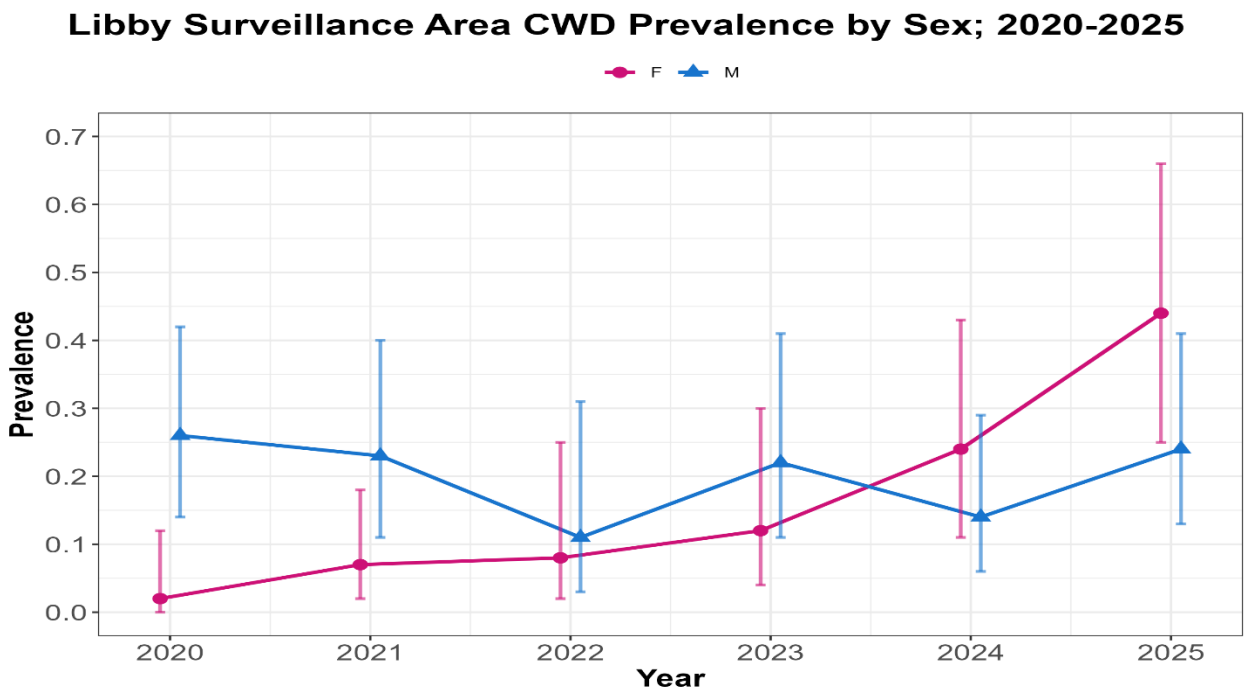

Figure 5. Libby Surveillance Area (LSA) CWD prevalence estimates of adult white-tailed deer by sex (F = female, M = male) with 95% confidence intervals, 2020-2025.

ONGOING RESEARCH

As CWD detections continue to grow statewide and in urban environments, FWP is committed to gathering more information regarding CWD to better inform management. Beginning in March 2026, FWP staff in Libby incorporated GPS collaring into its urban trapping effort to expand knowledge of CWD in an urban environment. Staff successfully captured and collared 8 adult female WTD within the LSA (Figure 7). Collar data will be used to inform agency staff on potential seasonal movements of individuals, further identify CWD hot spots, and be incorporated into an urban population estimate via mark-recapture methods. Collaring efforts will continue during the 2027 and 2028 winter trapping seasons.

For updates on CWD surveillance and analysis at the state-wide scale, please see the MT FWP Chronic Wasting Disease Surveillance and Monitoring Report (2024).

Figure 6. Clover trap used in urban deer trapping removal efforts around Libby, MT.

Figure 7. CWD trapping technicians restraining and collaring a female white-tailed deer in the LSA as part of an effort to inform CWD management through a better understanding of potential seasonal movements of individuals, CWD hot spots, and urban population estimation techniques, March 2026.

2026 LIBBY CWD MANAGEMENT SUMMARY

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