

New Mexico Department of Game and Fish

# 

Conserving New Mexico's Wildlife for Future Generations

### Wildlife worth bragging about



We are proud to remind all New Mexicans about the contributions hunters and anglers bring to our state and our citizens.

The New Mexico Department of Game and Fish never tires of reminding hunters, anglers and wildlife watchers how much their support benefits wildlife and the different habitats across the state that are so critical to maintaining and fostering wildlife populations.

We constantly praise our license-buyers for their contributions to wildlife management through their license fees, habitat stamps and taxes paid on sporting equipment, and we recognize everyone who enjoys the resources for their support of our Share with Wildlife Program, which focuses on conservation of many nongame species.

We also are proud to remind all New Mexicans about the contributions hunters and anglers bring to our state and our citizens. Each year, more than 160,000 anglers and more than 87,000 hunters spent approximately \$613 million pursuing their activities. Their license fees helped pay for ongoing projects such as the desert bighorn sheep restoration program, which saw sheep populations increase from 69 in 1980 to approximately 1,150 today. Thanks to those funds, the department has been able to restore approximately 132 miles of stream, 10 lakes and one reservoir for Rio Grande cutthroat trout, our state fish.

As everyone involved in wildlife conservation discovers, conversations about wildlife conservation often become discussions about habitat, and challenges such as climate change, fragmentation, invasive species and destructive wildfires. To address these issues, our agency, like many others around the country, has begun looking at the big picture and tackling the challenges on larger, landscape scales.

To meet those challenges, our department has earmarked more than \$25 million in support of landscape improvement and restoration efforts that will benefit multiple wildlife species. We wouldn't think of trying to accomplish this alone. Habitat projects need a community of support, and we work with partners including the U.S. Forest Service, the Bureau of Land Management, New Mexico State Forestry, the New Mexico Association of Conservation Districts, sporting groups, livestock permittees, private landowners, and many others.

There is a new urgency and commitment to improve habitat over large acreages in order to have a truly meaningful impact on wildlife and watershed health.

We are restoring native grasslands by thinning invading junipers, removing encroaching shrubs, and eliminating noxious weeds. We are bringing low-intensity prescribed fires to forests to lessen the threat of catastrophic wildfire and foster the growth of grasses, flowers and shrubs important to deer, elk, wild turkey, quail, and other wildlife. Stream edges are being planted with native willows and cottonwoods. Water availability to wildlife is being improved through the construction of supplemental water sources and the restoration of wetlands and springs.

In the southwestern part of our state, the department is working with the Wild Turkey Federation, the Rocky Mountain Elk Foundation and other partners to restore tens of thousands of acres of forest and grassland critical to elk, mule deer, pronghorns and wild turkeys.

In northern New Mexico, the department is spending millions of dollars to thin forests, restore grasslands and improve water availability. And in the Sacramento Mountains of the southeast, the department is working with the City of Alamogordo, livestock producers and others to thin forests, restore grasslands, and improve water availability for the benefit of wildlife, sportsmen and sportswomen, livestock, and municipal water supplies.

We plan to continue making the best use of funds acquired from several sources and to strengthen our partnerships with agencies, conservation groups, landowners and others to manage and restore New Mexico's wildlife and its habitat. Our wildlife, and the people who enjoy it, deserve nothing less.

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Alexandra Sandoval, Director

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The yellow-bellied marmot is one of many protected nongame species supported by the Department of Game and Fish. NMDGF photo by Dan Williams.



#### Administration

The department's administration is composed of its director, a deputy director, two assistant directors and the department's deputy general counsel. The director serves as secretary to the State Game Commission, a seven-member body appointed by Gov. Susana Martinez. The administration's primary role is to provide agency staff guidance and the necessary resources to successfully implement legislative and commission directives.

In response to the direction provided by the legislature and the commission, the department focused on the following priorities during fiscal year 2017:

- Expanded its skills-based hunter education and fishing camps statewide by 150 percent.
- Implemented a hunter education pilot program in after-school programs statewide.
- Implemented upgrades to become compliant with the Payment Card Industry Data Security Standards as required for all state agencies.
- Enhanced public safety by providing advanced training, modern communications and improved equipment for the department's Field Operations Division.
- Increased the Share with Wildlife program's outreach efforts to increase funding for large-scale restoration projects.
- Focused on native fish and stream restoration projects for the Gila trout and Rio Grande cutthroat trout.
- Initiated the modernization and renovation of hatcheries statewide to provide additional angling opportunities for the citizens of New Mexico.
- Successfully negotiated with Mexico to obtain Gould's turkeys in exchange for pronghorn antelope.
- Took the initiative and provided funding to promote large-scale restoration projects and habitat improvement for wildlife on commissionowned properties throughout New Mexico.
- Successfully reduced the department's employee vacancy rate through increased recruiting and retention efforts.
- Implemented a new web-based employee time-tracking system that allows the department to receive its federal reimbursements in a more efficient and timely manner.
- Initiated several research projects to better understand New Mexico's wildlife resources.



Above: The New Mexico Department of Game and Fish celebrates its 85th birthday this year.

Opposite: Conservation Officer Sgt. Chris Ortega utilizes the department's advanced communications equipment acquired in fiscal year 2017. NMDGF photo by Jeremy Lane.



#### Wildlife Management Division

#### Improving desert bighorn population estimates

The department conducts annual helicopter surveys for desert bighorn sheep primarily by attempting to count every bighorn in the population. However, a principal challenge to population surveys is visibility bias, or the difference between observed and actual numbers. Perfect detection of every individual in a population is unlikely, but if visibility bias can be measured then population estimates will be more accurate. Management actions such as determination of harvest quotas, translocations to reduce or augment populations, the implementation and degree of predator control, and listing decisions are contingent on population estimates. By enhancing survey methodology and improving the accuracy and precision of population estimates, the proposed hybrid model will refine our understanding of desert bighorn populations and more aptly direct management. This research commenced in October 2016, and is scheduled to finish in October 2018.



#### **Pronghorn population estimates**

A new survey method was developed in 2014 using double-observer and distance sampling with an adaptive cluster approach. The survey was adapted from methodology used in Wyoming, and allows for simultaneous collection of abundance, distribution, and composition data. The survey is designed to improve pronghorn population management and the department is continuing to refine the methods to obtain more precise estimates, particularly for areas where pronghorn numbers are very low.

For the 2016 survey, density and associated abundance estimates varied greatly throughout the state, with the highest pronghorn density and abundance coming from the northern regions. Composition ratios were highly varied from region to region, with the northern portion of New Mexico having the highest buck:doe and fawn:doe ratios.

#### Chiricahua leopard frog recovery efforts

An ongoing project to survey for Chiricahua leopard frogs, a federally threatened species, continues through the summer of 2017. Surveys have been conducted at 29 sites in Catron, Grant, Hidalgo, Sierra, and Socorro counties in south-central and southwestern New Mexico. At 13 sites, surveys were conducted to monitor the status of recently extant populations. Five populations appeared to be robust, two appeared to be stable, one was declining, two were small but may be showing signs of becoming established, and one was tenuous. Frogs were not detected at two sites, and only two tadpoles were found at a one site. Chytrid fungus, American bullfrogs and encroaching vegetation pose the greatest risks to this species. Nine sites were surveyed to search for new populations of Chiricahua leopard frogs or new potential translocation sites. Seven of those sites appeared to possess suitable habitat for translocation efforts, although none supported populations.



Top: Desert bighorn sheep populations continue to increase in southern New Mexico herds. NMDGF photo by Dan Williams.

Bottom: New Mexico has five robust populations of Chiricahua leopard frogs, a federally threatened species. NMDGF photo by Charlie Painter.

Opposite: The department's Cameron Gallegos holds on to a Rocky Mountain bighorn ram, one of 34 trapped and relocated during a project in March 2017. NMDGF photo by Martin Perea. Translocations have occurred at 12 sites in New Mexico, with the earliest occurring in 1999, and the majority occurring from 2008-2016. Successful translocations have occurred at four sites and moderately successful translocations have occurred at two sites. Continued translocation efforts and establishing backup refugium sites should slowly move Chiricahua leopard frog populations in New Mexico toward recovery.

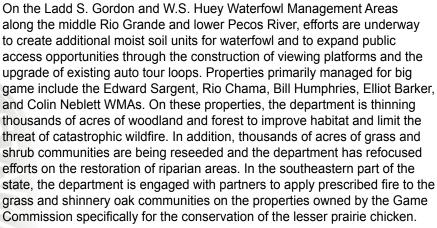
Above: A recovery plan for white-tailed ptarmigan was developed in fiscal year 2017. NMDGF photo.

#### **Recovery planning**

The department completed recovery plans for three state-listed vertebrates: white-tailed ptarmigan (endangered), Gould's turkey (threatened), and Gila monster (endangered) over the course of the last year. The recovery plans for these three species can be viewed and downloaded from the department website using the following link: http://www.wildlife.state.nm.us/conservation/wildlife-species-information/threatened-and-endangered-species. Recovery planning in New Mexico is carried out under the authority and direction of the state's Wildlife Conservation Act.

#### Wildlife Management Areas restoration and improvements

The department manages approximately 192,000 acres of Game Commission-owned Wildlife and Waterfowl Management Areas (WMAs) in New Mexico. While these areas provide important habitat for many game and nongame species, they also provide hunting, fishing and outdoor recreational opportunities for thousands of residents throughout the state. For fiscal year 2017, the department is engaged in an ongoing effort to restore habitats, maintain and improve infrastructure and promote recreational activities across these properties.





#### Wildlife habitat partnerships

The department continues to expand habitat restoration partnerships through close collaboration with the U.S. Forest Service, Bureau of Land Management, New Mexico State Forestry, New Mexico State Land Office, New Mexico Association of Conservation Districts, local Soil and Water Conservation Districts, and private landowners for increased forest resiliency, watershed health and wildlife habitat benefits. \$25 million of state and federal Pittman-Robertson Act funds have been earmarked for forest, rangeland and riparian restoration efforts over the next three to five years, including a 'collaborative effort with New Mexico State Forestry to implement \$9.4 million of restoration activities throughout forests in New

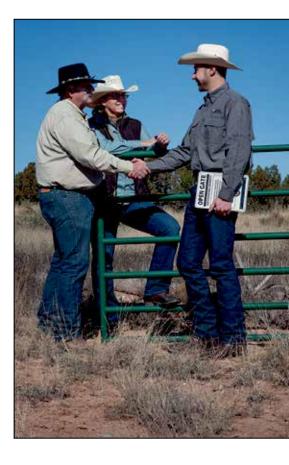
Mexico. These activities are part of a long-term process to reduce fuel loading and allow the return of low-intensity fire to forests and grasslands across hundreds of thousands of acres, improving wildlife habitat. In fiscal year 2017, the department expended several million dollars in support of habitat restoration efforts across jurisdictional boundaries in New Mexico. These projects ranged from prescribed fire treatments in grassland communities in southeastern New Mexico to restore habitat for the lesser prairie chicken, pronghorn, and quail; to forest thinning treatments in northcentral and southwestern New Mexico in habitat critical for mule deer, elk and wild turkey; to riparian restoration treatments in northeastern New Mexico important for migratory songbirds, mule deer, and aquatic species. In addition, the department entered a multi-year partnership with the Lincoln National Forest to restore 135,000 acres of wildlife habitat on the Sacramento Ranger District. This project should increase economic opportunities in the area, as well as improve vegetation conditions for multiple forest users.

#### **Open Gate**

The Open Gate hunting and fishing access program advanced efforts during fiscal Year 2017 to provide public hunting, fishing and trapping opportunities on private land and to improve access to public lands. The program provided access to or through 33 Open Gate properties using funds from Habitat Management and Access Validations purchased by the same sportsmen and women who benefit from use of the properties. This year the program opened gates to 66,640 acres of private land, expanding public hunting opportunities for dove, quail, pheasant, waterfowl, sandhill crane, turkey, javelina, deer, Barbary sheep and bobcats. Open Gate also provided public fishing access to 17 miles of stream shoreline and nine water bodies encompassing 720 surface acres. The program also leased and developed right-of-ways, improving access to 143,334 acres of public land. All Open Gate projects were made possible with assistance from the department's Field Operations Division, Wildlife Management Division and Fisheries Management Division. The program continues to cooperate externally with the U.S. Forest Service, Bureau of Land Management and the U.S. Fish and Wildlife Service, New Mexico State Land Office and the Rocky Mountain Elk Foundation.

#### Elk and Antelope private land programs

The Elk and Antelope Private Land Use System programs (E-PLUS and A-PLUS) work with New Mexico landowners to manage elk and pronghorn antelope populations on private land. These programs provide a mechanism to recognize the contributions of private land and landowners to the management of wildlife populations. Through both E-PLUS and A-PLUS, landowners may receive private land authorizations that they may give or sell to interested hunters. These programs also open private land to public hunters, providing access that otherwise might not be readily available. During the 2016-17 hunting season, the E-PLUS program had 4,193 properties enrolled, provided access to more than 8.7 million acres of private land and provided 21,194 hunting opportunities to residents and nonresidents. During the 2016-17 hunting season, the A-PLUS program had 1,225 properties enrolled, provided access to approximately 13 million acres of private land and 8 million acres of public land and provided 5,063 hunting opportunities to residents and nonresidents.





Top: Open Gate, a program to provide hunting and fishing on private land, opened gates to 66,640 acres for hunting in fiscal year 2017. NMDGF photo by Martin Perea.

Bottom: The department's Antelope Private Land Use System provided 5,063 hunting opportunities to residents and nonresidents. NMDGF photo by Dan Williams.







Top: Angelica Gurule, Los Alamos County environmental services manager, and Bob Osborn, private lands program manager with the Department of Game and Fish, examine new bear-resistant dumpsters installed in Los Alamos. Los Alamos County photo.

Center: Pronghorn hunters can more accurately pinpoint their locations with an improved hunting maps application for mobile devices. NMDGF photo by Dan Williams.

Bottom: An artist's rendering of the department's new Albuquerque Regional Office.

During the 2016-17 season, the E-PLUS program also developed a new habitat assessment tool that is being used to evaluate all new applications. Additionally, the E-PLUS program is in the process of mapping all enrolled acreage through GIS and plans to develop an online map application for users.

#### Los Alamos bear project

For many years, the city of Los Alamos has been dealing with an ongoing bear problem. Los Alamos is a northern New Mexico town surrounded by excellent bear habitat. From spring through fall each year, bears regularly enter town in search of easily available sources of food. The city's wastehandling system relies on unsecured dumpsters, which are not bear resistant. Over time, this has created a situation in which many bears have become dependent on food found in dumpsters as an important, and sometimes main, dietary resource. These bears also have become habituated to people, increasing the odds of negative human-bear interactions. Through the assistance of a federal aid grant, the department helped Los Alamos purchase 13 new, bear-resistant dumpsters that are compatible with the city's existing equipment and infrastructure. These dumpsters were placed in locations that historically have had bear problems. Los Alamos and the department will monitor the effectiveness of these efforts during the upcoming summer-fall period. Dumpsters may be repositioned or additional steps taken as needed.

#### Geographic information systems

The department's Geographic and Information Section updated and expanded the information available for web and mobile applications. The section contributed an additional 142 State Trust Lands access points (427 total), camping locations, and restricted areas to this year's edition of BLM N.M. Hunting Maps application. The department has expanded use of ArcGIS Online and the Collector app, developing several web applications and feature layers for use in for big-game aerial surveys and facility surveys and inventories. Species surveyed using these mobile applications include elk, pronghorn and bighorn sheep. A concerted effort with the Private Lands Program to map participating properties has resulted in digitally mapping of approximately 3,300 E-PLUS ranches, 1,200 A-PLUS ranches, and all Open Gate properties.

#### **Operations and Construction**

The Department's Facilities Operations and Construction section supports the Department's office operations, the Department's infrastructure improvements and manages the capital related construction activities.

During fiscal year 2017, the section was responsible for several significant improvements to the main office in Santa Fe, including completion of a new water system and a 10,360 square-foot warehouse and 9,300 square-foot covered storage building. The section also supported efforts to fence 11 State Land Office camping areas, repair roads to Charrette Lake and clean-up projects at the newly acquired River Ranch property. The section also initiated the design for the new Albuquerque Regional Office Complex and alternative studies for Bear Canyon Dam and Laguna Del Campo Dam to meet the Office of State Engineering Dam Safety Bureau requirements.

#### Fisheries Management Division

#### Fish stocking

The Department's Fisheries Management Division manages six fish hatcheries, including a warmwater hatchery. Division biologists conduct routine fish surveys and make management recommendations on more than 160 waters around the state.

In fiscal year 2017, the department stocked more than 3.5 million triploid rainbow trout, over 2.7 million kokanee salmon and over 9 million walleye. The division also stocked more than 200,000 each of largemouth bass and Rio Grande cutthroat trout. The division stocked smaller numbers of channel catfish (57,749), smallmouth bass (25,979), Gila trout (19,799), tiger muskie (15,200), bluegill (3,558), and striped bass (1,500). The division grew thousands of larger trout to add to catchable-size deliveries under a large trout program that proved very positive with anglers. The division continues to evaluate expansion of this program to additional waters as well as all stocking strategies.

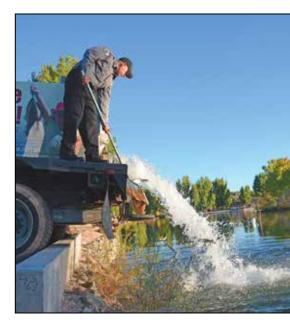
#### Hatchery improvements

The division completed several significant improvements to hatchery facilities and operations. Nearly two miles of exposed water delivery pipeline was replaced with buried pipeline at Seven Springs Hatchery, improving water delivery and security. The Warmwater Hatchery at Rock Lake Hatchery was expanded by seven ponds, increasing overall fish production capacity. A Pecos Watershed Education Center was also nearly completed at the hatchery. The center will be complete early in the next fiscal year and will be available to the public.

Efficiencies in hatchery production have been recognized during this fiscal year. Fish growth rates have improved from as low as ¼ inch per month to 1 or more inches per month. Survival from egg to stockable fish has also improved allowing for a reduction in the number of eggs purchased. Finally, the department successfully collected eggs from wild Gila trout in Willow Creek and is rearing the resulting fish at Glenwood Hatchery.

#### **Habitat improvements**

Division biologists focused significant effort on habitat improvement projects. Stream habitat improvement projects were completed on the State Game Commission-owned Rio de Los Pinos property. The work on the Rio de Los Pinos property is directed at improving sport-fish holding capacity and angler success. Work was also undertaken on the Mimbres River to improve habitat for the Chihuahua chub and the Chiricahua leopard frog. The work on the Mimbres represents a public/private partnership that supports native species conservation. Project planning is ongoing for additional habitat improvement projects, in particular on the Rio Chama within the Rio Chama Wildlife Area and the San Juan River within the Quality Waters reach.



The department stocked more than 3.5 million rainbow trout in the state's lakes and streams in fiscal year 2017. NMDGF photo by Karl Moffatt.

#### Fish Stocked in FY 2016-17

Rainbow trout 693,563
Channel catfish
Kokanee salmon 3,877
Rio Grande cutthroat trout 3,614
Gila trout 1,767
Largemouth bass 1,005
Bluegill 200
Smallmouth bass 103
Walleye 102
Tiger muskie
Striped bass
(pounds of fish stocked)

#### **Newly constructed Rio Costilla fish barrier**

Rio Grande cutthroat trout were stocked after successful restoration efforts for the native fish were completed above Costilla Reservoir Dam. This stocking restored over 80 miles of habitat to the state fish and further reduces the potential for listing the species under the Federal Endangered Species Act. Also on the Rio Costilla, a fish barrier was constructed to allow connection of the restored population of Rio Grande cutthroat trout in Comanche Creek to be connected in 2018 to the restored population in the Rio Costilla, thereby creating an interconnected 120 miles of Rio Grande cutthroat trout stream.

Top: A new fish barrier will protect native Rio Grande cutthroat trout on the Rio Costilla. NMDGF photo by Karl Moffatt.

Right: Forty-nine percent of New Mexico anglers prefer to fish for coldwater species. NMDGF photo by Karl Moffatt.

#### **Native species restoration**

Efforts to restore native Texas Hornshell and Grey Redhorse to the Delaware River continued last fiscal year. Surveys showed transplanting the species from the Black River to the Delaware River where successful in establishing new and reproducing populations of both species. This success should help to reduce the potential for listing the species under the Federal Endangered Species Act.

#### **Invasive species control**

The division inspected more than 10,000 watercraft in an effort to prevent the introduction of aquatic invasive species. New regulations regarding inspection and Clean, Drain, and Dry were passed by the State Game Commission and implemented by the division. A contractor for the Bureau of Reclamation began watercraft inspections at Navajo and Elephant Butte Lakes with department oversight. New Mexico remains free of AIS, but continued diligence is required.

#### **Angler satisfaction**

Our annual angler satisfaction survey indicated more than 87.6 percent of all anglers were satisfied with their angling experience in New Mexico and 61.7 percent of them were very satisfied. Forty-nine percent of anglers report a preference for coldwater species like trout, while 11 percent expressed a preference for only warmwater species. Forty percent of anglers fish for cold water and warm water species.



#### Administrative Services Division

The Administrative Services Division manages all financial operations and transactions for the department, which includes accounts payable, procurement, budget, department licensing operations and federal aid.

#### License sales

The Licensing Section manages all sales of hunting and fishing licenses through its online licensing system, area offices and 156 participating vendors. There were nine additional license vendors in fiscal year 2017 from fiscal year 2016.

In fiscal year 2017, 210,696 fishing licenses, 57,023 combination game hunting and fishing licenses and 57,793 game hunting licenses were sold. Additionally, 92,151 big-game licenses, 14,314 turkey and 1,919 trapping licenses were sold. An additional 570,796 permits and stamp validations were also issued. The department processed more than 193,000 applications for all special hunt drawings, which represents approximately 18,000 additional applicants than the previous year.

#### **Budget**

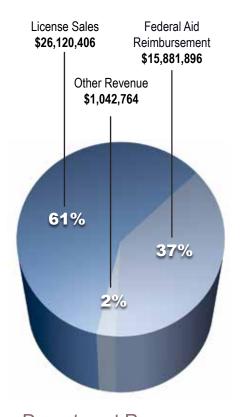
The Budget Section formulates, manages and adjusts the budget for the department. The New Mexico Legislature appropriated an operating budget of \$40,354,900 for fiscal year 2017. Employee salaries and benefits accounted for \$21,172,400 of the budget; contractual services accounted for \$4,283,200; and other expenses accounted for \$13,717,000. The Legislature also appropriated \$500,000 from the Game Protection Fund and \$500,000 from the Trail Safety Fund to be transferred to the Energy Minerals and Natural Resources Department.

Employee salaries and benefits include salaries and other employee benefits. Contractual services include anything involving the furnishing of labor, time or effort, such as engineering, legal and other professional services. Other expenses can be anything from vehicle acquisition to the transfer of money to another state agency, provided it is for the direct benefit of New Mexico's wildlife, such as habitat restoration or increased hunting and angling opportunities.

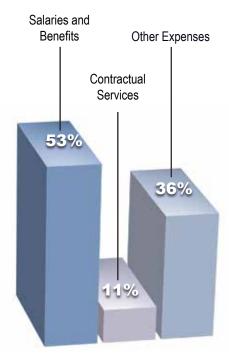
#### Federal assistance

The department is reimbursed for projects approved by the U.S. Fish and Wildlife Service's Sportfish and Wildlife Restoration Program, funded in part by excise taxes on hunting and fishing equipment and motorboat fuel.

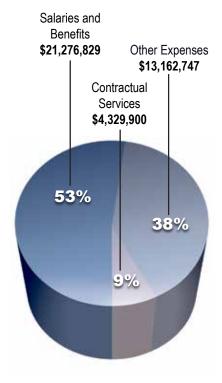
The Federal Aid Section continues to utilize a web-based Federal Aid Cost Tracking System. This system allows all department employees to submit and report time electronically, eliminating paper reporting. The system maximizes the timeliness and accuracy of time reporting related to department grants. The Administrative Services Division continues to work with the department's Information Systems Division to improve and upgrade grant time reporting system to provide the most user-friendly product possible.



Department Revenue Sources



**Budget** 



Expenses

The Federal Aid Section is currently managing 62 grants. Some of the projects for the fiscal year included aquatic invasive species management, habitat restoration, hunter education, wildlife surveys and lesser prairie chicken management.

The Share with Wildlife fund, generated by license plate sales and the state tax check-off program, supported 21 projects in the fiscal year. Other grant-funded agency work included efforts to conserve and recover species listed as threatened or endangered in the New Mexico Wildlife Conservation Act. Many of these projects were partially reimbursed through federal grants and involved studies of a variety of species, including the Grace's warbler, red-faced warbler, Rio Grande chub, Rio Grande sucker, western river cooter, Gila monster, white-tailed ptarmigan and Gould's turkey.

#### **Procurement**

In fiscal year 2017, the Procurement Section issued one request for proposal, 29 professional service contracts, 16 small professional service contracts, and 20 Invitations to Bid. The procurement section working closely with the Information Systems Division to procure, install and maintain a state of the art Computer Aided Dispatch systems in all law enforcement vehicles. The systems allow officers to have access to more tools and information while conducting law enforcement duties.

#### Annual financial audit

The department's annual financial audit for fiscal year 2016 was completed on time. The auditor's report issued an unmodified opinion with no material weaknesses, significant deficiencies or noncompliance material to financial statements noted in the department's financial statements.

#### Region 2 Federal Aid Coordinators Meeting

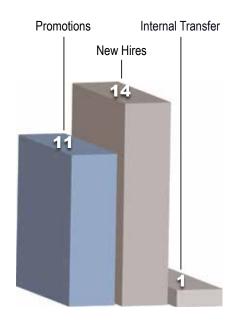
In May 2017, the Administrative Services Division hosted the annual meeting for the Region 2 Federal Aid Coordinators meeting. Meetings are conducted yearly for the business-related aspects of conservation. The conference included approximately 40 participants from four states. Participants from Texas, Arizona, Utah, and New Mexico attended the meeting. Training sessions were held in Santa Fe and included the exchange of information and department-sponsored, skills-based training and guest speakers.

#### **Human Resources**

During fiscal year 2017, the department held an overall capacity of 309 full-time employees. During fiscal year 2017, the department maintained an average vacancy rate of 10.41 percent.

Human Resources staff continues to ensure that employee evaluations are completed and processed for each employee in a timely fashion and in accordance with the State Personnel Office requirements. Last fiscal year, for the second consecutive year, the department completed this project at 99.9 percent, which ranked among the top three among all state agencies.

The department participated in the Governor's Wellness Initiative, which included an onsite wellness clinic in March for employees who elected to participate. The health screening consisted of height, weight, body mass index, blood pressure, glucose and cholesterol screening. The department also hosted "Fresh Fruit/Veggie Fridays" during the first Friday of each month through the month of July. On this day, employees of the headquarters office brought fresh fruit or vegetables that were laid out buffet style for sharing with staff throughout the office.



26 hires during fiscal year 2017



These six new game warden recruits were among 10 hired by the Department of Game and Fish in fiscal year 2017. NMDGF photo by Martin Perea.



## Information and Education Division

#### **Hands-on training camps**

The department's Information and Education Division continues an effort started last year to increase the number of hunting, shooting and angling camps offered statewide to recruit newcomers to the sports. The camps and other activities are part of the division's "Recruit, Retrain, Reactivate" (R3) strategy to support hunting and angling into the future. Up to 50 of the popular, hands-on training camps will be offered this year, with participants learning how to safely handle and shoot firearms and archery equipment, practice fishing with bait and flies, learn survival skills and orienteering, wildlife observation and identification, trapping, camping, cooking and more under the supervision of department staff and volunteers.



The division advanced it's initiative to expand the number of schools offering after-school hunter education classes to students in fiscal year 2017. Because most school districts do not allow firearms on a campus, this was an ideal way to provide interested students the opportunity to earn their hunter education certificate online at school. The online course is growing in popularity as it appeals to today's tech-savvy, online-oriented youth.

#### Teaching youths to fish

The department's Fishing Skills and Aquatic Education Program hosted 174 fishing camps and 143 fishing skills presentations statewide, providing angling skills and ethics instruction to 12,780 students and adults. An additional 15 schools and 3,000 students also received training in fisheries management practices, water quality monitoring and angling skills. Fishing clinics and workshops were presented at schools, community centers, scouting groups, 4-H clubs, home-schoolers and youth groups. Seven free fishing derbies and skills camps were conducted statewide on Free Fishing Day in June.

#### Youth archery

New Mexico's National Archery in the Schools program continues to grow, with more than 800 archers competing at the sixth-annual State Tournament March 11 in Albuquerque. The department worked with colleagues from surrounding states to successfully lobby the national organization for a western states tournament. The event is now scheduled to be conducted sometime in April 2018 in Sandy, Utah. Teams and individuals that can't participate in the national tournament in Kentucky because of the time and cost involved now will have a chance to compete closer to home for a regional title.





Top: Young anglers from Santa Fe Indian School enjoyed a fishing clinic with department staff at Cowles Ponds along the Pecos River. NMDGF photo by Karl Moffatt.

Bottom: More than 800 young archers competed in the National Archery in the Schools Program, coordinated by the Department of Game and Fish. NMDGF photo by Dan Williams.

Opposite: Department hunter education partner David Stambaugh gives a young shooter some instruction during one of the department's popular hands-on hunting skills camps. NMDGF photo by Ross Morgan.







Top: Dennis Segura, a department education specialist, shows a young angler how to tie a fishing knot during a youth clinic along the Pecos River. NMDGF photo by Karl Moffatt.

Center: Department shooting sports coordinator Jessica Fisher instructs a young shooter during a department hunter education camp. NMDGF photo.

Bottom: Conservation Officer Marcelino Peralta instructs a young rider during an off-highway vehicle training session. NMDGF photo by Dan Williams.

#### Outdoor skills "flash mobs"

The division conducted popular "flash mob mini-expos," where visitors to big-box hardware and sporting goods stores in urban areas find department staff set up in the parking lot with a mini-archery range, off-highway vehicle simulator, pellet gun shooting gallery, fishing skills and other instruction and information booths. The events provide many with their first exposure to these outdoor recreational activities and is part of the division's overall recruitment, reactivation and retention efforts.

#### Record hunting license sales

The department saw a record-breaking 8 percent increase in big-game hunting license applicants, with more than 189,000 applications filed. The division's Information Center staff and dozens of department volunteers from throughout the agency handled thousands of telephone calls and assisted hundreds of walk-in customers at area offices during the three days leading up to the March deadline for filing license applications.

#### **Outdoor Show, Expo and Governor's Banquet**

Over 5,000 visitors attended the third-annual Outdoor Adventures Hunting and Fishing Show on the state fairgrounds in Albuquerque. The event featured over 100 exhibitors representing the outdoor recreational industry. The third-annual Governor's Special Hunt & Auction was conducted in conjunction with the Outdoor Show and raised over \$100,000 dollars for the Game Protection Fund with over 500 guests at the gala event. The annual Outdoor Expo at Albuquerque's Shooting Range Park drew about 3,400 children and their families to the park to learn to shoot, fish and have fun in the great outdoors.

#### "New Mexico Wildlife" magazine online

The department's widely distributed printed magazine now can be found online at a dedicated website featuring a searchable database of current and former editions, timely and informative articles, stunning photography and a seven-part series chronicling the department's history.

#### Off-highway vehicle park

Construction started on a new off-highway vehicle park in the Brown Springs area of the federal Bureau of Land Management's 19,000-acre Glade Run Recreation Area near Farmington. The department provided technical and financial assistance for the effort. An estimated \$600,000 from the state Trail Safety Fund was contributed for construction of the park. Off-highway motor vehicle registration and user fees support the Trail Safety Fund. The park includes a small riding track for youths, a skills training track, primitive camp sites, toilets and a pavilion. The recreation area northeast of Farmington provides 42 miles of trails for use by motorized off-highway vehicles. The department's OHV program offered 54 hands-on riding and safety training classes in 10 counties last fiscal year and combined with online training classes certified over 600 students.

## Information Systems Division

The department Information Systems Division released the new Federal Aid Cost Tracking System to all staff July 1, 2016. The new web application allows staff to enter hours worked and supervisors to approve them without signed hard copies. This will dramatically increase the speed and ease of people to submit their hours, especially if they are in the field. It also will reduce data entry errors from having to manually enter the hours from hard copies, and also allow the Federal Aid team the ability to perform their duties much quicker and track documents.

The division implemented a new device called an Adaptive Security Appliance that will replace the current network firewall and provide more protection against sophisticated cyber-attacks.

The division installed new computers for law enforcement officers whose office is their vehicle. The computers have embedded cards that will provide internet connectivity regardless if they are in their vehicle or home. The computers can be docked in their vehicle or at home or used anywhere else as needed. The computers will allow officers to connect to the state police dispatch system and will have the capability to run various law enforcement searches on vehicles and people. In addition, the computers will have a GPS system to assist the officer in navigation and locate them in case of an emergency.

A new data analytics tool allows the department to conduct trends analysis and summarize data of our customers who purchased licenses. In conjunction with the Information and Education Division and their R3 (Recruitment, Retention and Re-engagement) efforts, data from this tool will provide information about the successes of their programs and demographics the department needs to target. One statistic already discovered was a decline of license holders in the 21–31 age range.

The division recently had an independent cyber security audit consisting of a review of potential avenues of penetrating and gaining access to our network from external points using multiple methods and known vulnerabilities. The department was listed as being very secure, scoring 9 out of 10 using the vendor's scale.

Division staff and the Administrative Services Division licensing team worked long hours and were able to release the results of the annual drawing for big-game licenses within two weeks, half the time it normally takes to process and audit the results. Many hunters were happy when they received an email stating they were lucky. Unlucky applicants were pleased to get refunds earlier than usual.

The division continues to make modifications to meet Payment Card Industry (PCI) Data Security Standards (DSS) compliance. This compliance is required by all State of New Mexico agencies to accept and process credit card transactions. The department is the second-largest state agency in terms of number of transactions and dollars amounts in the state behind the Tax and Revenue Department.



The Information Services Division helps maintain numerous web applications and business systems that serve hunters, anglers and outdoor enthusiasts. NMDGF photo by Russ Verbosky.



## Ecological and Environmental Planning Division

The Ecological and Environmental Planning Division coordinates the department's environmental review process. Staff provides technical assistance to municipal, state and federal government agencies and private landowners in protecting and enhancing wildlife habitat. The division implements the Share with Wildlife Program and maintains

BISON-M, a database of New Mexico's wildlife species. It also represents the department to regional and statewide initiatives to develop and apply wildlife-related information management and planning tools.



The Technical Guidance Section works with private sector, state and federal agencies, community, nongovernmental organizations and other project proponents to provide information on wildlife and habitats within a project area and provide recommendations on projects to mitigate adverse effects to wildlife and habitats. Section biologists review and comment on Environmental Impact Statements, Environmental Assessments, scoping documents, Forest Plan revisions and amendments, Resource Management Plan revisions and amendments, renewable and non-renewable energy development and transmission projects, communication infrastructure and a variety of other projects.

#### **Share with Wildlife**

Share with Wildlife is a donation-based program that annually funds wildlife research, education, rehabilitation, and habitat enhancement projects. There were 10 new projects funded for 2016 for which contracts were implemented with researchers, consultants, and nonprofits to do work on a variety of nongame species. The largest 2017 project focuses on developing environmental DNA (eDNA) markers for seven aquatic species in the lower Pecos River. Other projects involve a multitude of activities including population surveys for multiple species, development of maps of key habitat elements for a state-listed species, wildlife rehabilitation carried out at two facilities, and both classroom- and field-based education for elementary through high school students. The education projects focus on aquatic and riparian ecosystems, water quality monitoring, and New Mexico's wildlife.

#### **BISON-M**

Our Biota Information System of New Mexico (BISON-M) database now contains more than 6,800 species, including all vertebrates and selected invertebrates in New Mexico. Information includes the taxonomy, status, distribution, habitat associations, food habits, and life history of the species, as well as management practices and supporting scientific references. The database is available to the public at www.bison-m.org. In fiscal year



Burrowing owls are listed as a "Species of Greatest Conservation Need," in the department's State Wildlife Action Plan. NMDGF photo by Dan Williams.

2017, the department made significant progress on a longer-term process of entering information on Share with Wildlife contracts and project reports into BISON-M and enabling public access to electronic copies of these documents. To date, over 150 Share with Wildlife reports have been made available through this project. The process of incorporating information from the newly approved State Wildlife Action Plan for New Mexico is underway. Work was also done to ensure that the aesthetic of the BISON-M website better matches the style of the department's website and to improve website security.

#### Planning initiatives

State Wildlife Action Plan: The division is responsible for revision of the New Mexico State Wildlife Action Plan (SWAP). The SWAP is required component of a U.S. Fish and Wildlife Service program that allocates funds to each state to benefit at-risk wildlife species and their habitats and prevent listing. A revised plan was approved by the New Mexico State Game Commission in November 2016 and by U.S. Fish and Wildlife Service in March 2017.

Permits website and data mining: The division has been working with Natural Heritage New Mexico to develop a website that department staff can use to track scientific, educational, and commercial collecting permits issued by the department. This project imported data from over 700 collecting permits that were in place between 2007 and 2016, and databased almost 130,000 species observations This newly catalogued information can be used in a variety of efforts, including updating species distribution information in BISON-M.

Statewide riparian map: The division worked with Natural Heritage New Mexico to develop and submit a Riparian Mapping Proposal that would develop a map of the riparian and aquatic habitats across New Mexico. An agreement was signed in January and Heritage completed a floodplain delineation and a map of the upper Rio Grande and Chama watersheds.

Habitat handbooks: The Riparian and Aquatic Habitat Specialist prepared a Tamarisk Handbook to guide riparian restoration practitioners on how to deal with the presence of tamarisk when trying to restore native vegetation in riparian and aquatic areas adjacent to waterbodies and along stream/river systems. This up-to-date guidance takes into account the rapidly expanding presence of salt cedar beetles, which feed on the foliage and can ultimately kill even mature plants. There are ongoing efforts to remove tamarisk but there is less attention to post removal restoration of native vegetation and that can lead to a net loss of wildlife habitat.

Renewable energy development: There has been a marked increase in wind energy projects in order to take advantage of the full 100 percent production tax credit for projects completed and producing energy by 2020. The Mining and Energy Habitat Specialist worked extensively with renewable energy development companies and the U.S. Fish and Wildlife Service to provide guidance, develop pre-construction wildlife survey protocols and identify potential impacts to species of conservation concern. This includes reducing the potential for incidental take of golden eagles and developing location strategies for wind turbines to minimize disturbance to breeding lesser prairie chicken populations. During 2017, at least nine major wind projects have been proposed, primarily in the eastern portions of the state.





Top: River Otters are among the more than 6,800 wildlife species on the Biota Information system of New Mexico database, available on the department website, www.wildlife.state.nm.us. NMDGF photo by Dan Williams.

Bottom: Black-footed ferrets, once common to prairie dog colonies in New Mexico, is considered one of the most endangered mammals in North America. The Department of Game and Fish is among more than 30 state and federal agencies, nonprofit organizations and Native American tribes participating in efforts to restore the ferrets to its historic ranges across the western United States. NMDGF photo by Dan Williams.

## Field Operations Division



Conservation Officer Tyler Twichell checks hunting licenses of women participating in a Discover the Outdoors and Encourage Sportsmanship (DOES) turkey hunt. NMDGF photo by Martin Perea.

The department hired 10 game warden recruits in fiscal year 2017, which eventually will bring to 69 the number of officers in the field, from district officers to sergeants. Of approximately 350 applicants, 180 were invited to test for the interview process and 57 were invited for physical assessments and interviews. The increased number of officers has allowed the department to better serve customers while providing larger law enforcement coverage statewide.

Field Operations has worked diligently over the last several years to establish much needed upgrades in communications for law enforcement officers and other department staff. Officers now have high-watt, high-band radios, laptop computers in their vehicles with Computer Assisted Dispatch, and are receiving dispatch services from New Mexico State Police/ Department of Public Safety. This is an extreme upgrade from the outdated low band radio system used previously. Officers also now receive standardized ¾-ton trucks, a great improvement over the past years' ½-ton trucks.

#### **Operation Game Thief**

Operation Game Thief (OGT) received 216 tips from the public in fiscal year 2017. OGT paid \$8,100 in rewards and received \$20,704 in donations. The single largest payment was \$1,500.

#### Field law enforcement

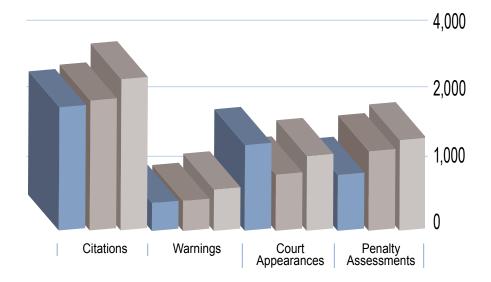
The 2017 State Legislature passed and Gov. Susana Martinez signed legislation that made the waste of specific big-game species a fourth-degree felony. New Mexico has a significant problem with trophy poaching of premier species such as mule



FY 2015

FY 2016

FY 2017



deer, elk, antelope, oryx and Barbary sheep. Officers investigate approximately 100 cases a year of big-game species being poached out of season or without a license that have only their head, antlers or horns removed and the rest of the carcass is left in the field to rot.

Conservation officers made more than 74,557 field contacts while checking licenses and patrolling public, State Trust and private lands, streams and lakes. Officers logged 55,267.5 hours in the field and issued 3,556 citations or criminal summons for various wildlife-associated violations. Approximately 1,621 of the citations issued were penalty assessments. As of July 1, 2017, the department had collected \$118,050 in penalty assessments.

Officers conducted 276 special operations, including roadblocks, artificial wildlife operations (decoys), organized saturation patrols, and off-highway vehicle patrols. During the fiscal year, officers arrested 82 individuals who had outstanding arrest warrants, and served 24 search warrants.

#### Outfitter and guide registration

The department registered 243 outfitters in fiscal year 2017 and collected approximately \$122,000 in outfitter fees, a decrease from fiscal year 2016, when there were 279 registered outfitters. There were 821 registered guides in fiscal year 2017 compared with 1,418 in fiscal year 2016. The department collected approximately \$52,000 in guide fees.

#### **Special investigations**

The Field Operations Division is continuing to develop a Special Investigations Unit to investigate and prosecute illegal trophy and commercial poaching activities. Decoys, aerial and ground surveillance and or other special law enforcement methods are used to apprehend poachers who may be out of sight of lawabiding citizens. The unit implements the most modern technology when conducting investigations. Wildlife forensics services such as DNA analysis and bullet examination are state of the art. Those services are provided by agencies such as the New Mexico State Crime Lab, the Wyoming Game and Fish Laboratory, and the National Fish and Wildlife Forensics Laboratory operated by the United States Fish and Wildlife Service.





Department of Game and Fish conservation officers made more than 74,557 contacts while checking licenses and patrolling public, private and State Trust lands, lakes and streams in fiscal year 2017. NMDGF photos by Martin Perea (top) and Karl Moffatt (bottom).

