I. Program Description

a. Overview of the Cervid Sector

The 2012 Census of Agriculture conducted by the National Agricultural Statistics Service (NASS) reported a total of 4,042 deer farms and 1,199 elk farms with sales of $43.8 million and $12.3 million, respectively. Beginning in early September 2014, Veterinary Services, in cooperation with NASS, conducted the first national survey of the U.S. farmed cervid industry, *Cervid 2014: Health and Management Practices on U.S. Farmed Cervid Operations*. The survey reported over 40% of operations had raised cervids for 11 to 20 years, about two thirds of operations bred cervids on the operation, about half of operations participated in a chronic wasting disease (CWD) herd certification program, and one-third of operations had a tuberculosis (TB) accredited herd or were in the process of becoming TB accredited.

b. Core program objectives

- Objective 1: Prevent the introduction of foreign animal disease and facilitate trade.
- Objective 2: Provide a consistent national approach to control and prevent the spread of CWD in farmed cervids.
- Objective 3: Eradicate *Mycobacterium bovis* in farmed cervids and maintain the national cervid TB accreditation program.
- Objective 4: Conduct comprehensive and integrated disease surveillance.
- Objective 5: Prepare for and respond to foreign, emerging, and zoonotic diseases that threaten the herd, industry, or public health.
- Objective 6: Conduct education and outreach to provide cervid health and disease information to decision makers and stakeholders.

c. Program components

The Veterinary Services (VS) Cervid Health Business Plan summarizes the priority and projected activities of Surveillance, Preparedness, and Response Services (SPRS); National Import and Export Services (NIES); and Science, Technology and Analysis Services (STAS) within VS. The activities highlighted here cannot be accomplished without the significant resources and infrastructure that exist within VS, the larger APHIS and USDA, and other U.S. governmental departments.
Surveillance, Preparedness and Response Activities (SPRS)

SPRS implements national-level surveillance and coordinates response among States, and provides disease-specific technical guidance, epidemiological expertise, and national-level situation reporting for the Cervid Health Program with a focus on:

The National CWD Herd Certification Program (HCP). The goal of the CWD HCP is to provide a consistent national approach to control the incidence of CWD in farmed cervids and prevent the interstate spread of CWD. This is accomplished through the establishment of the national CWD herd certification program and interstate movement requirements for CWD-susceptible cervids. APHIS cooperates with State animal health and wildlife agencies and farmed cervid owners to encourage participation in the HCP and compliance with its standards.

The National Cervid TB Herd Accreditation Program. The primary objective of the cervid TB accreditation program is to eradicate M. bovis, the causative agent of bovine tuberculosis, in farmed cervids as part of a comprehensive approach to the eradication of tuberculosis in domestic cattle in the United States. APHIS requires all farmed/captive cervids to be tested for tuberculosis for interstate movement. Cervid herds may also attain accredited status by testing their entire herd for tuberculosis at least every 36 months.

Stakeholder Communication, Outreach, and Education. The Cervid Health Program actively engages representatives of the farmed cervid industries in order to receive input on the Cervid Health Program, provide information on current and upcoming activities, and provide education about CWD and TB. APHIS performs these activities at both the national and local levels.

National Import Export Services (NIES)

NIES is committed to increasing international trade opportunities for the cervid industry and to prevent the introduction of foreign animal diseases into the United States. APHIS negotiates trade protocols with foreign governments and assists U.S. producers in meeting the receiving country’s import requirements.

Science, Technology and Analysis Services (STAS)

STAS assists the Cervid Health Program in conducting activities and building capacity in several secondary components: 1) evaluation and design of comprehensive integrated disease surveillance components; 2) conducting cervid health and management studies through the National Animal Health Monitoring System (NAHMS) and providing this information to interested stakeholders; and 3) monitoring global animal health for foreign, emerging, and zoonotic disease prevention, preparedness, and response.
d. Funding source(s)

The Cervid Health Program is funded through the Equine, Cervid, and Small Ruminant (ECSR) budget line item. The FY 2017 ESCR funding is $20 million. Other VS cervid-related activities such as licensing veterinary biologics, facilitating trade, and import/export activities, laboratory support and cervid health studies are funded in whole or in part through other line items and/or user fees.

II. FY 2016 Key Accomplishments

- Completed an internal evaluation of the Cervid Health Program and identified areas for improvement, with an emphasis on the CWD Program.
- Convened a working group of State and Federal animal health and wildlife officials and representatives from the farmed cervidae industry to review the CWD Program Standards. Issued a summary of the working group’s discussions and VS’ recommended changes to the CWD Program Standards at the 2016 USAHA meeting for public comment.
- Issued a guidance document that clarifies the process for approval of the interstate movement of wild-caught cervids.
- Evaluated ante-mortem medial retropharyngeal lymph node and rectal biopsies for future use in the CWD HCP.
- Improved the annual reporting process and reviewed annual reports from 29 HCP Approved States.
- Reviewed comments pertaining to farmed cervids for the brucellosis and bovine tuberculosis proposed rule.
- Tested 10,750 cervids for bovine TB using serological tests and 2,095 cervids using skin testing. No cases for TB were detected in farmed cervids.
- Tested 14,503 farmed cervids for CWD, of which 9,556 were enrolled in the CWD HCP.
- Identified seven CWD-positive farmed cervid herds (five white-tailed deer and two elk).
- Provided Federal indemnity funding to depopulate two CWD-positive herds and 100 additional CWD-exposed animals to inform the epidemiological investigations and evaluate the performance of ante-mortem tests.

III. FY 2017 Priority Activities and Overview of FY 2018-2020 Goals

Objective 1: Prevent the introduction of foreign animal diseases and facilitate trade.

FY 2017 Goals and Priority Activities

Activity 1.1: Negotiate a protocol for the export of U.S. cervidae semen to Mexico.
Activity 1.2: Negotiate a protocol for the import of cervidae semen from the State of Sonora, Mexico to the United States.

Future Goals and Activities (FY 2018 – FY 2020)

Future Goal 1.1: Establish industry-supported import protocols for live cervids in accordance with the final TB/brucellosis rule, if or when published.

Objective 2: Provide a consistent national approach to control CWD in farmed cervids and prevent the spread of disease.

FY2017 Priority Activities

Activity 2.1: Propose to publish and implement revised CWD Program Standards.

Activity 2.2: Implement the use of ante-mortem medial retropharyngeal lymph node and rectal biopsies to test CWD-exposed whitetail deer in the CWD HCP.

Activity 2.3: Implement a prioritized approach for providing indemnity funding for CWD-positive, exposed, and suspect animals.

Activity 2.4: Evaluate the possible use of rectal biopsies in elk as ante-mortem tests for CWD.

Activity 2.5: Maintain and add to APHIS’ archive of tissue, blood and feces samples that are well-characterized with regard to CWD-infection status. Evaluate sample requests from researchers and provide sample materials, as appropriate.

Activity 2.6: Update the existing material research transfer agreement (MRTA) and develop a procedure for submitting and evaluating requests for archived samples.

Activity 2.7: Collect and review FY 2017 annual reports from HCP Approved States.

Future Goals and Activities (FY 2018 – FY 2020)

Future Goal 2.1: Act on recommendations from the internal review of the Cervid Health Program, as appropriate and as resources allows.

Future Goal 2.2: Initiate revisions to 9 CFR Parts 55 and 81, and associated revisions needed to the Program Standards.
**Future Goal 2.3:** Continue to encourage research to identify new methods for ante-mortem CWD testing, characterize the role of genotype in CWD infection and disease progression, and develop tools to prevent disease transmission.

**Future Goal 2.4:** Conduct consistent state reviews of Approved State CWD HCPs (as resources allow).

**Objective 3:** Eradicate *Mycobacterium bovis* in farmed cervids and maintain the national cervid TB accreditation program.

**FY2017 Priority Activities**

Activity 3.1: Address comments related to farmed cervids received on the brucellosis and bovine tuberculosis proposed rule.

Activity 3.2: Continue to provide technical support for the interpretation of TB test results, and the designation of a final disposition for animals with non-negative test results. Summarize national cervid TB testing annually.

Activity 3.3: Monitor NVSL inventory and manufacturer’s availability of Dual Path Platform (DPP) test kits and provide regular inventory updates to stakeholders through the APHIS Stakeholder Registry.

Activity 3.4: Present at the VS/SPRS District 6 Cervidae and Exotic Hoofstock TB Test Training in San Diego, California, on February 16, 2017.

**Future Goals and Activities (FY 2018 – FY 2020)**

**Future Goal 3.1:** Create and implement TB training for States to promote national consistency in program delivery.

**Objective 4:** Conduct comprehensive and integrated disease surveillance.

**FY 2017 Priority Activities**

Activity 4.1: Improve reporting of CWD detections and epidemiological investigations in captive cervids.

**Future Goals and Activities (FY 2018 – FY 2020)**

**Future Goal 4.1:** Investigate options and possible goals for comprehensive and integrated disease surveillance in cervids.
Objective 5: Prepare for and respond to foreign, emerging, and zoonotic diseases that threaten the herd, industry or public health.

**FY2017 Priority Activities**

Activity 5.1: Participate in the Regional, State, Federal, and Zoological Park Workshop on Foreign Animal Diseases; Austin, Texas; June 26-29, 2017.


Activity 5.3: Monitor the global animal health landscape for potential threats to the U.S. cervid population.

**Future Goals (FY 2018 – FY 2020)**

Future Goal 5.1: Examine the utilization of the Emergency Management Response System (EMRS) 2.0 web based application for reporting of CWD investigations (as resources allow).

Future Goal 5.2: Review existing Foreign Animal Disease Preparedness and Response Plan documents and tools to identify needs for the farmed cervid industry. Prioritize development of new documents to supplement existing materials with a focus on farmed cervids (as resources allow).

Objective 6: Conduct education and outreach to provide cervid health and disease information to decision makers and stakeholders.

**FY2017 Priority Activities**

Activity 6.1: Continue to host a monthly cervid health call for Federal and State Animal Health Officials.

Activity 6.2: Include information about CWD detections and epidemiological investigations in captive cervid herds on the Cervid Health webpage of the VS website. Regularly update other information on the webpage.

Activity 6.3: Encourage stakeholders to provide feedback on the cervid health program through interactive meetings, such as the annual APHIS Administrator’s Cervid Sector meeting and the monthly cervid health call.
Activity 6.4: Participate in select stakeholder meetings to share information about the Cervid Health Program, including:

- United States Animal Health Association; Greensboro, North Carolina; October 13-19, 2016
- Cervid Sector Meeting; Washington DC; May 5, 2017
- Regional, State, Federal and Zoological Park Workshop on Foreign Animal Diseases; Austin, Texas; June 26-29, 2017

Future Goals and Activities (FY 2018 – FY 2020)

Future Goal 6.1: Consider supporting initiatives to improve cervid disease outreach, education, and reporting in cooperation with State animal health and wildlife officials and industry partners (as resources allow).