

Wyoming Game and Fish Department

FY 24 Annual Report

Department	Game and Fish
Director	Brian Nesvik
Agency Contact	Eric Wiltanger, Deputy Director
Phone	(307) 777-4501
Address	5400 Bishop Blvd Cheyenne, WY 82006
Website	wgfd.wyo.gov
Other Locations	Headquarters office is in Cheyenne. Regional offices are in Jackson, Pinedale, Lander, Cody, Sheridan, Green River, Laramie and Casper

Statutory References

The Wyoming Game and Fish Commission (Commission) was created and is empowered in Title 23 of Wyoming Statutes. The Wyoming Game and Fish Department (Department) was created and placed under the direction and supervision of the Commission in W.S. § 23-1-401. The responsibilities of the Commission and the Department are defined in W.S. § 23-1-103. The Department is charged with providing “an adequate and flexible system for the control, propagation, management, protection, and regulation of all Wyoming wildlife.”

Basic Information

Number of Employees

As of July 1, 2024, the Department has 576 total employees consisting of seven Commissioners, 400 full-time employees, 59 contract employees and 110 temporary employees.

This includes permanent, contract and temporary positions authorized in the FY 24 budget. Any positions added during the budget cycle require Commission authorization or must be funded from supplemental grants.

Clients Served

The Department's clients include, but are not limited to, Wyoming resident and nonresident hunters, anglers and wildlife enthusiasts.

Commission

The Department operates under the direction of the [Commission](#). Seven members are appointed by the Governor for six-year terms with Senate confirmation. The Commission meets six times annually.

Budget Information/Expenditures for FY 24

The Commission's approved budget for FY 24 was \$101,723,261 with an additional \$24,044,820 budgeted for one-time projects.

*Includes Wildlife Trust, Access Funds, State Wildlife Grants, competitive grants and one-time projects.

Core Business/Primary Functions

We conserve wildlife by providing wildlife and wildlife habitat management, including scientific data collection, law enforcement, wildlife human conflict management, research, habitat conservation and wildlife health services.

We serve people by managing wildlife populations, providing access for wildlife-associated recreation and providing information and education about wildlife and wildlife-related issues.

Executive Summary

The Department worked alongside the Wyoming Department of Transportation and was the recipient of the largest wildlife crossing award by the Federal Highway Administration's Bipartisan Infrastructure Law, Wildlife Crossing Pilot Program FY 2022-2024 Selections. An award for \$24.3 million was for the Kemmerer, U.S. Highway 189 project in southwest Wyoming. The project will consist of five underpasses, one overpass and fencing improvements along a 30-mile stretch between Evanston and Kemmerer. The Kemmerer project will help the Wyoming Range and Uinta deer herds, as well the Carter Lease pronghorn herd. The project will provide motorists with a safer means of travel while ensuring wildlife can continue to migrate between seasonal ranges. Along U.S. 189, an average of 80 deer-vehicle collisions are reported annually — although this number is likely underreported. In addition, traffic is expected to increase on this stretch of road in the coming years as a nuclear power facility will be constructed near Kemmerer. Once completed, this project is anticipated to eliminate 80-90% of wildlife-vehicle collisions.

In collaboration with many partners, the Department invested more than \$13 million in aquatic and terrestrial habitat projects in 2023. The projects are crucial for conserving and growing populations of more than 800 species in Wyoming for future generations. Game and Fish allocated more than \$4.6 million for habitat projects and was able to leverage that for more than \$8.6 million from the Wyoming Wildlife Natural Resources Trust fund, federal government funds, state funds, private landowners and local conservation partners. That is equivalent to \$2.86 million coming from external partners for every Game and Fish dollar allocated. Through these funds, Game and Fish was able to execute 237 projects in 2023.

Significant efforts and growth occurred in FY24 in relation to conservation education, specifically through the creation and expansion of multiple conservation in school programs. The Department expanded hunter education programs and worked with the Professional Teaching Standards Board to create a hunter education teaching endorsement so educators could teach hunter education in schools. The Department also reinvigorated the National Archery in Schools Program, and alongside Trout Unlimited introduced the Wyoming Trout in the Classroom program with a Wyoming-based curriculum for schools to raise eggs to trout and eventually release them into designated locations. These programs highlight conservation efforts and Wyoming's hunting heritage which is critical to support wildlife now and into the future and bolster the Department's *Inspire a Kid* program.

The Commission's approved budget for FY 24 was \$101,723,261, with an additional \$24,044,820 budgeted for one-time projects. Due to the State's fiscal situation and the frugality of Department staff, we were able to keep our expenditures within the reduced Department budget while adjusting to the reduction in free and reduced-priced license revenue, historically received from the general fund each fiscal year in the average amount of \$1,200,000.

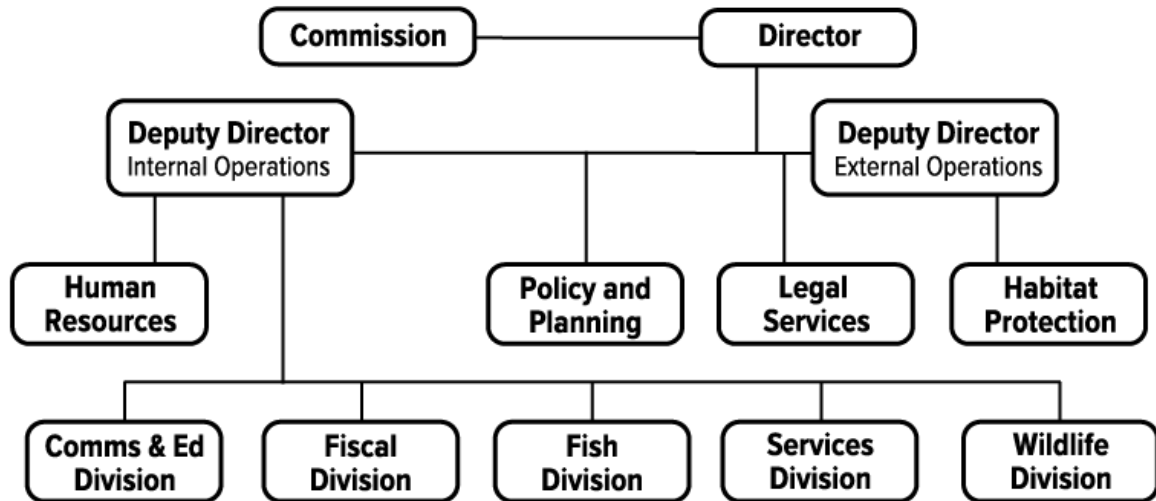
Mission

The Commission is created and empowered in Title 23 of the Wyoming Statutes. The Department is created and placed under the direction and supervision of the Commission in W.S. 23-1-401. The responsibilities of the Commission and the Department are defined in W.S. 23-1-103. In these and associated statutes, we are charged with providing ...“an adequate and flexible system for the control, propagation, management, protection and regulation of all Wyoming wildlife.” The Department is the only entity of state government directly charged with managing Wyoming's wildlife resources and conserving them for future generations. As such, our mission is:

“CONSERVING WILDLIFE - SERVING PEOPLE.”

WYOMING GAME AND FISH DEPARTMENT

Organization Chart



2023-24 IMPLEMENTATION PLAN ACCOMPLISHMENTS

CONSERVING WILDLIFE

Goal 1 - Conserve fish and wildlife by providing effective and efficient management and law enforcement.

Strategy 1.1 - Prevent, mitigate and research the impacts of fish and wildlife diseases.

Veterinarian Services

The Department continues to work extensively on the prevention, mitigation and research of many wildlife diseases, with chronic wasting disease (CWD) and brucellosis being at the forefront for deer, elk and moose. In FY21, the Commission approved the Department's CWD Management Plan. The approval of this plan resulted in the Department expanding its focused surveillance efforts and associated CWD prevalence data in order to move forward with "on the ground" CWD management engagement with the public, primarily for mule deer. Additionally, in FY24 the Commission approved the Feedground Management Plan (which contained disease management).

- For additional information on disease management, please visit [the Game and Fish website](#).
- For additional information on chronic wasting disease please read the 2023 [Chronic Wasting Disease Surveillance Report](#).
- For additional information on brucellosis surveillance, please read the 2023 [Brucellosis Report](#).

Nongame Section

The Nongame Section continued efforts on monitoring white-nose syndrome in bats throughout Wyoming and sylvatic plague in prairie dogs at the Meeteetse ferret reintroduction site. In addition to monitoring in Meeteetse, the Department contracted Wildlife Services to conduct plague management at the ferret recovery site using Delta Dust and Fipronil grain. The Department worked with USGS to conduct white-nose syndrome vaccine trials throughout Wyoming as part of research to examine vaccine effectiveness. More information about this work can be found in the [Nongame Annual Completion Report 2023-2024](#).

Large Carnivore Section

The majority of mountain lion field work for the research project evaluating the role of mountain lion predation in CWD and mule deer finished in the spring of 2023. There is still some work quantifying scavenging and comparing scavenge rates between CWD-positive and negative carcasses to complete. This work will be beneficial to better understand the role of a stalk and ambush predator on the primary prey and how this relates to CWD and the overall population of mule deer.

Annually, Large Carnivore Section (LCS) personnel compile information related to the documentation of disease in wolves. This is available in the annual wolf report. Our data demonstrate our management objective for wolves is beneficial in reducing the prevalence of canine parvovirus and sarcoptic mange.

Science, Research & Analytical Support

The Science, Research and Analytical Support (SRA) Unit, in collaboration with other Department work units and external research partners, began the third year of an intensive study of

five mule deer herds across the state. In addition to other goals, this work quantifies how CWD prevalence influences herd performance, including individual survival. Unit staff partnered with United States Department of Agriculture (USDA) and the University of Wyoming to collect ear punches on a subset of deer enrolled in the study. These punches are being used to evaluate the efficacy of an antemortem test for CWD.

The Unit also facilitated research partnerships on a number of terrestrial wildlife diseases, including an effort to evaluate behavioral signatures of CWD that may help managers determine CWD status well before an animal's death. ([Barrile et al. 2024](#))

Game Bird Farm Program

The Sheridan bird farm raised and released 16,905 pheasants onto 11 publicly accessible hunting areas in Sheridan, Bighorn, Johnson and Fremont counties. In Southeast Wyoming, the Downar bird farm raised and released 19,540 pheasants onto six publicly accessible hunting areas in Goshen, Platte and Laramie counties. The Game Bird Farm Program totaled 36,445 pheasants raised for release and public hunting in Wyoming.

Fish Division

The Department continues to research the impacts of diseases to cold-blooded aquatic wildlife and to prevent the spread of pathogens. All hatcheries that stock fish in Wyoming waters (Department, federal, and private) are tested annually to ensure pathogens are not introduced or spread through fish stocking. Hatchery facilities continue to improve biosecurity infrastructure and implement biosecurity measures to minimize or eliminate fish pathogen risks. Iodine water hardening treatments of brood stock eggs have been initiated to minimize the potential for passing on certain fish pathogens from parent to offspring. These treatments also have proven to be effective to reduce the infection of bacterial cold-water disease (*Flavobacterium psychrophilum*).

Wild populations of fish (e.g., cutthroat trout, largemouth bass) are routinely tested for the presence of pathogens prior to transplanting to restore populations or provide sport fishing opportunities. In FY24, a process was initiated to minimize the risk of an aquatic wildlife transplant spreading a pathogen. The process is initiated by filling out a transplant request form that is reviewed by the Fish Management Coordinator (FMC). If there are significant concerns about pathogens, a Transplant Committee (consisting of the FMC, appropriate Assistant Fish Management Coordinator, WGFD Fish Pathologist, Fish Culture Coordinator and a regional or statewide crew representative) is convened to determine, among other things, what amount of disease testing is necessary prior to conducting a proposed wildlife transplant.

Monitoring pathogens in wild populations remains a priority. Monitoring for amphibian chytrid fungus (*Batrachochytrium dendrobatidis*) is conducted annually, and results are housed in a Department geodatabase. In addition, the Department has funded ongoing research projects to determine amphibian chytrid fungus impacts on Western (boreal) Toad (*Anaxyrus boreas*) in the LaBarge Creek drainage and to develop protocols to minimize the risk of spreading amphibian chytrid fungus when transplanting beaver. The Department also has funded ongoing research projects to determine if the whirling disease parasite (*Myxobolus cerebralis*) is impacting trout populations in LaBarge Creek and the North Tongue River.

Strategy 1.2 - Expand and embrace the use of technology to increase effectiveness and efficiency in fish and wildlife management, law enforcement and forensic science.

Law Enforcement

The Department has signed a memorandum of understanding with the Wyoming Highway Patrol to gain access to the Patrol's e-citation software and cell phone app. This allows game wardens to issue citations and warnings electronically from their phones in the field and print them on a portable thermal printer for issuance to violators. Electronic citations are uploaded to an online repository and automatically pushed through to the Wyoming Supreme Court's software for distribution to the appropriate circuit court. Nearly all of the Department's game wardens have been trained on using the e-citation app and full implementation is expected prior to the 2024 hunting season. The Department and Patrol are in the process of finalizing a second MOU which will allow game wardens to access the Patrol's dispatch center app on their phones as well.

The Department issued replacement duty handguns for law enforcement personnel in early 2024. The new Glock pistols are equipped with red dot optics, an increasing trend across law enforcement. Research has shown that officers equipped with these sights on their pistols have improved threat focus and accuracy.

Legislation passed in 2023 allows the public the opportunity to take predatory animals at night on public land using artificial light, night vision and thermal optics, subject to seasonal restrictions and safety measures determined by the Wyoming Game and Fish Commission. The Department is finalizing the purchase of night vision monocular units for all law enforcement personnel to increase the safety and effectiveness of nighttime law enforcement efforts.

Nongame Section

The sage-grouse program has initiated efforts to assess drone effectiveness to monitor sage-grouse leks. The program has procured funding to purchase a drone that will be used during the spring of 2025. Monitoring will include one ground-based observer, paired with the drone, to determine feasibility of drone monitoring. Should this prove effective, a new monitoring protocol will be developed for drone use.

The Nongame Section continued to use specialized high-frequency acoustic detectors to monitor bat populations throughout the state as part of the North American Bat Monitoring Program. Information about this monitoring can be found in the [Nongame Annual Completion Report 2023-24](#).

Large Carnivore Section

The Large Carnivore Section (LCS) continues to adapt and amend the monitoring of large carnivores and large carnivore conflict management activities to increase efficiencies. We have refined our flight schedule for grizzly bears through increased use of GPS technology, and improved our efforts to collect fine-scale movement data for all large carnivore species.

Section biologists have written programming to map collar data in order to track animals monitored throughout the state, and have finalized the data collection efforts to move to the Bayesian Integrated Population Model for Greater Yellowstone grizzly bears.

Science, Research & Analytical Support

Technology development and application in service to the Department's mission is a core function of the SRA Unit. Specific technological advances during FY24 include:

- Continued development of Bayesian models and a web-based user interface to estimate population sizes for deer, pronghorn, bighorn sheep and moose.

- Developed and tested a new method to aerially estimate elk abundance.
- Updated and provided staff training on a web application to estimate pronghorn abundance from line-transect surveys (including training materials, software and corresponding Program R package).
- Designed and implemented eight aerial surveys to estimate mule deer abundance using an enhanced online interface to design the surveys, enter data, complete quality assurance and conduct analyses.
- Updated numerous components of data workflows associated with sharp-tailed grouse monitoring to improve the efficiency and repeatability of survey program results. Produced a mobile application to facilitate real-time data entry and enhance data quality.
- Developed applications for wildlife managers to access real-time location and mortality data associated with five mule deer herds and one elk herd enrolled in an intensive demographic study.
- Tested three types of solar ear tags designed to collect GPS locations, in collaboration with Veterinary Services. Compiled guidelines for best practice when using solar tags, and evaluated 80 tag deployments on free-ranging mule deer.

Big Game Program

Department field managers continued to expand the use of technology when documenting big game harvest during the fall hunting seasons through smartphone applications developed by the agency's Information Technology staff. During the 2023-24 winter season, 8,200 big game animals were recorded (August 1, 2023- February 28, 2024) on the Check Station App when managers either contacted successful license holders or documented big game mortality.

Fish Division

WiFi coverage has continued to expand to all fish hatcheries allowing for instantaneous data collection throughout the facilities. An all-inclusive Sequel database system used for spawning, egg incubation, production and fish stocking is now operating. The system, which is one of the most advanced in the U.S, will enable culture personnel to carefully track fish production from time of spawning to stocking, allowing them to identify solutions to address issues encountered during fish production and improve efficiencies.

Fisheries managers are employing several new technologies to improve their effectiveness and efficiency in managing the state's aquatic wildlife. Managers are currently using time-lapse cameras to census float fishing boats on important trout fisheries in the state. In collaboration with Biological Services personnel, Fish Division biologists also have been developing artificial intelligence tools to post-process the time-lapse camera photos, thus increasing efficiency. Fish managers also have worked with Information Technology personnel to create an online, tablet, or phone-based creel survey interview tool to assist with these efforts. Managers also continue to use environmental DNA techniques to more efficiently ascertain the effectiveness of nonnative fish removals, plan for eradication efforts, measure the success of fish translocations and to detect unwanted species in fish aboard fish stocking trucks. Efforts to track sport and nongame fish in the Powder and North Platte River drainages using stationary and portable radio telemetry receivers also are ongoing.

Aquatic habitat biologists have been employing drones to quantify and document aquatic habitat conditions and monitor projects. The instream flow biologist used a drone at multiple flow levels for instream flow water right studies. A drone was used to document post project stream conditions and the condition of habitat structures on Sunlight Creek and passage barriers on tributaries to the Greybull River. Drone imagery also was collected on East Tensleep Creek at the site of a proposed barrier to be constructed for future Yellowstone cutthroat trout restoration.

IT Branch

The application development section in conjunction with the Fish Division deployed a new custom-built application for fish production. This application helps manage all aspects of raising fish in all of the Department's hatchery facilities.

The IT Branch also continues to develop and enhance field data collection through upgrades to the Check Station app and development of GIS-based collection tools, including a new creel survey tool.

Strategy 1.3 - Expand the use of sound science and data as the foundation for fish and wildlife management planning.

Veterinarian Services

The Department continues to conduct and collaborate with others in developing science and data for wildlife management planning. Specifically regarding wildlife disease/health, from 2023 to date, Veterinary Services unit members have worked on and published research in peer-reviewed journals five times. For more information see examples below:

1. Pathology of chronic *Mycoplasma ovipneumoniae* carriers in a declining bighorn sheep (*Ovis canadensis*) population. Malmberg JL, Allen SE, Jennings-Gaines JE, Johnson M, Luukkonen KL, Robbins KM, Cornish TE, Smiley RA, Wagler BL, Gregory Z, Lutz D, Hnilicka P, Monteith KL, Edwards WH – Journal of Wildlife Diseases, 2024.
2. Clearance of *Mycoplasma ovipneumoniae* in Captive Bighorn Sheep (*Ovis canadensis*) following extended oral doxycycline treatment. Wood ME, Edwards WH, Jennings-Gaines JE, Gaston M, Van Wick P, Amundson S, Allen SE, Wolfe LL – Journal of Wildlife Diseases, 2023.
3. Using Opportunistic Samples to Monitor West Nile Virus Infection Status in Greater Sage-grouse (*Centrocercus urophasianus*) in Wyoming, USA (2020–22). SE Allen, MR Kunkel, NM Nemeth - Journal of Wildlife Diseases, 2023.
4. Mortality in Wild Turkey (*Meleagris gallopavo*) Associated with Natural Infection with H5N1 Highly Pathogenic Avian Influenza Virus (HPAIV) Subclade 2.3.4.4. JL Malmberg, M Miller, J Jennings-Gaines, SE Allen - Journal of Wildlife Diseases, 2023.
5. Butorphanol, Azaperone, and Medetomidine for Chemical Immobilization in Free Ranging Shiras (*Alces shirasi*) Moose: Ground and Helicopter Darting in Wyoming, USA. SE Allen, P Van Wick, AB Courtemanch, T Cufaude - The Journal of Wildlife Diseases, 2023.

Nongame Section

The Nongame Section conducted and funded numerous projects to obtain additional information on nongame populations throughout the state. Information about these studies can be found in the [Nongame Annual Completion Report 2023-2024](#).

The Sage-grouse Program [funded multiple projects](#) using sage-grouse local working group dollars to gather knowledge needed for effective sage-grouse management.

Statewide Terrestrial Habitat

The Migratory Game Bird Section (MGBS) works with partners to identify regionally and locally important wetland habitats within Wyoming. We contributed to efforts on the Intermountain West Joint Venture's research on White-faced ibis migration patterns and habitat use by placing GPS transmitters on ibis summering in southeast Wyoming.

MGBS conducts annual flights for several species, including sandhill cranes, waterfowl and trumpeter swans (in coordination with the Nongame Program). These surveys are coordinated with regional state and federal partners and feed into federal regulation and season-setting processes on an annual basis.

Mourning dove banding is coordinated by the MGBS annually. This data is used in population modeling and in setting annual hunting regulations. More information on this effort can be found in the USFWS report [Mourning Dove Population Status 2023](#).

Large Carnivore Section

LCS took a lead role in the demographic workshop to analyze grizzly bear vital rates and population demographics data resulting in the adoption of an integrating population model for the Greater Yellowstone Ecosystem grizzly bear population. The work unit continues to update methodologies and regulatory mechanisms in order to demonstrate that the GYE grizzly bear population is recovered based on empirical data.

The Department updated black bear harvest regulations and incorporated genetic data from multiple areas as part of a systematic monitoring program of black bears throughout the state. These regulations were discussed at a January Commission Meeting

The Department updated mountain lion harvest regulation based on public and agency concerns related to mule deer mortality following the winter of 2022-23. In addition, LCS personnel captured and collared 12 mountain lions in the Wyoming Range to evaluate movement in relation to mule deer migration by the University of Wyoming.

Our wolf management continues to use a data-driven approach based on the best available science to derive management objectives and harvest limits. Wolf management is under intense scrutiny, and the data-driven approach employed by the Department is a model for other state agencies that have or will be acquiring wolves.

Science, Research & Analytical Support

Wildlife science and the corresponding application of new information to management is a core responsibility of the unit. Accomplishments in this area include:

- Continued operation of a five-year integrated monitoring program for mule deer designed to provide robust population information, transparent assessments of future harvest opportunities and a clear ability to evaluate the results of management actions.
- Piloted space and time-to-event applications to assess wild sheep abundance in the Whiskey Mountain bighorn sheep herd.
- Provided staff training and support to implement big game herd composition surveys with an improved, repeatable survey design and corresponding online tools for data management and analysis.
- Produced or collaborated with the Wyoming Survey and Analysis Center to complete 18 harvest survey reports. Harvest surveys provide the Department with important information on harvest, hunter success, recreation days, etc. See [these reports](#) for additional detail.

In addition to this work, the SRA unit collaborated with partners to prepare nine management-focused manuscripts for publication in peer-reviewed journals.

Published

Carlisle, J., K. Smith, J. Beck, M. Murphy and A. Chalfoun. Beyond overlap: considering habitat preference and fitness outcomes in the umbrella species concept. 2024. [Animal Conservation](#). DOI: 10.1111/acv.12899.

Merkle, J., B. Lowrey, C. Wallace, E. Hall, L. Wilde, M. Kauffman and H. Sawyer. Conserving habitat for migratory ungulates: how wide is a migration corridor? 2023. Journal of Applied Ecology. 60: 1763-1770 DOI:10.1111/1365-2664.14473.

Milligan, M., A. Johnston, J. Beck, K. Taylor, E. Hall, L. Knox, T. Cufaude, C. Wallace, G. Chong and M. Kauffman. 2023. Wind-energy development alters pronghorn migration at multiple scales. Ecology and Evolution. 13: e9687 DOI: doi.org/10.1002/ece3.9687.

Verzuh, T. S. Rogers, P. Mathewson, A. May, W. Porter, C. Class, L. Knox, T. Cufaude, E. Hall, R. Long and K. Monteith. 2023. Behavioral responses of a large, heat-sensitive mammal to climatic variation at multiple spatial scales. Journal of Animal Ecology. 92: 619-634 DOI: 10.1111/1365-2656.13873.

In review

Becker, J., J. Beck, E. Hall, J. Hennig, M. Kauffman, H. Sawyer, D. Scasta and J. Merkle. Spatiotemporal variation in habitat partially explains diverse movement strategies in a large ungulate. *In review*. Proceedings of the Royal Society B: Biological Sciences.

Gelzer, E., J. Becker, S. Dwinnell, G. Fralick, E. Hall, R. Kaiser, M. Kauffman, T. LaSharr, K. Monteith, A. Ortega, J. Randall, H. Sawyer, M. Thonhoff and J. Merkle. How GPS collar sampling design influences consistency of migration corridors over time. *In review*. Journal of Wildlife Management.

Hayes, T., A. Johnston, E. Hall, J. Randall, M. Kauffman, C. Keefe and T. Graves. Weighing effects of energy development, climate, land cover, and restoration to sustain declining mule deer populations. *In review*. Ecological Applications.

Moss, W., J. Binfet, E. Hall, S. Allen, W. Edwards, J. Jennings-Gaines and P. Cross. The effectiveness of harvest for limiting wildlife disease: insights from 20 years of chronic wasting disease in Wyoming. *In revision*. Ecological Applications.

Thomas-Kuzilik, R., J. Becker, J. Beck, J. Clapp, A. Courtemanch, G. Fralick, C. Geremia, E. Hall, M. Kauffman, B. Lowrey, M. Metz, H. Miyasaki, K. Monteith, A. Ortega, H. Sawyer, D. Smith, E. Stahler, D. Stahler, T. Verzuh, and J. Merkle. Expression and mechanisms of behavioral plasticity in large mammals. *In review*. Ecological Monographs.

Big Game Program

Wildlife managers provided [detailed reports](#) outlining data analysis, population performance, harvest metrics and hunting season recommendations for elk, pronghorn, mule deer, white-tailed deer, wild bison, bighorn sheep and mountain goat herds in Wyoming.

Field managers engaged with the public during season-setting meetings and evaluated population management objectives for big game herds across the state. In September 2024, the Wyoming Game and Fish Commission approved revised objectives for the Cooper Lake pronghorn herd in southeast Wyoming, and the Paintrock, Upper Powder River and Pumpkin Buttes mule deer herds in northern Wyoming.

Fish Division

The spawning crew has worked collaboratively with Department fish health lab personnel to develop protocols and procedures to successfully cryopreserve milt from brood stock males. To date, fall rainbow trout and Snake River cutthroat trout milt has been collected and cryopreserved. Future plans are to cryopreserve five replicate samples of milt from at least 25 individual males from each of the Department's 12 captive brood stocks.

Fisheries managers continue to apply advances in science and new analytical techniques to provide better fishing opportunities and further conservation of the state's aquatic wildlife. During the past year, managers have continued to employ the use of isotopic signatures in fish eye lenses, muscle, liver, eggs and other tissues to reconstruct the life histories and diets of fish. Fish Division continues to fund genetic sequencing of native fish (e.g., cutthroat trout and sauger) and nonnative sportfish (e.g., lake trout in Flaming Gorge Reservoir) to better inform conservation and management. In addition, fish managers have recently collaborated with researchers from Idaho State University to study the impacts of water management below Jackson Lake Dam on native fish populations. Finally, Fish Division has collaborated with researchers on projects to better understand the distribution and status of western pearlshell and California floater mussels and Pilose crayfish in the Bear River drainage in southwest Wyoming, and native fish and mussels in the Lodgepole Creek drainage in the southeast corner of the state.

Strategy 1.4 - Enhance safety for those living, working and recreating around wildlife and on Wyoming's waterways.

Law Enforcement

The Department continues to partner with the U.S. Coast Guard for supplemental funding and training to enhance watercraft safety and education across the state. Game wardens conduct watercraft safety inspections, maintain regulatory buoy markers on lakes and reservoirs and educate interested groups on watercraft safety. To assist in accomplishing this watercraft safety mission, the Department partners with county sheriff's offices, municipal police departments and search and rescue organizations. This partnership includes the completion of a joint agency patrol boat facility on Alcova Reservoir, used by the Department and the Natrona County Sheriff's Office, and the purchase of flotation and rescue gear for use by the NCSO and Wyoming State Parks.

Large Carnivore Section

A primary component of all LCS work is to enhance safety for those living, working and recreating in large carnivore country. The Bear Wise Wyoming page provides an interactive guide for increasing safety and decreasing conflict potential with bears and other carnivores. LCS teamed up with Safari Club International and American Bear Foundation with a remote-control bear to simulate a charging bear and proper use of bear spray. The charging bear display was used at public events across the state. The Bear Wise Report is included in the [Annual Grizzly Bear Job Completion Report](#).

LCS managers participated in giving away more than 400 cans of bear spray throughout Wyoming.

LCS investigated and verified conflicts between large carnivores and people. It presented these data to the Commission and at the Western Association of Fish and Wildlife Agencies conference.

Goal 2 - Conserve and protect diverse and sustainable habitat for fish and wildlife.

Strategy 2.1 - Further habitat protection, enhancement and restoration on Wildlife Habitat Management Areas (WHMAs).

Services

Throughout 2023, the Department has continued its proactive efforts in habitat enhancements on Wildlife Habitat Management Areas (WHMA's) under its ownership and management. This comprehensive initiative includes a range of activities such as controlling invasive species, establishing food plots, converting fencing to wildlife-friendly standards with an emphasis in

migration routes, developing wildlife watering structures across the landscapes, upgrading irrigation infrastructure for efficient practices and water conservation and implementing mechanical treatments to promote seral age-class succession in sagebrush communities. Additionally, efforts were made on haying meadows to promote new growth while reducing cost of hay at state feed grounds, mitigate conifer encroachment and optimizing aspen stands through thinning and mechanical ripping.

To maintain ecosystem health, prescribed fires and mechanical treatments were strategically employed. Concurrently, significant restoration efforts were directed towards enhancing stream habitats and wetlands throughout the state. Noteworthy projects featured in the 2023 habitat plan report include the construction of a new beaver rearing facility in the Cody Region, restoration of 2,500 linear feet of rivers statewide and mechanical enhancements spanning 430 acres of sagebrush in western Wyoming to facilitate wildlife migration within a designated 1,800-acre treatment area.

For comprehensive insights into these initiatives and their outcomes, interested parties can refer to the [Statewide Habitat Plan Annual Report for 2023](#). This report serves as a detailed testament to the Department's steadfast dedication to habitat preservation and enhancement initiatives across Wyoming.

Statewide Terrestrial Habitat

We collaborated with other Department personnel and outside partners to enhance and create wetland habitat for migratory birds on several Department WHMAs. The MGBS worked with Pinedale and Lander region Habitat and Access personnel to develop and implement habitat monitoring and a wetland management plan for the newly restored wetlands on Soda Lake and Sand Mesa WHMAs. These areas provide breeding and forage-rich migratory habitats for wetland associated birds and other local wildlife.

More information on this work is available in the [2023 Statewide Habitat Plan Annual Report](#).

Strategy 2.2 - Conserve, enhance and protect fish and wildlife migrations.

Statewide Terrestrial Habitat

WGFD completed two wildlife crossing assessments, monitored 25 wildlife crossings and installed and enhanced 17 wildlife crossing structures in 2023. More information on this work is available in the [2023 Statewide Habitat Plan Annual Report](#).

Science, Research & Analytical Support

The Unit partnered with agency and academic collaborators to quantify the influence of GPS collar configuration, distribution of marked animals and sampling frequency on the delineation of migration corridors. Results of this work will help the Department strategically target resources for migration work, and continue to leverage the best-available science in migration conservation.

Gelzer, E., J. Becker, S. Dwinnell, G. Fralick, E. Hall, R. Kaiser, M. Kauffman, T. LaSharr, K. Monteith, A. Ortega, J. Randall, H. Sawyer, M. Thonhoff and J. Merkle. How GPS collar sampling design influences consistency of migration corridors over time. *In review*. [Journal of Wildlife Management](#).

Services

The Department worked with The Conservation Fund, Wyoming State Forestry, WWNRT and the Jackson Hole Land Trust to accept the donation of the Chimney Draw conservation easement on 256.5 acres south of Jackson in Teton County. This conservation easement will protect the property from development pressure, and preserve a crucial migration route for elk traveling between the South Park Wildlife Habitat Management Area along the Snake River and the Bridger-Teton National Forest to the west. The property also is home to habitat for gray wolves, grizzly bears and 47 species listed as Wyoming Species of Greatest Need of Conservation. The Chimney Draw conservation easement is located adjacent to two other conservation easements owned by the Commission, the 235-acre Munger Mountain conservation easement acquired in 2014 and the 148.9-acre Munger Mountain II conservation easement which was acquired in 2021.

Strategy 2.3 - Maintain, enhance and develop partnerships with private landowners and other stakeholders to benefit fish and wildlife conservation and sustainable use.

Nongame Section

The sage-grouse program funded habitat improvement projects through sage-grouse local working groups. The projects often occur on private properties and are focused on enhancing habitats to benefit grouse. More information can be found the [Game and Fish website](#).

Statewide Terrestrial Habitat

Game and Fish contacted more than 334 landowners and permittees in 2023, resulting in more than 160 projects. This is a combined number of biologists from the Wildlife and Fish Divisions. More information on this work is available in the [2023 Statewide Habitat Plan Annual Report](#).

Veterinarian Services

Regarding wildlife health/disease and utilizing the Wildlife Health Laboratory (WHL), the Department continues to collect, coordinate and test for a number of infectious pathogens. This work provides the public and stakeholders with current and easily accessible information that assist in managing risk and making informed decisions. While the scope of the work can change based on what is currently impacting Wyoming, it primarily centers around infectious diseases of human risk (i.e., zoonotic disease - plague, tularemia, highly pathogenic avian influenza (HPAI), brucellosis, diseases of wildlife/livestock interface (i.e., transmission that can occur between domestic and wild populations - epizootic hemorrhagic disease virus (EHDV)/ bluetongue virus (BTV), rabbit hemorrhagic disease virus 2 (RHDV2), *Mycoplasma bovis*) and infectious pathogens that can have a negative impact on wildlife populations (e.g., CWD, bighorn sheep pneumonia).

CWD: A total of 5,100 deer, elk and moose samples were submitted and tested through the WHL. CWD was detected in 711 samples from around the state The [surveillance program](#) identified three new CWD positive mule deer hunt areas, Yellowstone National Park and four new CWD elk hunt areas.

Brucellosis: A total of 1,415 elk samples were submitted and tested through the WHL, with 36 of those testing seropositive, two being from hunt areas outside of the [designated surveillance area](#).

HPAI: 146 samples submitted through WHL for external testing, [HPAI](#) was detected in 17 samples.

RHDV 2: 50 samples were submitted for testing through the WHL, [RHDV2](#) was detected in 39 samples.

EHDV/BTV: 36 samples were submitted for testing through the WHL, nine were positive for [EHDV/BTV](#).

Large Carnivore Section

The LCS presented an annual update to the Commission regarding outreach and education and working with landowners, livestock producers and sportspeople of Wyoming for conservation of large carnivore species. The Bear Wise Section of the Job Completion Report contains additional details on working with landowners and stakeholders. In 2023 nearly 6,500 people were reached for bear and carnivore awareness with nearly 50 presentation occurring as a result of Bear Wise Wyoming.

Big Game Program

For the ninth consecutive year, the Commission provided about \$500,000 for mule deer projects. Through partnering with other funding sources, these funds were matched 1:7.7, resulting in total project funding of \$4,382,341 to support mule deer habitat improvements in Wyoming. Approximately 27,600 acres and improving 2.9 fence/stream miles of important mule deer habitats are included in the project proposals this year. An overview of the FY24 MDI proposals can be found [in the 2024 Statewide Mule Deer Initiative PowerPoint presentation](#).

Fish Division

The Department's fish passage program consists of two full-time biologists and one seasonal technician. It works with several internal and external teams to address fish passage needs across the state. A diverse workload includes passage inventories, entrainment sampling, fish movement evaluations, design review, grant writing, permitting, construction oversight and coordination with various engineering consultants. On average, four to six projects are started each year to remove barriers and reconnect streams. Highlights for FY24 included installation of a fish bypass channel on a diversion near Torrington and rehabilitation of an additional diversion 3.5 miles downstream on Horse Creek, effectively reconnecting more than 23 miles of stream. Horse Creek is one of the most diverse fish communities within Wyoming. The fish screen at the Spread Creek diversion near Jackson operated without any issue for its first year ensuring fish will no longer become entrained between Spread Creek and the Snake River. A second year of monitoring documented upstream movement through the Wood River ladder by some of the 476 PIT tagged fish that also used it in 2022. Progress was made on a large design effort to improve fish passage and prevent fish entrainment on the Pitchfork Ranch in the Greybull River drainage. The project will prevent entrainment of 25,000-60,000 fish each year and restore upstream passage to 46 miles across 18 different sites on five streams. Construction will begin in 2025. Lastly, more than 235 inventories of road crossings and irrigation diversions were conducted further developing the state's fish passage prioritization tool. The Department Statewide Habitat Plan Annual Report contains detailed information about fish passage projects and summary statistics.

Services

In Fiscal Year 2024, the Department had the unique opportunity to work with a private landowner and the Rocky Mountain Elk Foundation (RMEF) to complete a private/public partnership to conserve the Mule Creek Ranch in Albany County. Through this partnership, the

Department purchased the 2,660-acre western portion of the ranch for a new Wildlife Habitat Management Area, and also place a conservation easement and permanent public access easement on the 4,000-acre eastern portion of the ranch. A private landowner, 88 Ranch Land and Livestock, LLC, was able to purchase the eastern tract for their cattle operations for a discounted price due to the encumbrance of both easements. The Department is now able to manage the public access to the entire 6,660-acre property during the hunting season permanently, which allows for better management of the elk population in an area that is significantly over population objectives. This project is a prime example of a win-win for all parties involved, especially wildlife and the public.

Strategy 2.4 - Identify, secure and enhance priority fish and wildlife habitats for native species.

Nongame Program

The Nongame Section has worked to identify priority habitats for species throughout the state. During the spring of 2023, efforts were expended to identify nesting and breeding habitat for pinyon jay (federally petitioned species) to determine the importance of Wyoming habitats for this species. In the spring of 2024 this work was expanded upon fitting four pinyon jays with satellite transmitters. This will enable managers to track this species back to new nesting areas. The section continued work to determine recovery areas for Preble's meadow jumping mouse in the Laramie Mountain Range.

Statewide Terrestrial Habitat

Utilizing priority habitats identified in the Department's Statewide Habitat Plan, the Wildlife Division spent more than \$6,123,000 on actions to enhance more than 747,000 acres in 2023. More information on this work is available in the [2023 Statewide Habitat Plan Annual Report](#).

Science, Research & Analytical Support

The Unit partnered with field managers to evaluate and analyze updates to seasonal range delineations in six big game herds across the state. Many of these efforts required combinations of various peer-reviewed, analytical techniques including continuous-time movement models, kernel density estimators and dynamic Brownian Bridge approaches.

Fish Division

The aquatic habitat program works to protect, restore and enhance Wyoming's water, watersheds and waterways. The program consists of 13 permanent, full-time employees. During FY24, an annual contract aquatic habitat position located in Lander was converted to permanent. This full-time, permanent aquatic habitat biologist bodes well for the future and means that big-picture aquatic habitat projects can be pursued to have lasting fisheries benefits.

In FY24 there were 39 on-going aquatic habitat projects involving significant funding. Tracked annually, this metric has ranged from 34-42 the last five years. Work (assessment, design, restoration or monitoring) occurred on approximately 156 stream miles, also close to the five-year average. Recent years have been marked by a high number of assessments (36) and designs (56) as newer biologists are collecting information to understand and address impairments in regional streams. The amount of newly constructed stream channel or bank enhancement is usually 1-5 miles annually, and 2023 was on the high end of that range at 5.1 miles. Water temperature monitoring has increased to the point where biologists are keeping a close eye on stream temperatures at 49 sites across the state. Beaver dam analog (BDA) work remains popular with Department biologists joining partners to install 52 BDAs. The number of watershed assessments conducted was similar to last year with 66.4 stream miles completed, compared to 72.4 miles the previous year. Finally, the creation of 27 miles of upstream fish passage marked a return to a more typical annual effort following the whopping 128 miles recorded last year.

Instream flow water rights are used to help maintain fish Species of Greatest Conservation Need, like native cutthroat trout. The Department conducts studies and files for water rights for flows needed to maintain or improve existing fisheries. In 2023, reconnaissance was conducted on reaches in 10 potential instream flow segments. Details of progress can be found in the Department's Statewide Habitat Plan Annual Report.

In 2023, fish management biologists monitored the effectiveness of chemical treatments of Saratoga Lake and the Big Sandy River. Trout have been restocked into Saratoga Lake to restore this popular fishery, and all native suckers that were salvaged from the Big Sandy River prior to 2021 and 2022 chemical treatments have been repatriated back to that stream. Pre-treatment efforts are currently underway for the future removal of hybridizing trout in the Crandall Creek drainage to enhance native cutthroat trout populations, and a 2025 chemical treatment in the Muddy Creek drainage to conserve native flannelmouth sucker, bluehead sucker and roundtail chub.

Goal 3 - Prevent the introduction and spread of invasive species in Wyoming.

Communications and Education

In FY24 the communications team created a marketing plan for aquatic invasive species (AIS) education to support and supplement the AIS Communication Toolkit created in FY23. This expansion education and information project was intended to build community capacity to share AIS messaging by offering the toolkit and expanding outreach specifically for watercraft owners and the general public. The project created multiple billboards around the state to inform boaters to get their watercraft inspected. Radio and print advertisements ran across multiple mediums including Wyoming public radio, local advertising companies, social media, license-selling agents, conservation organizations, boating businesses, news outlets and other agencies/groups. The goal is to continue increasing awareness of AIS prevention, promote the Clean, Drain, Dry campaign and increase AIS decal and check station compliance.

Strategy 3.1 - Seek opportunities to improve the efficiency and continuity of the State's AIS program.

Fish Division

In FY23, the AIS program began the transition from carbon-copy paper inspection receipts to using computer tablets and mobile receipt printers at the majority of inspection locations. This transition continued into FY24 and is now implemented throughout the state, which allows all inspectors to use tablets to instantaneously access a shared database and assess an individual watercraft's history and threat level. In addition, the AIS program continues to implement the use of environmental DNA for the early detection and monitoring of *dreissenid* mussels, mostly at hatchery facilities.

Strategy 3.2 - Facilitate the development of coordinated responses to new invasive species.

Fish Division

Quagga mussels were documented in the Snake River near Twin Falls, Idaho, in September 2023, which is the first detection of adult *dreissenid* mussels within the Columbia River Basin. The state of Idaho responded swiftly, initiating a chemical treatment within a month. The Department increased AIS program inspection capabilities in western Wyoming to effectively protect the state from the heightened quagga mussel threat posed by watercraft coming from Idaho. The AIS program added two additional seasonal AIS watercraft inspector positions to provide increased staffing at the existing Alpine and Kemmerer check stations in western Wyoming.

Additionally, the AIS program updated the water specific Rapid Response Plans for *dreissenid* mussels during the reporting period. The updates primarily consisted of updates to contacts and revamped budgetary projections given increased costs since the initial plans were completed.

Strategy 3.3 - Establish partnerships to develop and implement comprehensive programs to prevent, decrease or eliminate invasive species while diversifying funding for these programs.

Statewide Terrestrial Habitat

The Department has partnered with the University of Wyoming's Institute for Managing Annual Grasses Invading Natural Ecosystems (IMAGINE) to spread awareness of Invasive Annual Grasses (IAGs), implement a monitoring network to identify areas infested with IAGs and evaluate treatment methods and utilize the latest technology to detect infestations with remote sensing and in house modeling technologies. These actions are driven by the Department's [2021 Strategic Plan: Invasive Annual Grass Implementation Plan](#).

Fish Division

In FY24, the Department expanded and strengthened its partnership with the State of Idaho to effectively respond to the quagga mussel infestation in a segment of the Snake River in Idaho. The Department also continued to expand upon existing partnerships with multiple federal agencies, including the U.S. Bureau of Reclamation, U.S. Fish and Wildlife Service and U.S. Forest Service, who provided additional funding to the Department to address increased costs in the AIS program during the reporting period.

The Department also continues to expand and strengthen collaboration with the Wyoming Department of Transportation (WYDOT) as the AIS program pursues check station improvements (water, power, etc.) at ports of entry on WYDOT properties throughout the state.

Strategy 3.4 - Reduce dependence on importing fish.

Fish Division

The Department currently imports most species of non-salmonid gamefish from other states in order to provide important cool- and warm-water sport fisheries. Prior to importation to Wyoming, most of these species are reared in open ponds that are vulnerable to infestation by aquatic invasive species and other non-target organisms (e.g., various amphibians and invertebrates). In order to eliminate the potential to introduce these unwanted hitchhikers into Wyoming waters, the Department hired the McMillen Design & Engineering team to design and provide cost estimates for a new, fully-enclosed, state-of-the-art, intensive cool/warm-water fish hatchery via a facility expansion at the Department's Dan Speas Fish Hatchery near Casper. The Department is moving forward with this priority project to prevent the introduction of AIS into the state while providing the fish species necessary to sustain important warm- and cool-water sport fisheries (walleye, largemouth bass, channel catfish, etc.) in Wyoming. The Fish Division has identified multiple waters to serve as in-state sources of select species rather than relying on fish imported from out-of-state. These waters are being tested annually to ensure that transplants of eggs or adult spawning-size fish to the new facility are free of pathogens, AIS and non-target organisms.

SERVING PEOPLE

Goal 4 - Improve communications, outreach and education to foster appreciation, engagement and understanding of fish and wildlife conservation.

Communications and Education

Volunteer Program: In FY24 the Department had 336 volunteers who spent 3,468 total hours supporting the Department with 49 unique projects (not including hunter education instructor volunteers; see Strategy 5.4 below.).

New Website/Content Update: The Department finished a multi-year project to create a new website that allows for easier public use, engagement and information sharing. The new website had to be entirely created and all content reviewed and modified as necessary for public consumption. The overall project was completed and went live April 2024, and was considered a success.

FY24 Website analytics

1,874,293 users

11,612,809 pageviews

Website device stats

62.1% Mobile

36.3% Desktop

1.7% Tablet

Top visited pages

Licenses and Applications (4,109,903 pageviews)

Home Page (1,748,972 pageviews)

Hunt Planner (1,737,931 pageviews)

Regulations (704,694 pageviews)

Draw Results & Odds (388,491 pageviews)

Education and Outreach Tracking: Across the Department education and outreach efforts were tracked and Department employees engaged with more than 8,046 individuals through 81 different programs hosted across the state, not including traditional conservation education programs.

Strategy 4.1 - Facilitate advancements in communicating with the public, partners and stakeholders using email and social media, as well as other new techniques in the future.

Regarding [wildlife health/disease](#), the Department continues to be available and provides up-to-date communication with external partners. For example, continued diagnostics and mapping of current outbreak data, particularly for [rabbit hemorrhagic disease virus 2](#), [epizootic hemorrhagic disease/bluetongue](#), [chronic wasting disease](#), [highly pathogenic avian influenza](#) and [bighorn sheep pneumonia](#).

For more information:

Nongame Section

In 2023 the sage-grouse program funded a project through sage-grouse local working groups in conjunction with the Audubon Society focused on education and developing resources for public use. This project is ongoing.

The Nongame Section has worked with the Communications and Education Section to produce articles and informational material for nongame wildlife within the state. In 2023, the section assisted the USFWS with filming ferret releases in Meeteetse. The USFWS coordinated with Mutual of Omaha's Wild Kingdom to focus an episode on black-footed ferret recovery efforts. This program was aired to the public in the spring of 2024.

Large Carnivore Section

A primary component of all of our work is to enhance safety for those living, working and recreating in large carnivore country. Our Bear Wise Wyoming page provides an interactive guide for increasing safety and decreasing conflict potential with bears and other carnivores. We teamed up with Safari Club International and American Bear Foundation with a traveling remote control bear to simulate a charging bear and proper use of bear spray. Our Bear Wise Report is included in the [Annual Grizzly Bear Job Completion Report](#).

The Large Carnivore Section hosted the 14th Western Association of Fish and Wildlife Black Bear Workshop in Jackson with managers and researchers from across North America to discuss the current state of affairs with black bear and grizzly bear research, monitoring and management.

IT Branch

The IT Branch played a pivotal role in the development of the Department's new website, specifically focused on integrating data to the website from Department systems via custom APIs, allowing for more accurate and timely data to reach the public.

Communications and Education

Game and Fish continues to have significantly higher open rates on email communications than industry and other government standards. This higher average has been attributed to public trust and personal interest in our communications due to public interest and support for wildlife and draw notifications.

The Communications Team implemented new software in FY24 to track email and social media analytics to identify reach, interest and open rates of email and media communications. New releases sent by the Department reached approximately 860,000 people in FY24, not including earned media or additional shares by other media outlets that have reached millions of people within Wyoming and nationwide according to our newly acquired analytics.

Social media reach analytics

Facebook

- 1.7 million people reached
- 155 posts
- 967,600 video views
- 192 days of video watch time
- 79,500 followers

Instagram

- 457,700 people reached
- 120 posts
- 29,100 engagements
- 26,500 followers
- 383 link clicks

YouTube

- 1,468,595 views
- 116 videos

- 5,197,703 impressions
- 28,572 total watch time hours
- 568 comments
- 14,737 shares
- 8,934 likes

Game and Fish is mentioned in approximately 20-30 stories in local newspapers and online news each week. On average, 10,000 people see Game and Fish news weekly. Game and Fish also continues to produce 52 television pieces each year and creates and sends more than 200 statewide news releases each year.

Strategy 4.2 - Use education to improve public understanding of the role we all play in conservation and management of all fish and wildlife and their habitats.

Veterinarian Services

Veterinary services staff attend a number of in-person events such as schools, camps, hunter education, etc., to provide current wildlife health/disease information. Additionally, Veterinary Services provides training to veterinary students and training the next generations of wildlife veterinarians by participating and helping plan the [Rocky Mountain Wildlife Veterinary Externship](#).

Fish Division

Fish Division is using “Worth the Watching” funding to construct informational kiosks and develop self-guided tours for the public at Department culture facilities. Fish Division and the Communications and Education section collaborated with the Wyoming Council of Trout Unlimited (TU) to expand the Trout in the Classroom program to dozens of schools throughout the state. The Department will continue to collaborate with TU to expand this popular youth education program in coming years.

Communications and Education

FY24 Summer Camps: The Education Team hosted 24 summer camps that included three youth camps, two Becoming and Outdoors-woman camp and family camps. These camps reached 253 participants.

Conservation Crates: The Education Team launched a new education program that allows anyone to check out a conservation crate containing lesson plans and all supplies to teach a conservation topic. This first year of the program, without public rollout or advertising, received 24 requests organically, reaching 847 students. The most highly requested crate topic was Pelts and Skulls.

The Department reactivated its participation and statewide sponsorship of the National Archery in Schools Program (NASP), which trains and teaches the fundamentals of archery skills. In FY24 2,100 students participated from 24 schools.

The Department, alongside its partner Trout Unlimited, launched the new Trout in the Classroom (TIC) program with an accompanying Wyoming curriculum. This program allowed 28 schools to receive eggs from the Dubois Hatchery to grow trout in aquariums for a semester while learning about aquatic ecosystems and their importance in trout life cycles. At the end of the semester, the 1,500 students engaged in the program raised trout from eggs to fingerlings that were then released into designated locations.

Strategy 4.3 - Embrace processes to improve citizen participation, build relationships and partnerships.

Nongame Section

The sage-grouse program facilitated efforts to provide volunteer opportunities to monitor sage-grouse leks and provided resources to facilitate general public lek viewing visits.

The Nongame Section solicited volunteers from the public and other state and federal agencies to assist with black-footed ferret annual monitoring efforts.

Communications and Education

The Education Team created an education request form that teachers and members of the public could utilize to request education programs from the Department. This form has received national recognition and reached 28,980 people with 267 requested programs.

Strategy 4.4 - Enhance the Department's ability to quantify and utilize public input when making management decisions.

Big Game Program

During the 2023 hunting season-setting time frame, wildlife managers held public meetings across Wyoming and posted season proposals and season-setting videos online. From March 18-April 15, 2023, the online season-setting materials had 11,243 views.

For the 2023 hunting season, the Wyoming Survey and Analysis Center (WYSAC) at the University of Wyoming was contracted to carry out all harvest surveys for the Department. More than 116,000 big game license holders were surveyed to evaluate hunter success, harvest and recreation days and to determine the number of hunters in Wyoming. The 2023 harvest reports can be found on the [Department's website](#).

Fish Division

Fish Division has been using regional angler surveys to assess the opinions and desires of constituents. Biologists partnered with The Wyoming Survey and Analysis Center at the University of Wyoming to conduct an email-based angler survey in the Laramie Region. Similar surveys are now underway in the Casper and Cody regions. These surveys are powerful tools that ascertain resident and nonresident anglers' habits, opinions and desires and will guide future sportfish management across these three regions. In addition, Green River biologists conducted several public meetings and online surveys to highlight the impacts of a burgeoning Flaming Gorge Reservoir lake trout population on kokanee salmon, rainbow and cutthroat trout fisheries. These efforts culminated in proposed regulation changes aimed at decreasing numbers of small lake trout in the reservoir.

Fish Division also contracted with an independent consultant to assist with an exercise to understand angler and employee attitudes and desires related to the use of live baitfish in Wyoming. Tara Kuiper's Consulting, LLC will work with Fish Division employees throughout the next reporting period to conduct structured interviews of anglers and employees. The results of interviews will be summarized and used to attempt to simplify existing live baitfish regulations and minimize AIS threats associated with the sale and use of live baitfish.

Communications and Education

The Communications Team, in conjunction with the Wildlife Division, worked diligently to revamp season-setting meeting marketing and encourage greater public participation and information transmission. This effort included robust marketing and information sharing and a

public survey to analyze the reasons people do or do not attend season-setting meetings. The efforts were successful statewide, with substantially higher public participation. This effort further emphasized the importance of communicating across multiple mediums and working to better understand public engagement in meetings and forums when soliciting input on management decisions.

Goal 5 - Encourage and promote diverse fish and wildlife-based experiences for all users.

Strategy 5.1 - Secure and enhance access to Wyoming's fish and wildlife resources.

Services

The Department made significant progress this year in enhancing public access to Wyoming's fish and wildlife resources through several key projects. In collaboration with the Rocky Mountain Elk Foundation, the Commission purchased the western 2,660-acre portion of Mule Creek Ranch to create a new Wildlife Habitat Management Area in the Laramie Mountains in Albany County. Additionally, a conservation easement and a permanent public access easement were secured for the eastern 4,000 acres, ensuring the entire 6,660-acre property is conserved and accessible to the public during the hunting season each year. The Department, in partnership with Rocky Mountain Elk Foundation, renewed a 20-year public access easement across the Pitcher-Brokaw properties in Carbon County near Arlington to continue to provide improved public access to more than 10,000 acres of Medicine Bow National Forest and State land in the area. Additionally, a 5-year public access easement was acquired near McFadden to ensure public access to a section of State land in the area. Furthermore, the Commission expanded the Jelm Wildlife Habitat Management Area by acquiring a 459.71-acre parcel in Albany County, protecting a crucial mule deer migration corridor and securing permanent access to a 1-mile-long stretch of the Laramie River. To alleviate boating pressure on the Green River, three new boat ramp easements were obtained upstream from the town of Green River. An easement was renewed for a parking area, boat takeout and access road for an additional 10-year period on property owned by PacifiCorp at the Dave Johnston power plant near Glenrock. Finally, in partnership with Wheatland Irrigation District, the Department is in the construction phase of an additional boat ramp that accesses Wheatland Reservoir #3.

These initiatives underscore the Department's dedication to enhancing public access and conserving Wyoming natural resources for future generations.

Strategy 5.2 - Resource, support and facilitate activities and opportunities for hunting, angling and trapping.

Communications and Education

WY Hunt Fish programs were expanded. These programs are identified by the Department to promote and facilitate hunting and angling alongside partners and other groups. In FY24, 96 people participated in learn-to-hunt or learn-to-fish programs under WY Hunt Fish.

Strategy 5.3 - Promote quality and diverse fish and wildlife-based experiences other than hunting, fishing and trapping.

Nongame Section

The Nongame Section has worked with numerous partners and stakeholders to provide educational materials regarding wildlife viewing. The Department reprinted public outreach materials for bird identification and has provided numerous informational presentations to the public on nongame wildlife. The Nongame Section coordinates rare bird and mammal sightings provided by the public and ensures observations are tracked in Department databases.

Communications and Education

The Department held its 41st annual Conservation Stamp Art Show, which featured the Western Tanager as the species of the year. FY24 was the second year the Department hosted the art show virtually in an effort to attain greater engagement and reach. This also was the second year the art show featured a student contest with a record number of nearly 300 student art submissions.

Strategy 5.4 - Provide high quality hunting and fishing opportunities.

Nongame Section

The sage-grouse program has coordinated with regional personnel and developed recommendations for hunting seasons for sage-grouse. Information can be found in the annual [Job Completion Report for 2023](#).

Fish Division

The Fish Division continues to refine and promote online tools for the public that allow anglers to find opportunities to enjoy the states fish resources. Tools include a searchable database of where and when fish have been stocked by Department hatcheries, and a map-based fishing guide that allows anglers to find the types of sportfish available in all of the states publicly accessible waters.

Communications and Education

Hunter education is statutorily required for hunting in Wyoming and provides an opportunity for hunters to learn the requirements to hunt legally and safely. In FY24 128 traditional hunter education courses were conducted certifying 2,406 students. Forty-one internet completion courses were offered that certified 820 students. Twenty-three hunter education courses were taught in schools that certified 354 students. Six bowhunter education courses were offered and certified 59 students. Total hunter education certifications for FY24 included 192 courses that certified 3,680 students by 225 certified volunteer instructors who donated 8,113 hours.

A major collaborative project by the Department and the Professional Teaching Standards Board (PTSB) was completed in FY24. In February 2024 the hunter education endorsement for teacher certification was promulgated through the PTSB rules and signed by the Governor. This allows teachers to teach hunter education programs in schools and be a recognized endorsement on their teaching licenses. This accomplishment sets Wyoming hunter education apart from other states and recognizes the value Wyoming has on its hunting heritage.

Services

The Department is committed to enhancing hunting and fishing opportunities through the effective management of Wildlife Habitat Management Areas (WHMAs), as outlined in goal 5, strategy 5.1. Our efforts have led to increased sportsperson opportunities and improved terrestrial and aquatic environments.

Terrestrial management: Proper management planning and implementation has increased the carrying capacities of multiple species across multiple WHMAs throughout the year, especially during wintering wildlife closures. A notable example is the Wick Brothers/Beumee WHMA, where the elk herd winters in numbers between 800-1,100, helping reduce populations on neighboring lands. This success was largely attributed to upgraded irrigation practices, including improved water delivery system, water conservation efficient pipelines and an appropriate-sized water control structure. These upgrades have restored a healthy native plant community, improving wildlife habitat and providing a wide range of forage opportunities for ungulate species. Efforts to control invasive species through sustainable rotational grazing practices, and conducting site assessments ensure that land management goals are being met.

Aquatic management: Aquatic species have benefitted from our strategic management planning and stream channel classification efforts. Stream restoration enhancements across multiple segments have created more suitable ecosystems for aquatic species. This was achieved by installation of Zeedyk structures, beaver dam analogs, mitigating incised channel banks, controlling sediment deposition, incorporating in-stream structures to regulate water flows and reintroducing beavers in assessed streams. These measures have enhanced habitat use for invertebrate and vertebrate species. Additionally, the implementation of a riffle-run-pool-glide sequence has improved overall aquatic health and longevity. Identifying fish passage opportunities has been a priority in stream restoration enhancements.

Access improvements: To facilitate easier access for sportspersons, the Department has implemented improvements in signage, road conditions and crossings and trail infrastructure to mitigate spread of noxious weeds. Additionally, there is improved ADA boating access with additional boat ramps, boat docks and comfort stations. These upgrades enable sportspersons to access terrestrial and aquatic landscapes more efficiently and safely.

Goal 6 - Ensure the long-term effectiveness of the agency by providing high-quality, critical support for the successful performance of the Department.

Strategy 6.1 - Continually improve communications within the agency.

Fiscal Division

The division communicates with all other work units within the agency on a continuous basis to build relationships, share information and ensure fiscal and licensing rules and regulations are disseminated timely and accurately.

Communications and Education

The Communications team, alongside the Department, continued improving internal communications through email messaging, creating talking points for high-priority Department topics and working with regional information and education specialists to ensure regional communication matters were relayed to headquarters.

Strategy 6.2 - Effectively manage Commission land and facilities, integrating the organization's support infrastructure to deliver services to staff and customers at best value while enhancing organizational performance.

Services Division

The Services Division Habitat and Access Branch (H&A) is charged with the management and maintenance of Commission owned and managed lands comprising 48 Wildlife Habitat Management Areas (WHMAs) and 198 Public Access Areas (PAAs). H&A maintains development plans on each WHMA that includes enhancement projects and maintenance to support the Department's mission. Every year H&A conducts habitat treatments, irrigation improvements, stream restorations and road improvements that provide habitat and forage opportunities for wildlife throughout the year. H&A also works throughout the year maintaining fences, buildings, roads, and other critical infrastructure.

The Facilities Maintenance Crew, working through the Department's Engineering Branch, is responsible for providing infrastructure maintenance and improvements on Department owned housing, hatcheries and regional offices. Over the course of the year, the crew worked extensively on warden stations throughout the state, attending to deferred maintenance items and critical components. They also completed projects within the Green River and Pinedale Regional offices to increase office space in order to maximize capacity needs.

Strategy 6.3 - Maintain fiscal stewardship, efficiency and accountability and ensure budgets support priority programs.

Fiscal Division

The FY24 budget was developed using our standard annual process including field employee requests, division administration and department administrative review, and Commission approval. The budget was established considering all Department program standard operational needs and one-time project priorities. Expenditures remained aligned to support strategic objectives.

The Department was required to submit documentation for monthly and annual expenditure documentation and comprehensive annual financial reports to the State Auditor's Office, which resulted in no findings.

Document management initiative to digitize workflows in order to generate efficiencies in processes throughout a geographically dispersed workforce continues to be a top priority for the Department. The system was implemented for payment documents in the last quarter of FY24.

Strategy 6.4 - Develop innovative ideas and engage stakeholders in a broad conversation about new fish and wildlife funding.

The Department continues to pursue and assist with many grants annual that promote and engage with on the ground conservation work from fish and wildlife habitat projects, to Worth the Watching grants, along with supporting partner events and outreach events, such as Mule Deer Days, Maury Brown Kids Fishing Day, and many others. The Department also successfully granted and received grants to support conservation projects in the state for crossings and habitat work in FY24.

Strategy 6.5 – Evaluate and facilitate balanced workloads across the agency, which provide adequate coverage for public service priorities and workloads that allow employees to reach maximum performance.

Fiscal Division administration continues to evaluate workloads and demands to identify opportunities to gain efficiencies. Initiatives to leverage technology, like the implementation of a document management system, were implemented. Several efficiencies were identified with the continuous effort to communicate across work units. All office managers continued learning new processes and assisted regional personal with document management. In addition, the annual office manager's meeting provided a forum to discuss process improvements to benefit customers and employees.

Goal 7 - Attract, train and retain the best workforce to meet future needs of the Department.

Strategy 7.1 - Assess the workload of the workforce and develop strategies to eliminate unnecessary and duplicative burdens.

The Director compiled a cross-divisional team to review workload and assess needs for positions and other opportunities in FY24. This working group identified areas of need and potential increased FTE support which was presented along other information to the leadership team.

Strategy 7.2 - Grow our leaders through formal and informal training and experiences.

Fiscal Division

Division administration develops employees by sending five employees to the Wildlife Short Course, and four to WGFD's Leadership Development Course. Other formal development occurs

during WAFWA Conservation Business Managers Association (CBMA) as an opportunity to build relationships and exchange best practices between states. In addition, cross-training employees within the division remains a top priority and a staple for developing knowledge and skills. Lastly, there were various habitat projects that fiscal employees had the opportunity to participate in, which enhanced their knowledge of the Department and helped strengthen relationships within other work units.

Services Division

The Services Division continues to utilize Department-provided opportunities for leadership and training. Employees are carefully selected to participate in the Department's Leadership Development Program and other opportunities like the Western Conservation Leadership Development Program. Employees also are provided training opportunities relative to their work such as stream restoration, heavy equipment operation and cross-divisional training.

Communications and Education

The Communications and Education Division utilizes the Department's Leadership Development Program and other opportunities to assist with formal and informal training along with sending employees to division specific conferences such as the Recreational Boating and Fishing Foundation (RBFF), Association for Conservation Information (ACI), International Hunter Education Association (IHEA), WAFWA and AFWA communication and education meetings.

Strategy 7.3 - Maintain a culture of openness and supportiveness within the organization.

Each division's primary responsibility is to be a support to all of our external and internal customers. Employees continuously communicate with all other work units in the agency, other partners, government entities and the public to build relationships and share information to accomplish the Department's mission.

The Department's Leadership Team hosts televised staff meetings on a monthly basis so all employees can participate and discuss emerging topics. The Director's Office hosts post-commission meeting webinars to also review topics covered in the commission meetings. The Chiefs do annual regional office visits to allow for employee conversations and division updates. Occasional ad hoc webinars occur as well to communicate to all employees on pressing topics such as the website build and after legislative session.

Strategy 7.4 - Ensure the organization can compete in an ever-competitive market.

15 new FTE positions were filled per Governor approval to assist with agency workload and demand to meet new and existing services. The last time there had been an agency FTE increase was in 2003.

Strategy 7.5 - Develop effective recruiting, retention and succession plans.

The Wildlife Recruitment, Retention and Training unit continues to work to recruit and satisfy game warden recruitment demands for the agency.

Significant agency work was done to market and advertise open positions on various job boards and online platforms to communicate opening to qualified applicants in FY24.

Fiscal Division

Fiscal is one employee deep on many fiscal and licensing processes, however, with the cross-training efforts, leadership and other training opportunities available and stretch assignments

given, employee retention and succession planning was maintained. Recruitment for any vacancies is critical and continues to be an extremely high priority.

Fish Division

Hatchery Section personnel continue to assist the University of Wyoming Fisheries Program by providing course material and class instruction for its aquaculture course. This partnership has served as a successful recruiting tool for hatchery summer temporary positions.

The Fish Division recently convened a committee to develop best practices for hiring of seasonal employees. Recognizing that early-career field experience is critical to the development of future fisheries professionals, the committee worked to develop guidelines for recruitment, application review, interviews and candidate selection. The best practices are intended to fairly recruit a diverse and eager seasonal workforce and provide them quality early-career experiences to produce a pool of qualified applicants for future, permanent agency positions.

Communications and Education

The Wyoming Wildlife Fellowship Program entered its fourth cohort in 2023 and continues to be a successful program in partnership with the University of Wyoming to train and recruit college students into conservation work and positions. There have been 20 fellows since conception with one being hired as a full-time employee with the Department and others as at-will contract employees.

WYOMING GAME AND FISH BUDGET NARRATIVE

The Wyoming Game and Fish Commission approved the Department's FY24 standard budget for \$101,723,261 with an additional \$24,044,820 in the Commission's One-Time Projects Budget.

