# MISSOURI STATE REPORT May 16, 2024

Sara Parker Pauley, Director Missouri Department of Conservation 2901 West Truman Blvd. Jefferson City, MO 65102

## **Financial Update**

The Fiscal Year (FY) 2024 budget for the Missouri Department of Conservation (MDC) continues to represent less than 1 percent of the total state government budget in Missouri. The primary sources of revenue are the one-eighth of 1 percent Conservation Sales Tax, at about \$159.8 million, and permit sales and federal reimbursements, at about \$88.3 million. Total receipts for FY 2023 were \$265.0 million.

Conservation pays by enriching our economy and quality of life. In Missouri each year, more than 1 million hunt or fish and nearly 2 million view wildlife. In Missouri, the total economic impact of fish and wildlife recreation and the forest products industry is more than \$15 billion annually. Expenditures and retail sales from fish and wildlife recreation and forest products support over 111,000 jobs.

### Highlights of Conservation Challenges and Successes

**MDC Director.** The Missouri Conservation Commission selected Jason Sumners as the next department director, effective June 1, 2024. Sumners will serve as the tenth director in the 87-year history of MDC. Sumners previously served as the deputy director of resource management for MDC and succeeds Sara Parker Pauley, who retired after 30 years of public service.

**Drought Conditions.** As of May 2024, Missouri has been under a drought alert continuously since May 2023. A previous drought alert was also active from July 2022 to March 2023. Drought conditions were closely monitored to minimize impacts to MDC's warmwater and cold-water hatchery systems, resulted in an increase in wildfire damage incidents and fish kills, and negatively impacted forest health by leaving trees more susceptible to disease and mortality.

**Tree Seedling Program.** The George O. White Nursery grows and distributes about 2 million low-cost seedlings every year to Missouri citizens. Each year, it processes over 13,000 customer orders. It provides free seedlings to approximately 80,000 fourth-grade students for Arbor Day and assists the Monarchs Collaborative with hundreds of milkweed root stock to be planted by Master Naturalist and Master Gardener groups.

**Hatchery Program.** MDC manages 9 fish hatcheries (5 cold water and 4 warm water). In the past year, approximately 1.2 million trout and 5 million warm water sportfish were stocked to help maintain quality fishing opportunities.

**Deer and Spring Turkey Harvest Results.** While the number of hunters continues to decline nationwide, Missouri hunter numbers have remained steady in recent years and show a slight increase in the current fiscal year.

Missouri's 2023-2024 deer-hunting season ended with a record-setting total deer harvest for the season of 326,448. This year's new harvest record surpasses the one set in 2006 of 325,457. Preliminary data shows turkey hunters checked 43,380 birds during Missouri's 2024 regular spring turkey season. Young turkey hunters also harvested 3,739 turkeys over the youth weekend, April 6 and 7, bringing the overall 2024 spring turkey harvest to 47,119. According to MDC, that is a 6-percent increase in total harvest from 2023 and a 20-percent increase in total harvest compared to the previous five-year average.

These record harvest numbers can, in part, be attributed to a growing deer population, moving and expanding days in the hunting season like the October antlerless portion, expanding liberation of regulations as part of MDC's CWD management approach, and optimal weather conditions.

**Modification to Turkey Hunting Season.** MDC conducted a review of the Spring and Fall turkey hunting seasons, which included a hunter survey and open public comments during the Fall of 2023. The Conservation Commission approved the MDC's recommendation for changing the 1:00 PM daily closure, on private land, during the Spring season to sunset. Although there is potential for an increase in gobbler harvest (estimated < 10%), the goal is to provide more opportunity to a group of the public that don't yet hunt or are limited by other commitments. The Conservation Commission approved the MDC's recommendation to the Fall turkey hunting permits. This change combines turkey permits into a single permit and functionally reduces the Fall bag limit from four to two turkeys of either sex. This modification is a balance of management of the turkey population, opportunity, and public input.

**Mobile Applications.** MDC continues to use technology, such as free mobile applications, to connect people to nature. MO Outdoors enables users to find MDC conservation areas, fishing accesses, hiking trails, shooting ranges, and nature centers by location or based on their desired types of outdoor activities. MO Fishing allows anglers to buy fishing permits and see fishing structures in Missouri water bodies. MDC's most popular app, MO Hunting, allows hunters to buy permits, view regulations, and check-in animal harvests. At the end of FY23, the 3 apps had more than 1.3 million lifetime installs.

**Chronic Wasting Disease (CWD).** Each year, MDC tests a sample of the state's deer population for CWD. This important effort allows MDC scientists to better understand where the disease is on the landscape so that management actions can be applied (especially post-season targeted removal), learn about how the disease is spreading, and keep the public informed. MDC sampled and tested more than 37,000 deer for CWD between July 2023 and April 2024. Of the deer sampled, 162 tested positive. Those deer bring the total number of CWD cases found in the state to 572 since the first case in wild deer was found by MDC in early 2012. Including recent sampling efforts, MDC has collected more than 280,000 tissue samples for CWD testing since the disease was first detected.

**Invasive Species.** MDC continues active engagement and leadership within key invasive species collaborations including the Scenic Rivers Invasive Species Partnership, Missouri Invasive Plant Council, Missouri Invasive Forest Pest Council, Missouri Feral Hog Elimination Partnership, and Missouri River Basin Invasive Carp Technical Committee. MDC's dedicated Invasive Species Coordinator serves as the primary point of contact for all invasive species topics and has reinvigorated MDC's internal Invasive Species Working Group. This group uses the principles of the Missouri Comprehensive Conservation Strategy (CCS) to prioritize invasive species to be addressed, locations of focus, and timing of actions. The emphasis and strategic approach, complemented by increased partnerships, is leading to successes in increased knowledge and involvement in the prevention, management, control, and eradication of priority invasive species. For example, staff continue research on invasive carp population dynamics, movement, and removal efforts through basin partnerships and USFWS funding.

**Invasive Species Strike Teams Partnership.** MDC, in partnership with the Missouri Department of Transportation (MoDOT) and the Missouri Prairie Foundation, continue efforts to control invasive species along Missouri's highways. MDC provided increased contributions to the partnership to support the expansion of the Strike Teams to all MoDOT districts of the state. Twenty-eight new Strike Teams have been equipped with UTV's, injector sprayers, and logowrapped covered trailers. MDC provided funding for new sprayers and trailer wraps and trained over 75 MoDOT personnel on invasive plant identification and treatment methods. Between July 1, 2023, and December 31, 2023, these teams treated nearly 6,000 acres of MoDOT rights of way across the state, focused primarily on controlling invasive teasels, thistles, sericea lespedeza, Johnsongrass, and spotted knapweed.

**Eliminating Feral Hogs in Missouri.** MDC is part of a very productive network of federal and state agencies called the Missouri Feral Hog Elimination Partnership (Partnership). The Partnership is comprised of over 15 federal and state agencies, as well as agriculture and conservation NGOs, collaborating under the common goal of eliminating feral hogs from public and private lands throughout Missouri. During 2023, the Partnership removed 7,885 hogs from the landscape, assisted 660 landowners, and scouted 3,838,213 acres. In addition to on-the-ground operations, the Partnership placed equipment at Soil and Water Conservation District offices for landowners to use in areas with high feral hog activity; distributed mail-out landowner surveys to collect information regarding feral hog damage, mitigation, and removal efforts; and conducted landowner and community outreach activities throughout the southern portion of the state.

**Helping Missourians Discover Nature.** Discover Nature Schools (DNS) curricula is being used in 717 (23 percent) of Missouri schools to support teachers engaging students with inquiry based, hands-on, outdoor learning from pre-K to 12th grade. Two new DNS curricula were introduced: *DNS Kindergarten: Bears Through the Seasons* and *DNS First Grade: Exploring Missouri*, each meets all state science standards for the specific grade level. Trained teachers also receive prepared teacher kits to support indoor and outdoor conservation focused lessons. Working with MDC's social science program, DNS is implementing an evaluation of curriculum success in meeting the needs of teachers, getting students outside, connecting students to nature, and facilitating the development of inclusive pro-conservation identities.

Archery in the Schools Program Builds Champions. MDC provides Missouri National Archery in the Schools Program (MoNASP) grants to schools for equipment and free teacher and staff training for those administering the program. In September, MDC honored Greenwood Laboratory School in Springfield for becoming the 1000th member of MoNASP. More than 83,500 Missouri students from 638 schools reported participation in MoNASP during the 2022-2023 season. This year's state tournament was held in Branson. The bullseye tournament had 3,832 archers and 3D tournament had 1,710 archers from 268 schools, with some archers competing in both events.

**Protection.** MDC's 2023 class of 16 conservation agent trainees graduated in October and brought our law enforcement staffing levels to full strength for the first time in over five years. Agents Chase Wright and Marc Bagley made a once-in-a-lifetime poaching case when they responded to an Operation Game Thief (OGT) call and apprehended three subjects shooting 50 mallards in closed season on the Missouri River in January.

### Listening to Missourians.

The Department continues to offer virtual public input opportunities. In addition to annual hunter and angler surveys, MDC conducted surveys related to participant and landowner satisfaction with the Missouri Recreational Access Program, collected input from stakeholders who attended the regional Wetlands Summit hosted by the Conservation Federation of Missouri and MDC, conducted a survey and a series of focus groups with landowners in CWD core areas to better understand motivations and barriers to participating in targeted culling, conducted listening sessions in Kansas City to inform the further development of community conservation programs and services, and initiated several new research projects to support MDC's initiatives related to inclusion and relevancy. MDC also hired an external consulting firm to collect feedback on the state's hunting and fishing regulations to determine barriers to recruitment of new hunters and anglers and reactivation of latent hunters and anglers. Approximately 250 partners, representing 115 organizations, participated in MDC's seventh annual Conservation Partners Roundtable, which was held in Springfield, Missouri. The event provided partners an opportunity to hear from MDC and strengthen collaborative efforts, with a focus on dialog with partner organizations in attendance.

**Expanding Recreational Opportunities.** As part of efforts to reach new audiences, MDC is working to expand recreational activities on conservation areas. Two popular urban conservation areas now allow carry-in, hand-launched watercraft on several area lakes. James A. Reed Memorial Wildlife Area in Lee's Summit and August A. Busch Memorial CA in St. Charles previously prohibited personal canoes and kayaks. Responding to public feedback, a regulation change went into effect Feb. 28, 2023 that allows visitors to bring their own canoes and kayaks for use on certain area lakes. MDC also launched a new online special use permit system to allow easier requests for special activities on conservation areas including recreational drone use, weddings, and furbearer trapping. From July to December 2023, staff issued over 650 special use permits.

**Conservation Volunteers.** In calendar year 2023, Master Naturalist volunteers contributed 71,249 hours of service to conservation projects and activities in their local communities. Just over 600 volunteers at nature centers, interpretive sites, and shooting ranges, along with hunter education

instructors and fishing education instructors, recorded 46,445 hours in 2023. Stream Team volunteers contributed 60,312 hours during calendar year 2023.

**Communicating with Missourians.** MDC social media channels, including Facebook, Twitter, Instagram, and YouTube, continue to increase followers and engagement. Facebook is MDC's largest social media channel with more than 360,000 followers. MDC's website has 6.8 million unique visitors annually. MDC utilizes email communications to reach 826,114 subscribers and the free *Missouri Conservationist* and *Xplor* magazines are mailed to more than 670,000 individuals to share the value of fish, forest, and wildlife resources. The MDC Wild Webcast series highlights key conservation topics and provides a unique opportunity to ask live questions of MDC experts. MDC hosts a podcast, Nature Boost, to connect more youth and young adults to nature. We also offer 104 free publications on fish, forest, wildlife, and land management topics to the public.

### Missouri Comprehensive Conservation Strategy (CCS).

Through a truly landmark effort, Missouri is the first and only state in the nation to integrate its State Wildlife Action Plan, State Forest Action Plan, watershed priorities, public and private land conservation opportunities, community conservation framework, and other conservation challenges and opportunities into a single, comprehensive strategy meeting the requirements of both the U.S. Fish & Wildlife Service and USDA Forest Service. Missouri's CCS embraces landscape-scale conservation informed by natural community and wildlife diversity needs, working to maintain, enhance, restore, and re-create healthy natural systems. This approach will increase the resiliency of these systems to potential threats, increase connectivity among habitat systems, and provide benefits to Missouri's complete suite of species diversity, including but not limited to those of greatest conservation need. These robust landscapes also will support more reliable production of various sustainable, renewable resources (e.g., forest products, native grazing forage, native seed, etc.) and other benefits (e.g., outdoor recreation, human health benefits, ecosystem services, species recovery) that improve Missouri's economy and quality of life. This integrated approach proactively encourages an increase in connection between citizens and nature and ensures the responsible use of limited federal- and state-entrusted, partner, and citizen resources.

**Helping Communities One Tree at a Time.** In FY24, MDC funded 56 Tree Resource Improvement and Maintenance cost share totaling \$868,721. This funding helps communities with urban forestry projects such as master plans, tree inventory, education, hazard tree removals, pruning, and planting. MDC continues to partner with Forest ReLeaf of Missouri, a unique, nonprofit public/private partnership. A total of 7,200 volunteer hours of service was provided by volunteers, 293 planting projects were completed, 13,760 trees were planted, and 14,800 trees were potted.

Assisting Communities Improve Wildfire, Prescribed Fire, and Emergency Response. MDC awarded \$582,537 in Volunteer Fire Assistance grants to 125 rural fire departments to purchase personal protective equipment, suppression equipment, and provide vehicles and emergency response equipment through its Federal Excess Property programs. In early 2022 MDC released a revised version of its Private Landowner Burn Workshop. The new course "Prescribed Burning for Missouri Land Managers" is an online based program, with a required field exercise, which

introduces private landowners to prescribed fire and provided a mechanism for landowners and burn contractors to obtain a "Certified Burn Manager" certification. We are seeing greater than 1,000 participants annually in this course since its release.

**Eastern Hellbender Recovery Milestone.** MDC and partners reached a significant milestone in population recovery efforts of the endangered eastern hellbender as a zoo-raised hellbender successfully reproduced on the Gasconade River was documented. This eight-year-old male was found guarding a fertilized clutch of 86 eggs. MDC partnered with the Ron and Karen Goellner Center for Hellbender Conservation, a part of the Saint Louis Zoo WildCare Institute, and other agencies in the early 2000s to breed the salamanders in captivity and rear eggs collected from the wild to combat drastic population declines. Once the captive-bred larvae reached between 3-8 years old, they were released in their native Ozark aquatic ecosystem. Biologists began releasing a few zoo-raised hellbenders in Missouri in 2008, increasing the number of released animals to 1,000 or more per year beginning in 2012. These achievements are one step closer in conserving this unique, native salamander of the Ozark Highlands.

Lake Sturgeon Spawning. Lake sturgeon spawned for the third consecutive year at Lock and Dam 26 on the Mississippi River, and a pilot Sturgeon Watch program was initiated at that location. Master Naturalist Program volunteers attended training, signed up to watch the spawning site, and met with the public who visited the site. This year, the partnership between MDC and the Army Corps of Engineers expanded its focus to pursue favorable spawning conditions below Mark Twain Lake and at Mississippi River locks and dams throughout the system. Lake sturgeon spawning was also documented for the very first time on the Osage River. Eggs from the early portion of the spawning run hatched successfully, but eggs released later failed, as flows from Bagnell Dam were greatly reduced. MDC will continue to look for opportunities to discuss spawning-friendly flows from Bagnell Dam. Partnerships with neighboring states to aid recovery of the species are also being pursued.