OVERVIEW OF STATE RESPONSE TO CHRONIC WASTING DISEASE

The task of managing disease in cervids (Cervidae, members of the deer family) is shared by the Texas Animal Health Commission and the Texas Parks and Wildlife Department. The agencies' performance of this task has been scrutinized following the discovery of chronic wasting disease, a neurological disease affecting cervids, in a Texas deerbreeding facility in June 2015. The discovery prompted new regulation, which representatives of the \$349.4 million deerbreeding industry say has been more harmful to the industry than the disease has been. The state agencies maintain that the rules are necessary to decrease the probability of chronic wasting disease being spread from facilities where it might exist and to increase the probability of detecting and containing chronic wasting disease in facilities where it does exist. This overview, which was prepared at the request of members of the Legislature, shows the state's response to chronic wasting disease, including agency authority, activities, and expenditures.

FACTS AND FINDINGS

- ◆ The Parks and Wildlife Department has primary responsibility to protect the state's fish and wildlife resources, which includes disease management efforts for the state's native cervid species, white-tailed and mule deer.
- ♦ The Animal Health Commission has primary responsibility for managing and responding to diseases and pests of consequence that affect nonnative cervid species, which includes elk, moose, and others. The Animal Health Commission also coordinates disease-control efforts for native cervids and works collaboratively with the Parks and Wildlife Department in that area.
- ♦ Although both state agencies monitor and respond to a number of diseases affecting cervids, chronic wasting disease has been a significant focal point in recent years for the agencies and for stakeholders. Chronic wasting disease is unique relative to other diseases affecting cervids because it invariably is fatal, has a long incubation period, and virtually is impossible to eradicate.

- ♦ The current chronic wasting disease regulatory structure for white-tailed and mule deer was initiated in June 2016. This structure mandates certain testing requirements and restrictions on the artificial movement of deer. It was devised using a facilitated negotiation process with stakeholders, including representatives of the deer-breeding industry.
- The artificial movement of cervids increases risks for disease management, but it is a key component of the deer breeding industry and overall deer management.
- ♦ From fiscal years 2011 to 2017, the Parks and Wildlife Department reports expending approximately 3.1 percent (\$4.5 million) of its appropriations under Strategy A.1.1, Wildlife Conservation, for purposes related to chronic wasting disease. From fiscal years 2005 to 2017, the Animal Health Commission reports expending approximately 1.2 percent (\$2.1 million) of its agencywide appropriations for purposes related to chronic wasting disease.
- ◆ Legislative Budget Board staff found no indications that the collaboration between the Animal Health Commission and the Parks and Wildlife Department results in duplication of effort, nor that either agency exceeds its scope of authority or fails to engage stakeholders adequately in response to the disease.

DISCUSSION

According to the Texas Parks and Wildlife Department (TPWD), Texas is home to from 3.5 million to 4.5 million white-tailed and mule deer, which are the only cervids native to the state. Approximately 100,000 to 110,000 deer also are held in captivity as part of the state's deer-breeding industry.

Populations of other free-ranging and captive cervids in the state, such as elk, red deer, and sika, are not native to Texas and are much smaller in number compared to white-tailed and mule deer. State law deems cervids and all other wild animals inside the borders of the state the property of the people of the state, regardless of whether the movement of those animals is restricted by the existence of a fence constructed or maintained by a landowner. The law grants TPWD primary responsibility for protecting the state's wildlife resources and requires the Texas Animal Health

Commission (TAHC) to protect all livestock and exotic livestock from diseases recognized as communicable by the veterinary profession.

The deer-breeding industry is a prominent part of the community regulated by TPWD and TAHC. Deer breeding had a direct economic impact of \$349.4 million in 2015, as estimated by the Agricultural and Food Policy Center at Texas A&M University. That estimate increases to \$1.6 billion when considering indirect impacts, such as purchases of feed and veterinary supplies, and the economic impact of deer hunting stemming from breeding operations. The production side of the deer-breeding industry typically consists of operations involved in breeding and raising deer; the consumption side typically consists of other industry breeders and hunting operations such as game ranches. Hunting is the primary end market that the industry services, and many industry producers selectively breed deer to attain genetic characteristics desirable to hunters, namely, trophy antler racks. Deer-breeding operations vary, but often involve a certain amount of fenced acreage, with a subset dedicated to breeding pens, where deer are bred, nursed, provided supplemental feed and veterinary care, tagged for identification, and ultimately sold. Sales involve the transfers of deer, which are conducted with TPWD permits.

CHRONIC WASTING DISEASE

Cervids are susceptible to multiple diseases, including chronic wasting disease (CWD), anthrax, tuberculosis, epizootic hemorrhagic disease, pneumonia, and bluetongue. TPWD and TAHC monitor these diseases in the state's cervid population—the former in its capacity as protector of the state's fish and wildlife resources and the latter in its capacity as protector of all livestock and exotic livestock from communicable disease.

TPWD and TAHC report being concerned about CWD before it was discovered in Texas. The disease first was identified in captive mule deer in Colorado in 1967 and later was classified as a transmissible spongiform encephalopathy, or prion disease, which is a family of rare progressive neurodegenerative disorders that can affect, separately, humans and animals. Other animal prion diseases include bovine spongiform encephalopathy, better known as mad cow disease, and scrapie, which affects sheep and goats. The term prions refers to abnormal, pathogenic agents that are transmissible and able to induce abnormal folding of specific normal cellular proteins that are found most abundantly in the brain. The abnormal folding leads to brain damage and

the characteristic signs and symptoms of the disease. Those symptoms include drastic weight loss (or wasting), stumbling, and listlessness, which can render CWD-positive animals vulnerable to other mortality factors separate from the disease, such as predation and vehicle collisions.

CWD has spread steadily and has been reported in 25 states in the continental U.S. and two Canadian provinces, as shown in **Figure 1**. Although the overall occurrence of CWD in free-ranging deer and elk is relatively low nationwide, infection rates greater than one in 10 have been found in locations where the disease is established. Infection rates in some captive herds can be much higher, with a rate of 79.0 percent reported within one captive herd. In that case, CWD was diagnosed in a white-tailed deer from a captive farm in Wisconsin, after which the farm was quarantined and then depopulated more than four years later. Sixty of the 76 animals at the time of depopulation were found to be positive for the CWD-associated prion.

CWD presents stakeholders with challenges unlike other diseases affecting cervids. It is fatal and has no treatments or vaccines. CWD has a long incubation period of a reported minimum of approximately 17 months, with an unknown maximum. It is not known when during the course of infection an animal may be infectious. It is believed that CWD prions likely spread among animals through bodily fluids, either through direct contact or indirectly through environmental contamination of soil, food, or water. No known management strategies are available to mitigate the risk of indirect transmission of CWD when an environment has been contaminated, which makes eradication of the disease difficult, if not impossible, in areas where CWD has been long established before detection.

Given these characteristics, the risk of inadvertently spreading CWD is highest during the artificial movement of deer by human transport. In such a scenario an infected or exposed animal, whether it is a breeder deer or a trapped free-ranging deer, could be transported across the state in a trailer and disperse the disease into additional captive or free-ranging populations that otherwise would have been impossible given the deer's natural movement patterns.

To date, no cases of CWD infection have been reported in people. However, animal studies have suggested that CWD poses a risk to some types of nonhuman primates that eat meat from CWD-infected animals or come in contact with brain or bodily fluids from infected deer or elk. The Centers for Disease Control and Prevention advises against handling

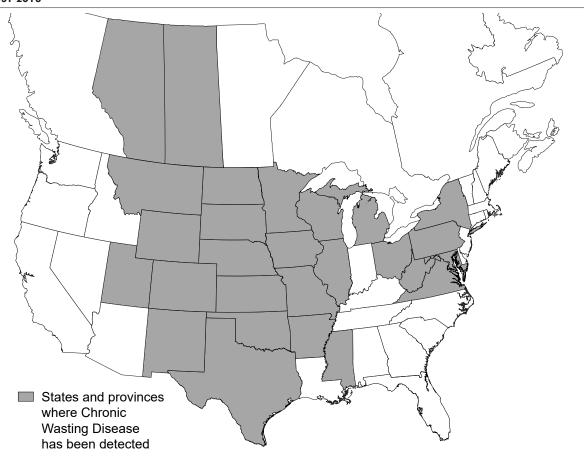


FIGURE 1
CHRONIC WASTING DISEASE DETECTED IN NORTH AMERICA
AUGUST 2018

Sources: Legislative Budget Board; Centers for Disease Control and Prevention.

or eating meat from deer and elk that look sick or are acting strangely or that are found dead.

AGENCY SCOPES OF AUTHORITY

The Texas Parks and Wildlife Code provides TPWD varied authority regarding the management of cervids, including the authority to take or manage native cervids for disease diagnosis or prevention; the authority to regulate the means, methods, and places in which it is lawful to hunt, take, or possess game animals; and the authority to regulate the conditions within which a person may possess a live native cervid with a TPWD-issued permit. **Figure 2** shows a comparison of TPWD's deer-related permits.

The Texas Agriculture Code, Section 161.041, requires TAHC to protect livestock from communicable disease and authorizes the agency to "act to eradicate or control any disease or agent of transmission for any disease that affects

livestock, exotic livestock, domestic fowl, or exotic fowl, regardless of whether the disease is communicable, even if the agent of transmission is an animal species that is not subject to the jurisdiction of TAHC." This latter condition includes the native cervid species of white-tailed and mule deer, which are within TPWD's jurisdiction, because the statutory definition of exotic livestock includes only nonnative animals from the deer family. Statute addresses the overlap, however, by prohibiting TAHC from infringing on or superseding the authority of any other state agency, including TPWD's authority relating to wildlife. Statute also requires TAHC to assume responsibility for disease control efforts if a conflict of authority exists, but to work collaboratively with the other state agency—TPWD, in this case—to enable each agency to carry out its responsibilities effectively.

FIGURE 2
TEXAS PARKS AND WILDLIFE DEPARTMENT DEER-RELATED PERMITS
FISCAL YEAR 2018

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PERMIT	PURPOSE	FEE
Deer breeder permit	Authorizes individuals to hold white-tailed and mule deer in captivity for the purpose of propagation	\$200
Deer Management Permit (DMP)	Authorizes owners of high-fenced properties to detain white-tailed deer temporarily in breeding pens located on the property for the purpose of natural breeding	\$1,000
Trap, Transplant, and Transport (TTT) permit	Authorizes municipalities, political subdivisions, and certain qualified individuals to trap white-tailed and mule deer on properties with excess population numbers and to relocate the deer to properties with sufficient habitat to support the additional animals	\$750 per release site
Trap, Transplant, and Process (TTP) permit	Authorizes cities, towns, villages, counties, special districts, property owners associations, and certain qualified individuals to capture surplus deer, process their carcasses, and donate the resulting venison to penal facilities or charitable organizations for human consumption	\$0
Scientific research permit	Authorizes employees or representatives of certain entities to collect, salvage, band, or hold native Texas wildlife for scientific purposes	\$53 (unless exempt)
Zoological research permit	Authorizes agents of certain facilities to hold native wildlife to further scientific understanding of protected wildlife, encourage management and conservation of protected wildlife, or further awareness and understanding of the biology of protected wildlife	\$158
Source: Texas Parks	and Wildlife Department.	

AGENCY ACTIVITIES

TAHC and TPWD collaborate on cervid disease management in many ways, with most examples related to the management of CWD. The agencies co-chair the CWD Task Force, which was established in 2006 to work with public and private stakeholders in developing rules and monitoring and managing CWD-related issues. TPWD provides biological information and statistics for native and nonnative species, and TAHC provides epidemiological expertise. Both agencies approve herd plans, which are requirements for disease testing and management established for deer-breeding facilities that have CWD-positive animals. Both agencies also coordinate to develop containment and surveillance zones in and around areas that have CWD and to train agency staff and others to collect samples for disease testing. Agency definitions of containment and surveillance zones terms vary slightly, but containment zones typically are geographic areas within which CWD has been detected or detection is probable, and surveillance zones are geographic areas within which the presence of CWD could reasonably be expected. The artificial movement of deer is restricted in both types of zones, and hunters who harvest CWD-susceptible species in either are required to bring their animals to a TPWD check station within 48 hours for testing.

Independently of TAHC, TPWD monitors disease in cervid and other wildlife populations by investigating reports of sick animals and mortalities. TPWD also tests roadkill, deer

exhibiting clinical symptoms of disease, and hunter-harvested deer throughout the state. Independently of TPWD, TAHC's role varies based on the disease, but typically includes the following actions:

- surveillance, which consists of varying levels of disease testing to detect presence of a disease, assess its spatial distribution and prevalence, and monitor changes in prevalence and direction of spread or contraction;
- · reporting;
- setting testing and record-keeping requirements;
- epidemiological investigations to determine the disease source and exposure;
- issuing movement restrictions such as hold orders and quarantines;
- developing herd plans;
- · conducting records and premises inspections;
- assisting the U.S. Department of Agriculture (USDA) to gather data for potential federal indemnification of affected herds or animals;
- proposing and establishing Texas entry requirements and disease risk zones; and
- enforcing all TAHC cervid regulations.

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FIGURE 3
TEXAS PARKS AND WILDLIFE DEPARTMENT CHRONIC WASTING DISEASE-RELATED EXPENDITURES
FISCAL YEARS 2011 TO 2017

Source: Texas Parks and Wildlife Department.

TAHC also sets entry requirements for nonnative cervids. The agency also administers Texas' voluntary native and nonnative herd certification programs for CWD, tuberculosis, and brucellosis and the Certified CWD Postmortem Sample Collector Authorized Personnel Program, which trains nonveterinarians to collect and submit samples for official post-mortem CWD testing in Texas.

ACTIVITIES IN OTHER STATES

Texas is joined by the other 49 states in conducting CWD testing on free-ranging cervids. Methods and sampling levels vary; however, most other states also test some combination of roadkill, hunter-harvested deer, and deer exhibiting clinical symptoms of disease. Forty-five states in addition to Texas also test captive cervids for CWD, although in some states this testing is voluntary. The four states that don't test for CWD in captive cervids—Nevada, South Carolina, Washington, and Wyoming—either don't permit captive cervids or have a nominal number of ranches with captive animals.

Bans on the importation and movement of cervid carcasses and body parts also are common—41 states join Texas in implementing restrictions or outright bans but with exceptions for items such as deboned meat, cleaned hides, and taxidermy mounts. States including Arkansas, Michigan, Minnesota, Virginia, and West Virginia have implemented

CWD management or containment zones with enhanced movement restrictions and testing.

CHRONIC WASTING DISEASE FUNDING

TPWD reports CWD-related expenditures pursuant to the General Appropriations Act (GAA), Article VI, Parks and Strategy Department, A.1.1, Conservation. The Legislature appropriated \$147.6 million in All Funds to TPWD from fiscal years 2011 to 2017 within this strategy, which includes funding for the regulation and management of other species of animals, management and operation of TPWD's wildlife management areas, wildlife surveys and research, and the issuance of wildlife permits. According to TPWD, CWDrelated expenditures for the same period totaled approximately \$4.5 million (3.1 percent of appropriations within the Wildlife Conservation strategy), and other expenditures related to general disease management totaled \$64,880 during the period. As **Figure 3** shows, the majority of the CWD-related expenditures are financed by Federal Funds. TPWD reports that these funds consist of the following grants: (1) a federal grant for CWD surveillance issued as part of a cooperative agreement between TPWD and the USDA Animal and Plant Health Inspection Service; and (2) a portion of a Federal Aid in Wildlife Restoration Act grant that was used to carry out CWD monitoring and testing. The Federal Aid in Wildlife Restoration Act, commonly known as the Pittman-Robertson Act, provides cost-shared federal aid to states on a formula basis for the management and restoration of wildlife.

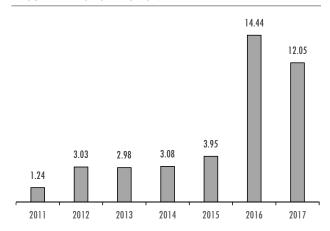
Expenditures increased during fiscal years 2016 and 2017 due to expanded TPWD activities involving CWD following the detection of the disease in a deer breeding facility in June 2015, as discussed in the following section.

Figure 4 shows full-time-equivalent positions for hours that TPWD staff attributed to CWD-related tasks for fiscal years 2011 to 2017.

TAHC receives appropriations for a CWD program pursuant to GAA, Article VI, Animal Health Commission, Strategy A.1.1, Field Operations, which covers the agency's statewide, field-based, animal health management and assurance programs. The Legislature initiated the CWD program funding during fiscal year 2005 for the purpose of furthering CWD surveillance in breeder deer and in elk, decreasing the risk of introduction of CWD, and providing early disease detection. TAHC also uses appropriations outside the CWD program for purposes related to CWD. As shown in **Figure 5**, total CWD-related expenditures for the agency from fiscal years 2005 to 2017 are approximately \$2.1 million in General Revenue Funds, or 1.2 percent of total agency appropriations during that period (approximately \$171.9 million in All Funds).

FIGURE 4
TEXAS PARKS AND WILDLIFE DEPARTMENT FULL-TIMEEQUIVALENT POSITIONS RELATED TO CHRONIC WASTING
DISEASE

FISCAL YEARS 2011 TO 2017



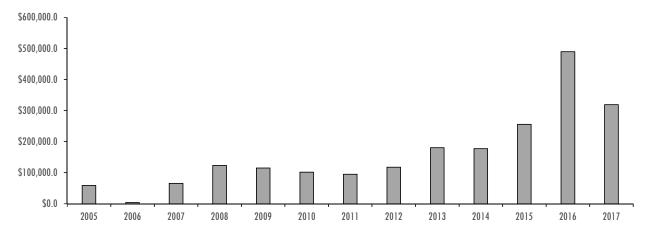
Note: Texas Parks and Wildlife staff hours shown are attributed to chronic wasting disease-related tasks in terms of full-time-equivalent positions.

Source: Texas Parks and Wildlife Department.

TEXAS REGULATORY RESPONSE TO CHRONIC WASTING DISEASE

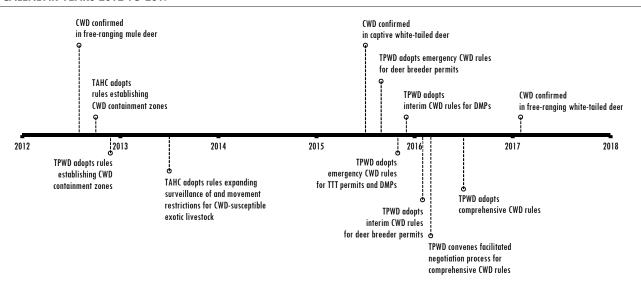
The state's regulatory response to CWD began in calendar year 1999 with TAHC's development of a voluntary statusmonitoring program in which participating owners of herds were required to submit annual inventories and submission of samples from all cases of mortality in animals age 17 months or older. In 2002, following the discovery of CWD in multiple other states, TPWD began testing roadkill and

FIGURE 5
TEXAS ANIMAL HEALTH COMMISSION CHRONIC WASTING DISEASE-RELATED EXPENDITURES
FISCAL YEARS 2005 TO 2017



Source: Texas Animal Health Commission.

FIGURE 6
CHRONIC WASTING DISEASE EVENTS IN TEXAS
CALENDAR YEARS 2012 TO 2017



Note: CWD=chronic wasting disease; TAHC=Texas Animal Health Commission; TPWD=Texas Parks and Wildlife Department; TTT=Trap, Transport, and Transplant Permit Program; DMP=Deer Management Permit.

Source: Legislative Budget Board.

hunter-harvested deer for CWD, and TPWD and TAHC adopted rules intended to prevent the importation of potentially diseased deer and elk into the state. Testing by TPWD and rulemaking from both agencies continued until 2005, when, at the recommendation of TPWD's White-tailed Deer Advisory Committee, TPWD closed the Texas border to the entry of out-of-state captive white-tailed and mule deer and increased regulatory requirements regarding disease monitoring and record keeping due to the threat that CWD posed. Those rules were updated in 2010 to address other disease threats to white-tailed and mule deer.

Despite these efforts, Texas confirmed the first state cases of CWD in July 2012 among free-ranging mule deer in Hudspeth County, part of a western region of the state known as the Trans-Pecos. **Figure 6** shows a timeline of significant events related to the discovery of CWD in Texas, beginning with these confirmed cases in 2012. TPWD, TAHC, and the CWD Task Force already had collaborated on a CWD management plan with a response structured for the region after the detection of the disease in mule deer harvested in New Mexico within two miles of the Texas border. The plan called for the establishment of movement restriction zones in the region. The zones were established by TAHC rule in September 2012 and TPWD rule in November

2012. TAHC also adopted rules in June 2013 expanding its surveillance of elk, which began in December 2005, to include other CWD-susceptible exotic livestock.

CWD cases were confined to Hudspeth County until June 2015, when the disease was confirmed in a captive white-tailed deer in a Medina County deer breeding facility west of San Antonio. The Medina County tissue samples were submitted by the breeder facility as part of routine deer mortality surveillance. TPWD responded by temporarily disabling access to the online database by which deer breeders obtain transfer permits to transport deer, placing movement restrictions on breeder facilities that had received deer from the Medina County facility or shipped deer to the facility during the previous two years, and disallowing release of captive deer from all breeder facilities into the wild.

TPWD adopted emergency rules in August 2015 that included the following requirements: (1) specific testing requirements for deer breeders to move deer to other deer breeders or for purposes of release; (2) similar testing requirements on release sites; and (3) restriction of the release of breeder deer to enclosures surrounded by a fence of at least seven feet in height capable of retaining deer at all times. TPWD also adopted emergency rules in October 2015 to address movement of white-tailed or mule deer in accordance

FIGURE 7 AFFILIATIONS OF PARTICIPANTS IN FACILITATED NEGOTIATIONS WITH CHRONIC WASTING DISEASE STAKEHOLDERS FEBRUARY 2016 TO APRIL 2016

2015 Stakeholder Group

Private Lands Advisory Committee

Breeder User Group

Texas Deer Association

Chronic Wasting Disease Task Force

Texas Parks and Wildlife Department

Deer Breeders Corporation

Texas Wildlife Association

Exotic Wildlife Association

White-tailed Deer Advisory Committee

North American Deer and Elk Farmers Association

Deer Breeders Corporation

Source: Texas Parks and Wildlife Department.

with a trap, transport, and transplant (TTT) permit or a deer management permit (DMP).

TPWD replaced the emergency rules with interim rules in November 2015 for deer breeders and in January 2016 for DMP (the TTT emergency rules were allowed to expire). The agency intended for the interim rules to maintain regulatory continuity during the 2015–2016 deer season and the period immediately thereafter, and to review all the interim rules following the close of the season.

That review began in February 2016, when TPWD invited a group of stakeholders, shown in Figure 7, to participate in a negotiation process facilitated by the Center for Public Policy Dispute Resolution at the University of Texas School of Law. According to TPWD, the agency took this step to address criticisms from some deer breeders that official and ad hoc TPWD advisory committees were "stacked" with members predisposed against the interests of the deerbreeding industry. The purpose of the negotiation was to develop a consensus concerning the essential components of eventual regulations to comprehensively address and implement effective CWD management strategies. Stakeholders represented various interests, including deer breeders, landowners, hunters, veterinarians, wildlife enthusiasts, TAHC, and TPWD. The results of the negotiation formed the basis of comprehensive rules, which were proposed in April 2016 and adopted in June 2016, following the solicitation of public comment and public testimony. Those rules remain in place as of October 2018, with some modification, such as the adjustment of the CWD movement restriction zones set by TPWD and TAHC.

The detection of CWD continues in Texas, with most cases found in white-tailed breeder deer from one of five deerbreeding facilities, and the most recent cases confirmed in December 2018, as of January 2019. The total for calendar

years 2012 to 2018 is 139 out of approximately 131,000 tests conducted beginning in fiscal year 2003. **Figure 8** shows the number of positive CWD cases in Texas from calendar years 2012 to 2018.

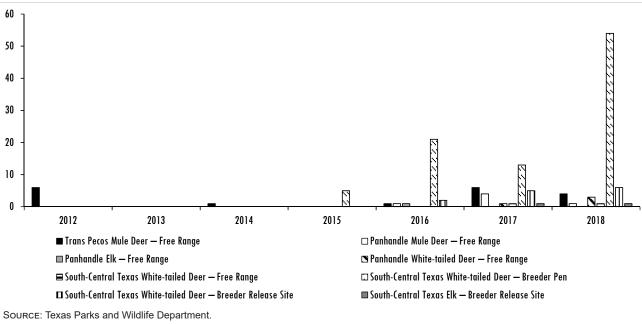
In comparison, Wisconsin, which has had a widely studied CWD outbreak since 2002, has recorded more than 4,200 positive CWD cases in free-ranging and captive deer from more than 210,000 tested samples. Wisconsin's population of white-tailed deer was estimated at approximately 1.4 million in 2017.

To test white-tailed and mule deer in Texas, TPWD pays for the costs of general CWD surveillance, and the holders of TPWD deer-related permits and the owners of deer-release sites pay for testing related to permitted activities. To test nonnative cervids, landowners pay for the testing of the first three cervids harvested on their properties to comply with TAHC's CWD surveillance requirements. Testing costs vary depending on the type of sample and how samples are collected, but costs are a minimum \$25 for a single tissue test for both TPWD and private individuals. Testing levels are based on herd-level statistical sampling where the number of samples can decrease for bigger herds without sacrificing statistical confidence in detecting the disease.

DEER-BREEDING INDUSTRY RESPONSE TO REGULATION

Representatives of the deer-breeding industry have been vocal critics of the state's regulatory response to CWD. The rules adopted following the discovery of CWD in captive white-tailed deer require deer-breeding facilities to meet certain testing standards for deer to be moved under TPWD transfer permits. In addition to resulting in an administrative burden to meet those standards, the rules limit the ability of some facilities to transfer deer for sale or purchase. This limitation has led some deer breeders to claim that they are being singled out unfairly by regulators. TPWD's response





centers on the agency's determination that more than 75.0 percent of the deer breeders in Texas were linked by no more than three degrees of separation to the facility in Medina County where the first CWD-positive white-tailed deer was discovered. This scale of interconnectedness, coupled with the risk of inadvertently moving CWD to new areas of the state posed by the artificial movement of deer (e.g., in a trailer as part of a transfer between deer breeders), informed TPWD's imposition of restrictions on movement. However, the privilege of movement enables deer breeders to set a market outside of paid access to deer on a breeder's own property.

A second element of criticism involves the perception that regulators are acting on a stigma against breeder deer. Some critics outside the deer-breeding industry argue that breeder deer are unnatural, more prone to diseases such as CWD due to the circumstances of their captivity, and more likely to spread disease as part of the industry. Respondents to that criticism have attributed this perception to jealousy of the trophies that deer breeders are able to raise or fear of the industry's encroachment on hunting operations that tout the quality of free-ranging deer. This notion of a stigma also is related to the issue of deer tagging or identification. The Texas Parks and Wildlife Code requires breeder deer to be identified by a visible identification tag while held in a

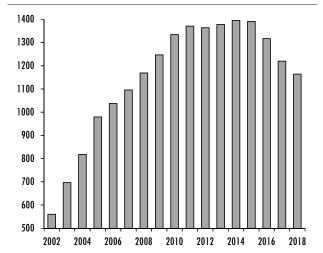
permitted deer-breeding facility. Recent efforts to expand the means of identification to include scannable subcutaneous microchips, which are nonvisible and supported by some deer breeders, have been resisted by some ranchers and hunters who state that visible identification is necessary to track and contain potentially diseased breeder deer that could threaten free-ranging deer's health.

Another aspect of criticism centers on the issue of private ownership. Some deer breeders state that captive deer are privately owned and, therefore, outside of TPWD's regulatory jurisdiction. TPWD holds that deer breeders possess deer in bailment, or without the rights of ownership, because state law deems that all wild animals inside state borders are the property of the people of the state. According to TPWD, breeder deer are never sold in the legal sense; a deer breeder receives monetary compensation for transferring the permitted privilege of possession of a breeder deer to another permitted deer breeder or for agreeing to release a breeder deer on a landowner's property.

As shown in **Figure 9**, the number of permitted deer breeders in Texas decreased during permit years 2016 and 2017, and TPWD projects that trend will continue for permit year 2018. (A permit year begins July 1 and ends June 30 of the following calendar year.) Certain TPWD

testing requirements for compliant deer-release sites will expire March 1, 2019, because the testing regimen within that period will have produced statistical confidence that enables the expiration. Legislative Budget Board staff found no indications that the collaboration between TAHC and TPWD results in duplication of effort, nor that either agency exceeds its scope of authority or fails to engage stakeholders adequately in response to CWD.

FIGURE 9
TEXAS PARKS AND WILDLIFE DEPARTMENT DEER BREEDER
PERMITS ISSUED, PERMIT YEARS 2002 TO 2018



Note: Amount for permit year 2018 is projected. Source: Texas Parks and Wildlife Department.