

2015 Explanatory Notes  
Animal and Plant Health Inspection Service

Contents

Purpose Statement .....	20-1
Statement of Available Funds and Staff Years .....	20-5
Permanent Positions by Grade and Staff Year Summary .....	20-7
Motor Vehicle Fleet and Aircraft Data .....	20-8
Salaries and Expenses	
Appropriations Language.....	20-10
Lead-off Tabular Statement .....	20-11
Project Statement .....	20-13
Justifications .....	20-17
Proposed Legislation.....	20-55
Geographic Breakdown of Obligations and Staff Years .....	20-57
Classification by Objects .....	20-59
Shared Funding Projects.....	20-60
Physicians Comparability Allowance Worksheet.....	20-62
Status of Programs.....	20-63
Buildings and Facilities	
Appropriations Language.....	20-117
Lead-off Tabular Statement .....	20-118
Project Statement .....	20-118
Justification.....	20-119
Geographic Breakdown of Obligations and Staff Years .....	20-120
Classification by Objects .....	20-121
Status of Programs .....	20-123
Summary of Budget and Performance	
Statement of Goals and Objectives .....	20-125
Key Performance Outcomes and Measures .....	20-138
Full Cost by Strategic Objective .....	20-140

## ANIMAL AND PLANT HEALTH INSPECTION SERVICE

### Purpose Statement

The Secretary of Agriculture established the Animal and Plant Health Inspection Service (APHIS) on April 2, 1972, under the authority of Reorganization Plan No. 2 of 1953 and other authorities. The mission of the Agency is to protect the health and value of American agriculture and natural resources.

Together with its stakeholders, APHIS promotes the health of animal and plant resources to facilitate their movement in the global marketplace and to ensure abundant agricultural products and services for U.S. customers. APHIS strives to assure its stakeholders that it is on guard against the introduction or re-emergence of animal and plant pests and diseases that could limit agricultural production and damage export markets. At the same time, APHIS also monitors and responds to potential acts of agricultural bio-terrorism, invasive species, diseases of wildlife and livestock, and conflicts between humans and wildlife. The Agency also manages and resolves sanitary (animal) and phytosanitary (plant) trade barriers and addresses certain issues relating to the humane treatment of animals. Finally, APHIS ensures that biotechnology-derived agricultural products are safe for release in the environment.

APHIS' mission is carried out using three major areas of activity, as follows:

### Safeguarding and Emergency Preparedness/Response

In addition to APHIS' domestic monitoring, APHIS monitors plant and animal health throughout the world and uses the information to set effective agricultural import policies to prevent the introduction of foreign plant and animal pests and diseases. APHIS and the Department of Homeland Security cooperate to ensure that these policies are enforced at U.S. ports of entry. These policies prevent the entry of many invasive pests, including crop, pollinator, woodland, and livestock pests. APHIS also develops and conducts pre-clearance programs to ensure that foreign agricultural products destined for the United States do not present a risk to U.S. agriculture. The Agency engages in cooperative programs to control pests of imminent concern to the United States and to strengthen foreign plant protection and quarantine organizations. APHIS certifies plants and plant products for export to the United States and regulates imports and exports of designated endangered plant species. APHIS assists U.S. exporters and the Foreign Agricultural Service in revising foreign plant and animal import regulations to encourage and increase U.S. agricultural exports.

Should a pest or disease enter the United States, APHIS works cooperatively with other Federal, State, and industry partners to conduct plant and animal health monitoring programs to rapidly diagnose them and determine if there is a need to establish new pest or disease management programs. APHIS, in conjunction with States, industry, and other stakeholders, protects American agriculture by eradicating harmful pests and diseases or, where eradication is not feasible, by minimizing their economic impact. The Agency monitors endemic pests and diseases through surveys to detect their location and through inspection to prevent their spread into non-infested parts of the country.

The Agency maintains a cadre of trained professionals prepared to respond immediately to potential animal and plant health emergencies. Program personnel investigate reports of suspected exotic pests and diseases and take emergency action if necessary. To facilitate these efforts, APHIS develops pathway studies and thoroughly investigates the progression of outbreaks to determine the origin of plant and animal pests and diseases. APHIS also actively engages State, Tribal, and local governments, and industries to advance their emergency preparedness and response capabilities.

Through its Wildlife Services program, APHIS protects agriculture from detrimental animal predators through identification, demonstration, and application of the most appropriate methods of control. APHIS also develops methods to control animals and pests that are detrimental to agriculture, wildlife, and public safety. The Agency's regulatory structure brings the benefits of genetic research to the marketplace, while protecting against the release of potentially harmful organisms into the environment. APHIS also conducts diagnostic laboratory activities that support the Agency's veterinary disease prevention, detection, control, and eradication programs. The Agency also provides and directs technology development in coordination with other groups in APHIS to support plant protection programs of the Agency and its cooperators at the State, national, and international levels.

### Safe Trade and International Technical Assistance

Sanitary (animal) and phytosanitary (plant) (SPS) regulations can have a significant impact on market access for the United States as an exporter of agricultural products. APHIS plays a central role in resolving technical trade issues to ensure the smooth and safe movement of agricultural commodities into and out of the United States. This is done through negotiating access to new markets, preserving existing markets, and expanding existing markets. APHIS' role is to negotiate animal and plant health certification requirements, assist U.S. exporters in meeting foreign regulatory requirements, ensure requirements are proportional to risk without being excessively restrictive, and provide any necessary technical information to support the safety of U.S. agricultural products destined for foreign markets.

APHIS helps to protect the United States from emerging plant and animal pests and diseases while meeting obligations under the World Trade Organizations SPS agreement by assisting developing countries in improving their safeguarding systems. APHIS collaborates with other Federal agencies including the Foreign Agricultural Service, the U.S. Agency for International Development, the State Department, and the Office of the U.S. Trade Representative, to implement technical and regulatory capacity building projects with shared resources. APHIS develops and implements programs designed to identify and reduce agricultural pest and disease threats while still outside of U.S. borders, to enhance safe agricultural trade, and to strengthen emergency response preparedness.

### Animal Welfare

The Agency conducts regulatory activities to ensure the humane care and treatment of certain animals and horses as required by the Animal Welfare Act of 1966 as amended (7 U.S.C. 2131-2159), and the Horse Protection Act of 1970 as amended (15 U.S.C. 1821-1831). These activities include inspection of certain establishments that handle animals intended for research, exhibition, and sale as pets, and monitoring of certain horse shows.

### Statutory Authorities

APHIS operates under the following authorities:

#### General:

7 U.S.C. 450	Talmadge-Aiken Act (cooperation with States)
21 U.S.C. 136-136a	User Fees
31 U.S.C. 9701	User Fees
7 U.S.C. 3291a(3)	Authority to provide technical assistance and training
7 U.S.C. 5680	Farm Security and Rural Investment Act of 2002-reporting on SPS issues and trade barriers
7 U.S.C. 5925	Food, Agriculture, Conservation, and Trade Act of 1990- authorizes funding for national honeybee pest survey
7 U.S.C. 2279g	Marketing Services; cooperative agreements

#### Animal Health

7 U.S.C. 8301-8317	The Animal Health Protection Act
49 U.S.C. 80502	28-Hour Law (feed, water, and rest for animals)
19 U.S.C. 1202, Part I, Item 100.01	Purebred animal duty-free entry
7 U.S.C. 1622	Section 203 of the Agricultural Marketing Act of 1946
7 U.S.C. 1624	Section 205 of the Agricultural Marketing Act of 1946
7 U.S.C. 430	Section 101(d) of the Organic Act of 1944

7 U.S.C. 3801-3813	Swine Health Protection Act
7 U.S.C. 851-855	Anti-hog cholera serum and hog cholera virus
7 U.S.C. 2274	Firearms (tick inspectors)
7 U.S.C. 1901 note	Transportation of Equines to Slaughter
21 U.S.C. 151-159	Virus-Serum-Toxin Act
21 U.S.C. 113a	Authority to establish research facilities for FMD and other diseases
21 U.S.C. 618	Section 18 of the Federal Meat Inspection Act, as amended, as it pertains to the issuance of certificates of condition of live animals for export
7 U.S.C. 8401	Title II, Subtitles B and C of the Agricultural Bioterrorism Act of 2002
7 U.S.C. 8318	Section 10504 of the Farm Security and Rural Investment Act of 2002 (training of accredited veterinarians)

Plant Health:

7 U.S.C. 7701-7772; and 7781-7786	Plant Protection Act
7 U.S.C. 1581-1611	Title III, Federal Seed Act
7 U.S.C. 2801 note; 2814	Federal Noxious Weed Act
7 U.S.C. 281-286	Honeybee Act
7 U.S.C. 2279e and 2279f	Title V of the Agricultural Risk Protection Act of 2000 (penalties for interfering with inspection animals)
16 U.S.C. 1531-1544	Endangered Species Act (plants)
16 U.S.C. 3371-3378	Lacey Act (importation or shipment of injurious mammals, birds, fish)
7 U.S.C. 8401 and 8411	Title II, Subtitle B, of the Agricultural Bioterrorism Protection Act of 2002
39 U.S.C. 3015	Alien Species Prevention and Enforcement Act of 1992

Wildlife Services:

7 U.S.C. 426-426d	Control of predatory and other wild animals
-------------------	---

Animal Welfare:

7 U.S.C. 2131-2159	Animal Welfare Act
15 U.S.C. 1821-1831	Horse Protection Act

There were 5,434 permanent full-time employees and 1,947 other than permanent full-time employees as of September 30, 2013. Of the total, 1,157 full-time employees were located at headquarters. APHIS manages programs on a national basis through 2 regional offices and 439 field offices, including area offices, work stations, technical centers, and animal import centers. APHIS conducts much of its work in cooperation with State and local agencies, private groups, and foreign governments. APHIS performs work in the 50 States, Washington, D.C., Guam, Puerto Rico, Virgin Islands, Mexico, Central America, South America, the Caribbean, Western Europe, Australia, Asia, and Africa.

Each year, the Office of Inspector General (OIG) and the Government Accountability Office (GAO) audits selected programs to examine the efficiency of the programs and operations including program results, compliance with applicable laws and regulations, and fair presentation of financial reports. Audits in which APHIS has been involved during 2013 – 2014 include those listed below.

OIG Reports - Completed

None

OIG Reports – In Progress

#33601-12-CH	Effectiveness of the Smuggling, Interdiction, and Trade Compliance (SITC) Unit – Report issued in August 2012. As of July 24, 2013, 12 of the 13 APHIS recommendations have been implemented.
#33601-01-41	APHIS Oversight of Research Facilities - Audit started July 6, 2011.
#33601-02-41	APHIS Wildlife Services – Wildlife Damage Management Start Date – Audit started December 5, 2013.
#33601-01-23	Plant Protection and Quarantine Preclearance Program – Audit started May 22, 2012.
#33601-11-CH	USDA’s Controls Over Animal Import Centers. Report issued August 2010. As of May 15, 2013, 11 recommendations of the 12 APHIS recommendations have been implemented.
#33701-01-AT	Follow-up on APHIS’ Implementation of the Select Agent or Toxin Regulations - Report issued on November 2012. As of November 13, 2013, 10 of the 12 APHIS recommendations have been implemented.
#50601-01-32	Controls Over APHIS’ Introduction of Genetically Engineered Organisms – Audit started November 22, 2013.

GAO Reports - Completed

None

GAO Reports – In Progress

#361161	Horse Welfare - Audit report issued June 2011. 4 recommendations for APHIS are being implemented.
#361330	Agricultural Quarantine Inspections – Report issued in September 2012. 3 recommendations for APHIS are being implemented.
#440936	Training of Customs of CBP Officers – Audit started on November 24, 2010.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Available Funds and Staff Years (SYs)  
(Dollars in thousands)

Item	<u>2012 Actual</u>		<u>2013 Actual</u>		<u>2014 Estimate</u>		<u>2015 Estimate</u>	
	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs
<b>Salaries and Expenses:</b>								
Discretionary Appropriations.....	\$816,534	4,679	\$758,519	4,617	\$821,721	4,695	\$834,341	4,682
Citrus Greening...a/.....	-	-	-	-	20,000	-	-	-
Sub-Total Disc Funding.....	816,534	4,679	758,519	4,617	841,721	4,695	834,341	4,682
Mandatory Appropriations: Farm Bill.....	55,000	15	47,450	15	58,360	15	62,500	15
Agricultural Quarantine Inspection User Fees:								
Total Collections.....	548,329	1,350	566,055	1,121	577,825	1,250	696,418	1,250
<b>Buildings and Facilities:</b>								
Discretionary Appropriations.....	3,200	-	2,928	-	3,175	-	3,175	-
<b>Trust Funds:</b>								
Mandatory Funding.....	10,186	150	13,071	50	9,000	50	9,000	50
Transfers In.....	21,405	2	-	-	-	-	-	-
Transfers Out.....	-351,305	-	-366,370	-	-362,526	-	-464,514	-
Adjusted Appropriations.....	1,103,349	6,196	1,021,653	5,803	1,127,555	6,010	1,140,920	5,997
Balance Available, SOY.....	224,547	144	208,559	141	225,642	151	240,223	129
Other Adjustments (NET).....	21,871	-	24,161	-	-95	-	-	-
Total Available.....	1,349,767	6,340	1,254,373	5,944	1,353,102	6,161	1,381,143	6,126
Lapsing Balances.....	-6,647	-26	-5,729	-	-	-	-	-
Balance Available, EOY.....	-208,559	-141	-225,642	-222	-240,223	-129	-234,018	-127
Subtotal Obligations, APHIS.....	1,134,561	6,173	1,023,002	5,722	1,112,880	6,032	1,147,125	5,999
<b>Obligations under other USDA appropriations:</b>								
<b>Agricultural Marketing Service:</b>								
for administrative and technical support.....	6,623	-	7,506	-	7,546	-	7,556	-
<b>Agricultural Research Service:</b>								
for administrative and technical support.....	3,611	-	4,337	-	4,360	-	4,366	-
Departmental Administration.....	-	-	1	-	1	-	1	-
<b>Farm Service Agency:</b>								
for administrative and technical support.....	25	-	25	-	25	-	25	-
<b>Food Safety Inspection Service</b>								
for administrative and technical support.....	60	-	487	-	490	-	490	-
<b>Food &amp; Nutrition Service:</b>								
for administrative and technical support.....	-	-	13	-	13	-	13	-
<b>Foreign Agricultural Service:</b>								
for administrative and technical support.....	3,262	-	4,528	-	4,553	-	4,558	-
<b>Forest Service:</b>								
for administrative and technical support.....	451	-	463	-	465	-	466	-
<b>Grain Inspection Service:</b>								
for administrative and technical support.....	1,551	-	1,592	-	1,601	-	1,603	-
<b>National Appeals Division:</b>								
for administrative and technical support.....	10	-	16	-	16	-	16	-
<b>National Institute of Food and Agriculture:</b>								
for administrative and technical support.....	25	-	202	-	203	-	203	-
<b>Natural Resource Conservation Service</b>								
for administrative and technical support.....	1,350	-	2,175	-	2,187	-	2,189	-
<b>Office of Departmental Management</b>								
for administrative and technical support.....	-	-	90	-	90	-	91	-
<b>Office of the Secretary:</b>								
administrative and technical support.....	11	-	154	-	155	-	155	-
Total, Agriculture Appropriations.....	16,979	-	21,589	-	21,703	-	21,731	-

Item	2012 Actual		2013 Actual		2014 Estimate		2015 Estimate	
	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs
<b>Other Federal Funds:</b>								
DOD, U.S. Air Force.....	5,588	-	5,874	-	5,906	-	5,913	-
DOD, U.S. Coast Guard.....	38	-	-	-	-	-	-	-
DOD, Air National Guard.....	1,777	-	2,702	-	2,716	-	2,720	-
DOD, U.S. Navy.....	3,612	-	3,706	-	3,726	-	3,731	-
DOD, U.S. Marine Corps.....	812	-	378	-	380	-	380	-
DOD, U.S. Army.....	1,681	-	822	-	826	-	827	-
DOD, U.S. Army Corp of Engineers.....	-	-	1,379	-	1,386	-	1,388	-
DOD, Defense Finance and Accounting Services.....	-	-	477	-	479	-	480	-
Department of Energy.....	189	-	232	-	234	-	234	-
Department of Health and Human Services.....	96	-	260	-	262	-	262	-
DHS: for AQI and other services and support.....	1,890	-	1,167	-	1,173	-	1,175	-
Federal Emergency Management Agency.....	-	-	77	-	77	-	78	-
NASA, National Aeronautics and Space Administration..	405	-	396	-	398	-	399	-
USDOJ, Geological Survey, National Park Service, Office of Insular Affairs.....	1,851	-	1,108	-	1,114	-	1,115	-
USDOJ, Bureau of Land Management & Reclamation: for administrative and technical support.....	478	-	412	-	414	-	415	-
USDOJ, Fish and Wildlife Services: for natural resources and endangered species.....	2,238	-	2,006	-	2,017	-	2,019	-
USDOT, Federal Aviation Administration	270	-	1,140	-	1,146	-	1,148	-
Department of State: for miscellaneous services.....	-	-	298	-	300	-	300	-
EPA, IACB: for miscellaneous services.....	701	-	855	-	860	-	861	-
GSA: for miscellaneous services.....	6	-	55	-	55	-	55	-
Other Federal Funds.....	1,054	190	229	359	230	375	231	375
<b>Total, Other Federal Funds.....</b>	<b>22,686</b>	<b>190</b>	<b>23,574</b>	<b>359</b>	<b>23,700</b>	<b>375</b>	<b>23,730</b>	<b>375</b>
<b>Non-Federal Funds:</b>								
Funds from States and local entities for wildlife services support.....	47,356	545	46,807	575	47,057	589	47,118	589
Import-Export User Fees.....	42,801	325	39,876	326	40,089	340	40,141	340
Phytosanitary Certificate User Fees.....	14,762	106	16,158	86	16,244	95	16,265	95
Reimbursable Overtime.....	7,900	85	8,569	74	8,615	80	8,626	80
Product Certificates.....	-	-	-	-	-	-	-	-
Veterinary Diagnostics User Fees.....	4,250	29	5,586	29	5,616	30	5,624	30
Other User Fees.....	27	-	1	-	1	-	1	-
Non-Federal.....	524	-	201	-	203	-	203	-
<b>Subtotal, Reimbursable Salaries and Expenses.....</b>	<b>157,285</b>	<b>1,280</b>	<b>162,360</b>	<b>1,449</b>	<b>163,228</b>	<b>1,509</b>	<b>163,440</b>	<b>1,509</b>
<b>Total Obligations,</b>								
Animal and Plant Health Inspection Service.....	\$1,291,846	7,453	\$1,185,362	7,171	\$1,276,108	7,541	\$1,310,565	7,508

a/ The Consolidated Appropriations Act 2014, included \$20M in one-time funding via a General Provision for control, management and associated activities directly related to a multiple-agency response to citrus greening.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Permanent Positions by Grade and Staff Year Summary

Item	2012 Actual			2013 Actual			2014 Estimate			2015 Estimate		
	Hdqts	Field	Total	Hdqts	Field	Total	Hdqts	Field	Total	Hdqts	Field	Total
Senior Executive Service.....	25	11	36	27	11	38	27	11	38	27	11	38
GS-15.....	63	55	118	60	57	117	60	57	117	60	57	117
GS-14.....	309	266	575	289	250	539	289	250	539	289	250	539
GS-13.....	263	481	744	258	449	707	259	451	710	259	451	710
GS-12.....	212	911	1,123	188	886	1,074	190	886	1,076	190	886	1,076
GS-11.....	89	845	934	84	818	902	84	818	902	84	818	902
GS-10.....	2	7	9	2	7	9	2	7	9	2	7	9
GS-09.....	88	431	519	86	395	481	86	395	481	86	395	481
GS-08.....	7	270	277	6	255	261	6	255	261	6	255	261
GS-07.....	90	484	574	81	472	553	81	472	553	81	472	553
GS-06.....	14	243	257	12	234	246	12	234	246	12	234	246
GS-05.....	6	183	189	5	169	174	5	169	174	5	169	174
GS-04.....	5	34	39	6	30	36	6	30	36	6	30	36
GS-03.....	2	6	8	0	4	4	0	4	4	0	4	4
GS-02.....	3	4	7	1	4	5	1	4	5	1	4	5
Other Graded Positions.....	26	137	163	23	130	153	23	130	153	23	130	153
Total Perm. Employment EOY.....	1,204	4,368	5,572	1,128	4,171	5,299	1,131	4,173	5,304	1,131	4,173	5,304
Unfilled Positions EOY.....	13	49	62	29	106	135	29	106	135	29	106	135
Total Permanent Positions.....	<u>1,217</u>	<u>4,417</u>	<u>5,634</u>	<u>1,157</u>	<u>4,277</u>	<u>5,434</u>	<u>1,160</u>	<u>4,279</u>	<u>5,439</u>	<u>1,160</u>	<u>4,279</u>	<u>5,439</u>
Staff Year Estimate.....	1,450	6,003	7,453	1,395	5,776	7,171	1,467	6,074	7,541	1,461	6,047	7,508

## ANIMAL AND PLANT HEALTH INSPECTION SERVICE

### Size and Composition of Agency Motor Vehicle and Aircraft Fleet

#### 1. Size, Composition, and Cost of Motor Vehicle Fleet

APHIS uses vehicles to deliver mission critical services. The Agency's veterinarians, animal health technicians, inspectors, plant protection and quarantine officers, wildlife biologists, and other technical personnel use motor vehicles in their daily responsibilities, which entail travel between inspection sites, farms, ranches, ports, nurseries, and other commercial firms. In some cases, APHIS' cooperators use Agency vehicles as authorized in program cooperative agreements.

In most instances, using Government-Owned Vehicles is more cost effective than either leasing or using privately-owned vehicles. To maintain the life span of the vehicles, operators are required to keep historical maintenance records and submit the vehicles' operational and cost data for review and reporting at least once a year. These periodic maintenance surveys and review of the consolidated vehicle fleet data ensure optimal use of each vehicle in the fleet.

Replacement criteria: APHIS replaces vehicles in accordance with Title 41, CFR, § 102-34.280. Agency programs replace and retire vehicles using data on utilization, age, condition, and funding availability. As a result of a reduced budget in recent years, programs have extended their normal replacement cycle. APHIS has implemented efforts to both increase the number of alternative fuel vehicles and extend the life cycle of each vehicle.

Reductions to the motor vehicle fleet. During FYs 2012-2013, two of APHIS's largest program units underwent reorganizations that resulted in combined offices and assets, reduced staff, and more shared vehicles. Additionally, during FY 2013, APHIS began implementation of a Vehicle Allocation Methodology (VAM) that allowed further reductions to the fleet. The VAM allows closer management of the fleet, including the identification of under-utilized vehicles. These two changes allowed APHIS to reduce the size and cost of its fleet, while still meeting the needs of its programs and allowing it to serve the taxpayers in the most effective way possible. APHIS expects that additional VAM-related reductions will occur in FY 2014, although they will not be as significant as those that occurred in FY 2013.

Planned changes to the motor vehicle fleet. For FY 2015, APHIS will continue to show a reduction in the size of its motor vehicle fleet. In particular, we expect to reduce the number of: sedans/station wagons by 5; light duty trucks by 11; and vans by 5, while increasing the number of medium duty trucks by 1. There is no planned change in the number of sport utility vehicles, buses, or heavy duty trucks.

Replacement of passenger motor vehicles. For FY 2015, the Agency proposes replacing 21 of the 305 vehicles currently in the Agency fleet that are used by APHIS' technical personnel in the field. Vehicles designated for disposal meet the General Service Administration's (GSA's) standards for replacement by having mileage of 60,000 or more, or by being three years of age or older.

#### Impediments to managing the motor vehicle fleet.

- 1) Currently, APHIS manages its fleet with Agency spreadsheets, fleet card data, and GSA data bases. USDA is in the process of implementing fleet management software system to facilitate improved Department-wide accountability.
- 2) The current fleet card system provides accurate purchase information only about 80 percent of the time. APHIS welcomes the implementation of a new USDA fleet management software system and fleet card system in FY 2014, which will provide complete and accurate vehicle cost and mileage data for use starting in FY 2015.

Size, Composition, and Annual Operating Costs of Vehicle Fleet

Fiscal Year	Number of Vehicles by Type*									Annual Operating Costs (\$ in 000)
	Passenger Motor Vehicles (e.g. Sedans & Station Wagons)	Light Duty Vehicles				Medium Duty Vehicles		Heavy Duty Vehicles	Total Number of Vehicles	
		Vans	SUVs	Trucks		Buses	Trucks, Vans and SUVs			
				4x2	4x4					
2012	381	250	1,087	465	2,458	-	437	15	5,093	16,344
Change	-74	-43	-58	-71	-143	-	-35	-1	-425	+348
2013	307	207	1,029	394	2,315	-	402	14	4,668	16,692
Change	-2	-5	-6	-10	-22	-	-1	-	-46	+485
2014	305	202	1,023	384	2,293	-	401	14	4,622	17,177
Change	-5	-5	-	-5	-6	-	+1	-	-20	+499
2015	300	197	1,023	379	2,287	-	402	14	4,602	17,676

\* Numbers include vehicles owned by the Agency, and leased from commercial sources or GSA.

2. Size and Composition of Aircraft Fleet

APHIS aircraft are used to conduct aerial resource and surveillance surveys, aerial application tests, methods development and testing, and equipment demonstration and testing; control and/or eradicate destructive plant pests from attacking agricultural crops; and alleviate or control wildlife damage to agricultural products. Some are also used to monitor contract aircraft.

The Appropriations Act provides APHIS with authority to replace aircraft; however, the Agency only replaces aircraft when necessary to maintain fleet safety and efficient operating conditions.

The APHIS aircraft fleet consists of 7 operable aircraft for domestic plant pest and disease management programs, and 71 aircraft used for the wildlife damage management programs. Of the 71 aircraft used for the wildlife damage management programs: 62 are owned, 22 of which are non-operational; 5 are borrowed from state cooperators; and 4 are rented. APHIS plans to dispose of at least 10 of the non-operational planes in FY 2014.

## ANIMAL AND PLANT HEALTH INSPECTION SERVICE

The estimates include proposed changes in the language of this item as follows: (new language is underscored; deleted matter is enclosed in brackets):

### Salaries and Expenses:

For necessary expenses of the Animal and Plant Health Inspection Service, including up to \$30,000 for representation allowances and for expenses pursuant to the Foreign Service Act of 1980 (22 U.S.C. 4085), [~~\$821,721,000~~]\$834,341,000, of which \$470,000, to remain available until expended, shall be available for the control of outbreaks of insects, plant diseases, animal diseases and for control of pest animals and birds ("contingency fund") to the extent necessary to meet emergency conditions; of which [~~\$12,720,000~~] \$9,055,000 to remain available until expended, shall be used for the cotton pests program for cost share purposes or for debt retirement for active eradication zones; of which [~~\$35,339,000~~]\$37,889,000, to remain available until expended, shall be for Animal Health Technical Services; of which \$697,000 shall be for activities under the authority of the Horse Protection Act of 1970, as amended (15 U.S.C. 1831); of which [~~\$52,340,000~~]\$50,223,000, to remain available until expended, shall be used to support avian health; of which \$4,251,000, to remain available until expended, shall be for information technology infrastructure; of which [~~\$151,500,000~~]\$137,393,000, to remain available until expended, shall be for specialty crop pests; of which, \$8,826,000, to remain available until expended, shall be for field crop and rangeland ecosystem pests; of which [~~\$54,000,000~~]\$45,392,000, to remain available until expended, shall be for tree and wood pests; of which \$3,722,000, to remain available until expended, shall be for the National Veterinary Stockpile; of which up to \$1,500,000, to remain available until expended, shall be for the scrapie program for indemnities; of which \$1,500,000, to remain available until expended, shall be for the wildlife damage management program for aviation safety: *Provided*, That, of amounts available under this heading for wildlife services methods development, \$1,000,000 shall remain available until expended: *Provided further*, That of amounts available under this heading for the screwworm program, [~~\$4,990,000~~]\$4,929,000 shall remain available until expended: *Provided further*, That no funds shall be used to formulate or administer a brucellosis eradication program for the current fiscal year that does not require minimum matching by the States of at least 40 percent: *Provided further*, That this appropriation shall be available for the operation and maintenance of aircraft and the purchase of not to exceed four, of which two shall be for replacement only: *Provided further*, That, in addition, in emergencies which threaten any segment of the agricultural production industry of this country, the Secretary may transfer from other appropriations or funds available to the agencies or corporations of the Department such sums as may be deemed necessary, to be available only in such emergencies for the arrest and eradication of contagious or infectious disease or pests of animals, poultry, or plants, and for expenses in accordance with sections 10411 and 10417 of the Animal Health Protection Act (7 U.S.C. 8310 and 8316) and sections 431 and 442 of the Plant Protection Act (7 U.S.C. 7751 and 7772), and any unexpended balances of funds transferred for such emergency purposes in the preceding fiscal year shall be merged with such transferred amounts: *Provided further*, That appropriations hereunder shall be available pursuant to law (7 U.S.C. 2250) for the repair and alteration of leased buildings and improvements, but unless otherwise provided the cost of altering any one building during the fiscal year shall not exceed 10 percent of the current replacement value of the building.

In fiscal year [~~2014~~]2015, the agency is authorized to collect fees to cover the total costs of providing technical assistance, goods, or services requested by States, other political subdivisions, domestic and international organizations, foreign governments, or individuals, provided that such fees are structured such that any entity's liability for such fees is reasonably based on the technical assistance, goods, or services provided to the entity by the agency, and such fees shall be reimbursed to this account, to remain available until expended, without further appropriation, for providing such assistance, goods, or services.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Salaries and Expenses

Lead-off Tabular Statement

Budget Estimate, 2015.....	\$834,341,000
2014 Enacted.....	821,721,000
Change in Appropriation.....	<u>+12,620,000</u>
Adjustments in 2014:	
2014 Enacted.....	821,721,000
General Provision 748 <sup>a/</sup> .....	<u>20,000,000</u>
Adjusted Base for 2014.....	841,721,000
Budget Estimate, 2015.....	834,341,000
Decrease over adjusted 2014.....	<u>-7,380,000</u>

Summary Of Increases and Decreases - Current Law

(Dollars in thousands)

	<u>2012</u>	2013	2014	2015		2015
	<u>Actual</u>	<u>Change</u>	<u>Change</u>	<u>Change</u>		<u>Estimate</u>
Discretionary Appropriations:						
<u>Safeguarding and Emergency Preparedness/Response</u>						
Animal Health Technical Services.....	\$32,500	+\$1,518	+\$1,321	+\$2,550	1a	\$37,889
Aquatic Animal Health.....	2,261	-174	+166	-	1b	2,253
Avian Health.....	52,000	-4,007	+4,347	-2,117	1c	50,223
Cattle Health.....	99,000	-8,659	+2,159	-	1d	92,500
Equine,Cervid, & Small Ruminant Health.....	22,000	-4,308	+1,808	-	1e	19,500
National Veterinary Stockpile.....	2,750	-212	+1,184	-	1f	3,722
Swine Health.....	23,000	-1,772	+1,022	-	1g	22,250
Veterinary Biologics.....	16,457	-1,268	+1,228	-	1h	16,417
Veterinary Diagnostics.....	31,611	-2,436	+2,365	-	1i	31,540
Zoonotic Disease Management.....	9,000	+575	-52	-	1j	9,523
Subtotal, Animal Health.....	<u>290,579</u>	<u>-20,745</u>	<u>+15,550</u>	<u>+433</u>		<u>285,817</u>
Agricultural Quarantine Inspection (Appropriated).....	27,500	-1,196	+596	-	1k	26,900
Cotton Pests.....	17,848	-3,109	-2,019	-3,665	1l	9,055
Field Crop & Rangeland Ecosystems Pests.....	9,068	-699	+457	-	1m	8,826
Pest Detection.....	27,500	-2,119	+2,065	-	1n	27,446
Plant Protection Methods Development.....	20,600	-665	+4,614	-4,000	1o	20,549
Specialty Crop Pests.....	153,950	-11,863	+9,413	-14,107	1p	137,393
Tree & Wood Pests.....	55,638	-3,365	+1,727	-8,608	1q	45,392
Subtotal, Plant Health.....	<u>312,104</u>	<u>-23,015</u>	<u>+16,852</u>	<u>-30,380</u>		<u>275,561</u>
Wildlife Damage Management.....	72,500	-4,664	+19,592	-	1r	87,428
Wildlife Services Methods Development.....	18,000	-464	+1,320	-	1s	18,856
Subtotal, Wildlife Services.....	<u>90,500</u>	<u>-5,128</u>	<u>+20,912</u>	<u>-</u>		<u>106,284</u>
Animal & Plant Health Regulatory Enforcement.....	16,275	-1,254	+1,203	-	1t	16,224
Biotechnology Regulatory Services.....	18,135	-1,397	+1,397	-	1u	18,135
Subtotal, Regulatory Services.....	<u>34,410</u>	<u>-2,652</u>	<u>+2,601</u>	<u>-</u>		<u>34,359</u>
Contingency Fund.....	1,000	+384	-914	-	1v	470
Emergency Preparedness & Response.....	17,000	-1,310	1,276	-	1w	16,966
Subtotal, Emergency Management.....	<u>18,000</u>	<u>-926</u>	<u>362</u>	<u>-</u>		<u>17,436</u>

	<u>2012</u> <u>Actual</u>	2013 <u>Change</u>	2014 <u>Change</u>	2015 <u>Change</u>	2015 <u>Estimate</u>
Subtotal Safeguarding and Emergency Preparedness/Response.....	745,593	-52,465	+56,276	-29,947	719,457
<u>Safe Trade and International Technical Assistance</u>					
Agriculture Import/Export.....	13,354	-1,029	+1,774	- 2a	14,099
Overseas Technical & Trade Operations.....	20,104	-1,632	+1,642	- 2b	20,114
Subtotal Safe Trade and International Technical Assistance.....	33,458	-2,661	+3,416	-	34,213
<u>Animal Welfare</u>					
Animal Welfare.....	27,087	-2087	+3,010	- 3a	28,010
Horse Protection.....	696	-54	+55	- 3b	697
Subtotal, Animal Welfare.....	27,783	-2,141	+3,065	-	28,707
<u>Agency-Wide Programs</u>					
APHIS Information Technology Infrastructure.....	4,335	-334	+250	- 4a	4,251
Physical/Operational Security.....	5,365	-413	+194	- 4b	5,146
Decentralized GSA Rental and DHS Security Payments.....	-	-	-	+42,567 4c	42,567
Subtotal, Agency Management.....	9,700	-747	+444	+42,567	51,964
General Provision 748 <sup>a/</sup> .....	-	-	+20,000	-20,000	-
Total, Appropriation or Change .....	\$816,534	-\$58,015	+\$83,202	-\$7,380	\$834,341

a/ The FY 2014 General Provision 748 provides \$20 million in one-time funding for control, management and associated activities directly related to the multiple-agency response to citrus greening. Funds will be available until September 30, 2015.

## ANIMAL AND PLANT HEALTH INSPECTION SERVICE

## Salaries and Expenses

Project Statement  
Appropriations Detail and Staff Years (SYs)  
(Dollars in thousands)

Program	2012 Actual		2013 Actual		2014 Estimate		Inc. or Dec.		2015 Estimate	
	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs
Discretionary Appropriations:										
<u>Safeguarding and Emergency Preparedness/Response</u>										
Animal Health Technical Services.....	\$32,500	64	\$34,018	64	\$35,339	64	+\$2,550	-	\$37,889	64
Aquatic Animal Health.....	2,261	22	2,087	22	2,253	22	-	-	2,253	22
Avian Health.....	52,000	196	47,993	196	52,340	196	-2,117	-2	50,223	194
Cattle Health.....	99,000	570	90,341	560	92,500	555	-	-	92,500	555
Equine, Cervid & Small Ruminant Health.....	22,000	133	17,692	129	19,500	120	-	-	19,500	120
National Veterinary Stockpile.....	2,750	1	2,538	1	3,722	1	-	-	3,722	1
Swine Health.....	23,000	127	21,228	122	22,250	120	-	-	22,250	120
Veterinary Biologics.....	16,457	108	15,189	108	16,417	109	-	-	16,417	109
Veterinary Diagnostics.....	31,611	190	29,175	190	31,540	190	-	-	31,540	190
Zoonotic Disease Management.....	9,000	45	9,575	45	9,523	45	-	-	9,523	45
Subtotal, Animal Health.....	290,579	1,456	269,834	1,437	285,384	1,422	+433	-2	285,817	1,420
<u>Agricultural Quarantine Inspection</u>										
(Appropriated) .....	27,500	364	26,304	360	26,900	360	-	-	26,900	360
Cotton Pests.....	17,848	61	14,739	61	12,720	58	-3,665	-	9,055	58
Field Crop & Rangeland Ecosystems Pests.....	9,068	60	8,369	58	8,826	58	-	-	8,826	58
Pest Detection.....	27,500	145	25,381	145	27,446	145	-	-	27,446	145
Plant Protection Methods Development.....	20,600	140	19,935	139	24,549	141	-4,000	-	20,549	141
Specialty Crop Pests.....	153,950	700	142,087	694	151,500	688	-14,107	-7	137,393	681
Tree & Wood Pests.....	55,638	321	52,273	319	54,000	319	-8,608	-4	45,392	315
Subtotal, Plant Health .....	312,104	1,791	289,089	1,776	305,941	1,769	-30,380	-11	275,561	1,758
<u>Wildlife Damage Management</u>										
Wildlife Services Methods Development.....	18,000	164	17,536	163	18,856	163	-	-	18,856	163
Subtotal, Wildlife Services .....	90,500	698	85,372	689	106,284	783	-	-	106,284	783
<u>Animal &amp; Plant Health Regulatory Enforcement...</u>										
Biotechnology Regulatory Services.....	18,135	92	16,738	90	18,135	92	-	-	18,135	92
Subtotal, Regulatory Services .....	34,410	234	31,758	228	34,359	234	-	-	34,359	234
<u>Contingency Fund.....</u>										
Emergency Preparedness & Response.....	17,000	91	15,690	89	16,966	90	-	-	16,966	90
Subtotal, Emergency Management .....	18,000	106	17,074	104	17,436	95	-	-	17,436	95
Emergency Preparedness/Response.....	745,593	4,285	693,128	4,234	749,404	4,303	-29,947	-13	719,457	4,290
<u>Safe Trade and International Technical Assistance</u>										
Agriculture Import/Export.....	13,354	92	12,325	92	14,099	92	-	-	14,099	92
Overseas Technical & Trade Operations.....	20,104	73	18,472	73	20,114	76	-	-	20,114	76
International Technical Assistance.....	33,458	165	30,797	165	34,213	168	-	-	34,213	168
<u>Animal Welfare</u>										
Animal Welfare.....	27,087	224	25,000	213	28,010	218	-	-	28,010	218
Horse Protection.....	696	5	642	5	697	6	-	-	697	6
Subtotal, Animal Welfare.....	27,783	229	25,642	218	28,707	224	-	-	28,707	224
<u>Agency-Wide Programs</u>										
APHIS Information Technology Infrastructure.....	4,335	-	4,001	-	4,251	-	-	-	4,251	-
Physical/Operational Security.....	5,365	-	4,952	-	5,146	-	-	-	5,146	-
Decentralized GSA Rental and DHS Security Payments.....	-	-	-	-	-	-	+42,567	-	42,567	-
Subtotal, Agency Management.....	9,700	-	8,953	-	9,397	-	+42,567	-	51,964	-
Subtotal, Appropriated .....	816,534	4,679	758,519	4,617	821,721	4,695	+12,620	-13	834,341	4,682

Program	2012 Actual		2013 Actual		2014 Estimate		Inc. or Dec.		2015 Estimate	
	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs
General Provision 748.....	-	-	-	-	20,000	-	-20,000	-	-	-
Rescission P.L. 113-6.....	-	-	22,256	-	-	-	-	-	-	-
Sequester P.L. 113-6.....	-	-	41,077	-	-	-	-	-	-	-
<b>Subtotal, Discretionary Appropriated .....</b>	<b>816,534</b>	<b>4,679</b>	<b>821,851</b>	<b>4,617</b>	<b>841,721</b>	<b>4,695</b>	<b>-7,380</b>	<b>-13</b>	<b>834,341</b>	<b>4,682</b>
Authority from Offsetting collections.....	205,042	1,627	234,983	1,500	154,450	1,500	+3,089	9	157,539	1,509
Sequester P.L. 113-6...Offsetting Collections.....	-	-	-900	-	-	-	-	-	-	-
<b>Subtotal, Offsetting Collections.....</b>	<b>205,042</b>	<b>1,627</b>	<b>234,083</b>	<b>1,500</b>	<b>154,450</b>	<b>1,500</b>	<b>+3,089</b>	<b>9</b>	<b>157,539</b>	<b>1,509</b>
<b>Mandatory Funding:</b>										
Farm Bill, Section 10007 .....	-	-	-	-	62,500	15	-	-	62,500	15
Farm Bill, Section 10201 .....	50,000	15	50,000	15	-	-	-	-	-	-
Farm Bill, Section 10202 .....	5,000	-	-	-	-	-	-	-	-	-
Sequester P.L. 113-6...Farm Bill.....	-	-	-2,550	-	-4,140	-	+4,140	-	-	-
<b>Subtotal, Farm Bill.....</b>	<b>55,000</b>	<b>15</b>	<b>47,450</b>	<b>15</b>	<b>58,360</b>	<b>15</b>	<b>+4,140</b>	<b>-</b>	<b>62,500</b>	<b>15</b>
Trust Funds.....	10,186	150	13,071	50	9,000	50	-	-	9,000	50
<b>Agricultural Quarantine Inspection User Fees:</b>										
Total Collections.....	548,329	1,350	576,786	1,250	594,529	1,250	+101,889	-	696,418	1,250
Less: Transfer to DHS .....	-348,805	-	-366,370	-	-362,526	-	-101,988	-	-464,514	-
Sequester P.L. 113-6 ...AQI.....	-	-	-10,731	-	-16,704	-	+16,704	-	-	-
AQI User Fees (APHIS).....	199,523	1,350	199,685	1,250	215,299	1,250	-100	-	231,904	1,250
<b>Subtotal, Mandatory Funding.....</b>	<b>264,710</b>	<b>1,515</b>	<b>260,206</b>	<b>1,315</b>	<b>282,659</b>	<b>1,315</b>	<b>+20,745</b>	<b>-</b>	<b>303,404</b>	<b>1,315</b>
<b>Total Appropriations .....</b>	<b>1,286,286</b>	<b>7,821</b>	<b>1,252,808</b>	<b>7,432</b>	<b>1,278,830</b>	<b>7,510</b>	<b>+16,454</b>	<b>-4</b>	<b>1,295,284</b>	<b>7,506</b>
<b>Transfers In:</b>										
CCC.....	21,294	2	-	-	-	-	-	-	-	-
Departmental .....	111	-	102	-	-	-	-	-	-	-
<b>Transfers Out:</b>										
Working Capital Fund.....	-2,500	-	-250	-	-	-	-	-	-	-
<b>Subtotal, Transfers.....</b>	<b>18,905</b>	<b>2</b>	<b>-148</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
Balance Available, SOY.....	293,480	15	322,698	170	406,476	211	+5,377	-31	411,853	180
Sequester P.L. 113-6 ...Trust Funds.....	-	-	-67	-	-95	-	+95	-	-	-
Recoveries Trust Funds.....	321	-	436	-	-	-	-	-	-	-
Recoveries.....	22,491	-	25,811	-	-	-	-	-	-	-
<b>Total Available .....</b>	<b>1,621,482</b>	<b>7,838</b>	<b>1,601,538</b>	<b>7,602</b>	<b>1,685,211</b>	<b>7,721</b>	<b>+21,925</b>	<b>-35</b>	<b>1,707,136</b>	<b>7,686</b>
Lapsing Balances.....	-10,572	-215	-10,834	-220	-	-	-	-	-	-
Balance Available, EOY.....	-322,698	-170	-406,476	-211	-411,853	-180	+12,533	+2	-399,321	-178
<b>Total Obligations .....</b>	<b>1,288,212</b>	<b>7,453</b>	<b>1,184,228</b>	<b>7,171</b>	<b>1,273,358</b>	<b>7,541</b>	<b>+34,457</b>	<b>-33</b>	<b>1,307,815</b>	<b>7,508</b>

## ANIMAL AND PLANT HEALTH INSPECTION SERVICE

## Salaries and Expenses

Project Statement  
Obligations Detail and Staff Years (SYs)  
(Dollars in thousands)

Program	2012 Actual		2013 Actual		2014 Estimate		Inc. or Dec.		2015 Estimate	
	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs
<u>Discretionary Obligations:</u>										
<u>Safeguarding and Emergency</u>										
<u>Preparedness/Response</u>										
Animal Health Technical Services.....	\$30,349	64	\$33,484	64	\$38,151	64	-\$976	-	\$37,175	64
Aquatic Animal Health.....	2,261	22	1,988	20	2,253	22	-	-	2,253	22
Avian Health.....	53,206	194	50,207	187	50,705	196	+948	-2	51,653	194
Cattle Health.....	97,722	570	89,331	544	92,500	557	-21	-	92,479	557
Equine, Cervid & Small Ruminant Health.....	23,552	133	18,715	127	20,000	120	-1,000	-	19,000	120
National Veterinary Stockpile.....	3,026	1	2,596	1	4,238	2	-738	-1	3,500	1
Swine Health.....	22,897	127	20,318	122	22,250	120	-	-	22,250	120
Veterinary Biologics.....	16,445	108	15,179	107	16,417	109	-	-	16,417	109
Veterinary Diagnostics.....	31,582	190	29,153	190	31,540	190	-	-	31,540	190
Zoonotic Disease Management.....	8,956	45	9,414	41	9,523	45	-	-	9,523	45
Subtotal, Animal Health.....	289,996	1,454	270,385	1,403	287,577	1,425	-1,787	-3	285,790	1,422
<u>Agricultural Quarantine Inspection</u>										
(Appropriated).....	27,211	362	26,274	360	26,900	360	-	-	26,900	360
Cotton Pests.....	19,860	63	13,962	60	9,004	60	+3,746	-2	12,750	58
Field Crop & Rangeland Ecosystems Pests.....	8,896	60	8,385	57	8,777	60	+423	-2	9,200	58
Pest Detection.....	27,358	145	25,155	145	27,446	145	-	-	27,446	145
Plant Protection Methods Development.....	20,081	140	19,138	139	24,549	141	-4,000	-	20,549	141
Specialty Crop Pests.....	166,886	704	143,809	687	151,267	693	-6,134	-12	145,133	681
Tree & Wood Pests.....	78,300	324	51,622	303	50,790	324	+980	-9	51,770	315
Subtotal, Plant Health.....	348,592	1,798	288,346	1,751	298,733	1,783	-4,985	-25	293,748	1,758
Wildlife Damage Management.....	70,480	531	68,027	526	87,528	620	-160	-	87,368	620
Wildlife Services Methods Development.....	16,924	163	17,297	163	18,856	163	+14	-	18,870	163
Subtotal, Wildlife Services.....	87,404	694	85,324	689	106,384	783	-146	-	106,238	783
Animal & Plant Health Regulatory Enforcement....	16,189	142	14,728	138	16,224	142	-	-	16,224	142
Biotechnology Regulatory Services.....	18,134	90	15,792	90	18,135	92	-	-	18,135	92
Subtotal, Regulatory Services.....	34,323	232	30,520	228	34,359	234	-	-	34,359	234
Contingency Fund.....	1,500	-	1,644	5	2,000	10	+400	-5	2,400	5
Emergency Preparedness & Response.....	16,753	89	15,637	83	16,966	90	-	-	16,966	90
Subtotal, Emergency Management.....	18,253	89	17,281	88	18,966	100	+400	-5	19,366	95
Subtotal Safeguarding and Emergency Preparedness/Response.....	778,568	4,267	691,856	4,159	746,019	4,325	-6,518	-33	739,501	4,292
<u>Safe Trade and International Technical Assistance</u>										
Agriculture Import/Export.....	13,310	92	12,021	92	14,099	92	-	-	14,099	92
Overseas Technical & Trade Operations.....	20,104	73	18,442	70	20,114	76	-	-	20,114	76
Subtotal Safe Trade and International Technical Assistance.....	33,414	165	30,463	162	34,213	168	-	-	34,213	168
<u>Animal Welfare</u>										
Animal Welfare.....	27,016	218	24,585	210	28,010	218	-	-	28,010	218
Horse Protection.....	696	5	640	5	697	6	-	-	697	6
Subtotal, Animal Welfare.....	27,712	223	25,226	215	28,707	224	-	-	28,707	224
<u>Agency-Wide Programs</u>										
APHIS Information Technology Infrastructure.....	4,494	-	3,921	-	4,360	-	-106	-	4,254	-
Physical/Operational Security.....	5,224	-	4,947	-	5,146	-	-	-	5,146	-
Decentralized GSA Rental and DHS Security Payments.....	-	-	-	-	-	-	+42,567	-	42,567	-
Subtotal, Agency Management.....	9,717	-	8,869	-	9,506	-	+42,461	-	51,967	-
General Provision 748.....	-	-	-	-	12,000	-	-4,000	-	8,000	-
Subtotal, Discretionary.....	849,412	4,655	756,414	4,536	830,445	4,717	+31,942	-33	862,387	4,684
<u>Mandatory Obligations:</u>										
Agricultural Quarantine Inspection User Fees.....	188,234	1,350	194,095	1,121	204,095	1,250	+2,041	-	206,136	1,250
Farm Bill.....	52,115	15	47,008	15	58,360	15	+4,492	-	62,852	15
Trust Funds.....	11,702	150	14,919	50	9,000	50	-	-	9,000	50
Subtotal, Mandatory.....	252,051	1,515	256,021	1,186	271,455	1,315	+6,533	-	277,988	1,315

Program	2012 Actual		2013 Actual		2014 Estimate		Inc. or Dec.		2015 Estimate	
	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs
Other Obligations:										
CCC.....	24,561	3	5,213	0	4,200	-	-4,200	-	-	-
Obligations from Offsetting collections.....	157,285	1,280	162,360	1,449	163,228	1,509	+212	-	163,440	1,509
Homeland Security, HUB Relo, & Department.....	111	-	106	-	30	-	-30	-	-	-
H1N1.....	4,793	-	4,113	-	4,000	-	-	-	4,000	-
Subtotal, Other .....	<u>186,750</u>	<u>1,283</u>	<u>171,793</u>	<u>1,449</u>	<u>171,459</u>	<u>1,509</u>	<u>-4,019</u>	<u>-</u>	<u>167,440</u>	<u>1,509</u>
Total, Obligations .....	<u>1,288,212</u>	<u>7,453</u>	<u>1,184,228</u>	<u>7,171</u>	<u>1,273,358</u>	<u>7,541</u>	<u>+34,457</u>	<u>-33</u>	<u>1,307,815</u>	<u>7,508</u>
Lapsing Balances.....	10,572	215	10,834	220	-	-	-	-	-	-
Balance Available, EOY.....	322,698	170	406,476	211	411,853	180	-12,532	-2	399,321	178
Total, Available .....	<u>1,621,482</u>	<u>7,838</u>	<u>1,601,538</u>	<u>7,602</u>	<u>1,685,211</u>	<u>7,721</u>	<u>+21,925</u>	<u>-35</u>	<u>1,707,136</u>	<u>7,686</u>
Transfers In:										
CCC .....	-21,294	-2	-	-	-	-	-	-	-	-
Departmental.....	-111	-	-102	-	-	-	-	-	-	-
Transfers Out:										
Working Capital Fund.....	2,500	-	250	-	-	-	-	-	-	-
Sequester P.L. 113-6.....	-	-	67	-	95	-	-95	-	-	-
Balance Available, SOY.....	-293,480	-15	-322,698	-170	-406,476	-211	-5,376	+31	-411,853	-180
Recoveries: Other (Net).....	-22,812	-	-26,248	-	-	-	-	-	-	-
Total, Appropriation .....	<u>1,286,286</u>	<u>7,821</u>	<u>1,252,808</u>	<u>7,432</u>	<u>1,278,830</u>	<u>7,510</u>	<u>+16,454</u>	<u>-4</u>	<u>1,295,284</u>	<u>7,506</u>

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Justification of Increases and Decreases  
Salaries and Expenses

Citrus Greening (\$20,000,000 available in 2014)

APHIS' budget request reflects the removal of a General Provision (Sec. 748) in the FY 2014 Consolidated Appropriations Act that provided \$20 million in one-time funding for a special effort to combat citrus greening. Congress authorized the funding for use in FYs 2014 and 2015. A USDA Multi-Agency Coordination (MAC) Group, working with citrus stakeholders, will use it to further safeguard domestic and international citrus exports by addressing this growing threat.

An increase of \$4,526,000 to fund increased pay costs which includes \$1,116,000 for annualization of the fiscal year 2014 pay raise and \$3,410,000 for the anticipated fiscal year 2015 pay raise.

A large portion of APHIS' budget is in support of personnel compensation. Having to absorb the \$4.526 million in increased pay costs will result in a reduction of direct program dollars available for hands-on operations.

- (1) A net decrease of \$29,947,000 and a decrease of 13 staff years for Safeguarding and Emergency Preparedness/Response:

A net increase of \$433,000 and a decrease of 2 staff years for Safeguarding and Emergency Preparedness/Response - Animal Health.

- (a) An increase of \$2,550,000 for the Animal Health Technical Services program (\$35,339,000 and 64 staff years available in 2014).

APHIS' Animal Health Technical Services program enhances the tools available for acquiring and managing information vital for maintaining and improving global market access. Incorporating national surveillance data standards into data management applications enables animal health information entered by Federal, State, Tribal and private individuals in multiple systems to be compiled nationally, thus leveraging the work of animal health professionals across the country to meet local, State and national veterinary health objectives. Private veterinarians trained and accredited by APHIS assist producers in meeting both export requirements and disease program standards, allowing U.S. animals and animal products to compete in the global economy. Disease transmission and spread models developed and shared by the Agency allow improved planning and management of animal health incidents.

Technical applications and systems made available by APHIS are vital for national animal health surveillance and response activities. The Agency is assisting interested States in installing and using the Agency's current product for managing animal disease surveillance data. Additionally, the program increased the use of validated and verified animal disease spread models, linked to economic impact models, to develop and test disease response strategies. APHIS leads the implementation of the joint USDA/Department of Homeland Security foreign animal disease modeling analysis center, and contributes funding to additional modeling efforts through cooperative agreements.

The activities conducted to safeguard American agriculture are too expansive to be overseen only by Federally-employed veterinarians. The voluntary National Veterinary Accreditation Program (NVAP) authorizes 64,000 private veterinary practitioners to work with Federal veterinarians and State animal health officials on cooperative animal health related programs. Through the NVAP, APHIS leverages the medical expertise and community relationships of private veterinarians to deliver critical, Federally-regulated animal health services to safeguard animal and public health. In addition, USDA-accredited veterinarians certify exports to facilitate international market access for a rapidly growing number of U.S. producers. APHIS has integrated formal NVAP training into the curriculum of all 28 U.S. veterinary schools, building knowledge among new veterinary professionals. Failure to adhere to the Federal

standards that APHIS oversees can result in license suspension or revocation of a participating accredited veterinarian. On average, less than ten veterinarians have their accreditation suspended or revoked each year.

Because animal traceability is a vital issue with U.S. trading partners, APHIS has been developing the new animal disease traceability (ADT) framework. This framework brings together Federal, State, Tribal, and private animal health professionals to identify diseased animals in a timely manner, quickly trace their movements, and control disease spread. These activities are crucial to protecting the U.S. livestock industry, whose production value was approximately \$70 billion in 2012. Knowing where diseased and at-risk animals are located helps preserve animal health, reduce animal deaths if outbreaks occur, and limit economic losses to owners and communities. This approach addresses many producer concerns about previous efforts to implement a national animal identification system by directing more responsibility to the State and Tribal level. Additionally, it offers basic, low-cost animal identification options that are well supported by most industry sectors as a starting point to increase the number of animals officially identified, particularly for cattle. While other species are included, current practices for many of those species result in adequate traceability and are being maintained.

The new ADT approach also addresses many concerns that Congress identified with the previous approach, including the need to establish performance standards to measure the system's value and that are linked to cooperator funding, developing a mandatory system, and a reliable system with reasonable operational costs. The improved framework will focus on where the impact of disease spread is the greatest—animals moving interstate. Rulemaking that requires official identification of livestock as well as certificates that document the health of the animals (unless otherwise exempt) will assure necessary participation. This rulemaking will enhance the ability of the United States to regionalize and compartmentalize animal health issues more quickly, minimizing losses and enabling the reestablishment of foreign and domestic market access with minimum delay during an animal disease event. This will help the U.S. animal and animal product exports to remain competitive in the global market place as trade requirements increasingly require such a system to allow access to markets. APHIS' objective is to decrease the time needed to trace animals, and the performance-based approach directs these efforts accordingly. The Agency estimates that a disease trace can be conducted twice as quickly when official identification is used. States and Tribes will implement traceability programs that work with their stakeholders and align to national standards. The Agency provides funding to help support the implementation of ADT at the local level. In FY 2014, 80 percent of States and Tribes had an approved ADT strategic plan with APHIS, which include performance measures and implementation plans. The Agency anticipates that all States receiving cooperative agreement funds will have a current strategic plan consistent with the recently implemented final rule for ADT by the end of FY 2015.

APHIS proposes an increase of \$2.550 million for the AHTS program, of which a total of \$14.866 will be allocated to the ADT program. With this increase APHIS will be able to build additional database integration, conduct additional tag retirement feasibility studies, or provide additional cooperative funds to States and tribes. As a result, progress on improving the ability to trace animals quickly and efficiently will be hindered. In FY 2015, the Agency plans to provide \$7 million to States and Tribes through cooperative agreements to support implementation of the revised traceability plan, and will use \$3.8 million to support field personnel, \$3.5 million on program administration, and \$500,000 on information technology activities specific to the ADT program. The requested increase will enable APHIS to maintain the current level of infrastructure, and to continue the progress made in premises registration and data collection and management. The proposed funding level accurately reflects how much the program needs to carry out essential activities and retain the advances made to date, while not compromising other critical animal health data management systems such as laboratory information systems that allow test results to be shared between reporting systems, surveillance data storage and analysis, and emergency management systems that ensure timely response in the event of an animal disease outbreak.

Without funding for this program, the information needed to trace the origin of diseased animals would not be available, resulting in increased disease spread and potential loss of marketability for animals and animal products, both in the United States and through exports. A 2011 study from Kansas State

University points out that export restrictions due to the discovery of a single cow with bovine spongiform encephalopathy in 2004 resulted in losses to the U.S. beef industry ranging from \$3.2 billion to \$4.7 billion. Researchers argue that cattle traceability would limit the amount of time market access is lost following an outbreak of some disease. Further, there would be diminished credibility of animal health information for U.S. animals and animal products in the export market due to the lack of national surveillance information and Federal oversight of accredited veterinarians who perform examinations and testing for animals being exported.

Overall, approximately 50 percent of the program's funding supports salaries and benefits of personnel, 20 percent funds contracts and agreements, 16 percent funds major IT system costs, and the remaining supports normal operating costs such as travel, supplies, rent and utilities.

Pay Increase - redirect (+\$62,000)

An increase of \$62,000 for pay costs which includes \$15,000 for annualization of the FY 2014 pay raise and \$47,000 for the anticipated FY 2015 pay raise.

(b) Aquatic Animal Health program (\$2,253,000 and 22 staff years available in 2014).

APHIS supports efforts to protect the health and thereby improve the quality and productivity of aquatic animal industries. APHIS conducts activities that prevent the introduction or spread of reportable aquatic animal pathogens into farmed populations. The Agency also collaborates with other relevant agencies and stakeholders to prevent the spread of aquatic animal pathogens into wild aquatic animal populations. APHIS maintains regulations and program standards that guide aquatic animal health activities at both the Federal and State/Tribal level.

The Aquatic Animal Health Program contributes to protecting animal health within the aquaculture industry, which was last valued at \$1.4 billion in 2007. APHIS has a role in developing a national aquatic animal health infrastructure to help the domestic aquaculture industry. APHIS' surveillance efforts in aquatic animal species are designed to detect foreign, emerging, and domestic diseases that could have a substantial impact on domestic production and the economy. The Agency collaborates with States, Tribes, Federal agencies, and the industry to establish standards for surveillance and disease control. Establishing and maintaining these national standards is an important Federal responsibility that supports interstate and international commerce by providing assurances regarding the health of animals and products being moved or traded.

APHIS is leading the interagency collaborative effort to increase the effectiveness of aquatic animal health efforts in the United States. The Secretary of Agriculture's Advisory Committee on Animal Health recently appointed a Subcommittee on Aquatic Animal Health. APHIS is a key member of the Joint Subcommittee on Aquaculture, a statutory committee that operates under the National Science and Technology Council of the White House Office of Science and Technology Policy. APHIS enters into limited cooperative agreements with State animal health and wildlife agencies and Native American Tribes to support surveillance efforts. APHIS, States, Tribes, and the industry collaborate regularly on policy and guidelines. APHIS also works with international trading partners to facilitate safe trade in aquatic animals and products.

Funding for this program improves preparedness, surveillance, and response to aquatic animal health issues, and reduces the likelihood of disease spread resulting in larger and more serious disease outbreaks.

Approximately 74 percent of the Aquatic Animal Health program funding supports salaries and benefits, less than 5 percent is for cooperative agreements and programmatic contracts, and the remaining funding supports normal operating costs such as travel, supplies, and rent and utilities.

Pay Increase - redirect (+\$21,000)

An increase of \$21,000 for pay costs which includes \$5,000 for annualization of the FY 2014 pay raise and \$16,000 for the anticipated FY 2015 pay raise.

- (c) A decrease of \$2,117,000 and 2 staff years for the Avian Health program (\$52,340,000 and 196 staff years available in 2014).

The Avian Health program protects the health of avian species, improving the quality, productivity, and economic viability of the poultry industry valued at more than \$35 billion. APHIS activities include disease prevention, monitoring and surveillance, and investigation and response actions undertaken when avian health issues are identified. APHIS' surveillance programs for avian species detect foreign, emerging, zoonotic, and domestic diseases that could have a substantial impact on domestic production and the economy. Surveillance information verifies and documents that certain diseases do not exist in the poultry populations, thus facilitating trade and protecting public health. APHIS also maintains regulations and program standards and guidelines that direct avian health activities at both the Federal and State/Tribal level. Establishing and maintaining these national standards is an important Federal responsibility that supports interstate and international commerce by providing assurances regarding the health of animals and products being moved or traded.

APHIS' avian health program primarily focuses on notifiable avian influenza (NAI), which are the forms of avian influenza that must be reported to the World Organisation for Animal Health (OIE) due to their potential for health threat and disease spread. Annually, APHIS' funding supports more than two million tests in commercial poultry and more than 200,000 tests in smaller premises such as backyard birds and the Live Bird Marketing System (LBMS). NAI findings must be investigated or addressed to prevent mutation of low pathogenic strains into highly pathogenic strains that can devastate the domestic poultry population, close export markets to U.S. poultry and poultry products, and cause disease and death in humans. Without this program, a lack of national standards would likely lead to a patchwork of State-level requirements that would diminish interstate commerce and the United States' credibility with international trading partners. The cost of an outbreak of highly pathogenic avian influenza (HPAI) could be staggering. If an HPAI outbreak were to occur similar to that in the early 1980s in Pennsylvania, it has been estimated that the direct cost of eradication would be more than \$222 million and indirect costs such as to the poultry industry would be more than \$924 million (in current dollars).

As a result of the LBMS program and the surveillance and response efforts by APHIS and the States, the incidence of low pathogenic avian influenza (LPAI) on the LBMS has decreased steadily. While the number of premises sampled has remained the same, the number of LBMS found positive with avian influenza (AI) in FY 2013 was 4. This represents a significant improvement from the 29 found positive in FY 2007. The positive premises were depopulated, cleaned, and disinfected according to established standards. APHIS' program for AI surveillance in the LBMS, backyard poultry and upland game birds represents support for thousands of small and/or independent farmers and producers, therefore allowing access to markets for these entities.

In addition to reducing the impact on producers, States, and Tribes, APHIS' rapid response to NAI findings also facilitates exports. For example, during an outbreak of HPAI in 2004 in Texas, some major importers of U.S. poultry placed regional bans instead of countrywide bans, allowing non-affected areas to continue trade. These negotiations have been successful because our surveillance includes frequent follow-up testing when a suspect AI finding is detected as well as testing contact birds and premises to ensure the virus has not spread.

The National Poultry Improvement Plan (NPIP) has been a successful program for decades. It is a cooperative Federal-State-industry surveillance program that allows the U.S. to certify to our trading partners that many classes of poultry (e.g., egg- and meat-type chicken breeding stock, breeding turkeys, upland game bird, waterfowl, and exhibition poultry) originate from flocks that are monitored or are free of

diseases such as salmonella, mycoplasma, and NAI. APHIS provides most of the funding for the program through cooperative agreements with States to enhance NAI surveillance and control and to aid in the diagnosis, control, and prevention of the spread of NAI in poultry populations. In 2013, APHIS performed approximately 1.8 million tests through NPIP. By supporting the poultry industry's ability to market, the NPIP supports thousands of jobs in the major poultry producing States. It is for this reason that the NPIP will not be affected by the requested reduction to Avian Health. As an additional means of support, APHIS is currently streamlining NPIP regulations to allow them to be more easily updated.

Internationally, USDA works closely with organizations such as the OIE, the United Nations' Food and Agriculture Organization (FAO), and the World Health Organization to assist HPAI H5N1-affected regions with disease prevention, management, and eradication activities. APHIS provides training and support overseas to respond to AI outbreaks to prevent the disease from entering the United States and has assisted foreign governments in reducing the severity and number of poultry and human deaths due to AI. Collaborative border programs led to the implementation of a U.S./Mexico Wildlife Disease Border Surveillance Plan allowing cross border surveillance for AI. By helping countries prepare for, manage, or eradicate HPAI H5N1 outbreaks, APHIS has reduced the risk of the disease spreading from overseas to the United States.

The Avian Health program continuously evaluates its activities to ensure it is operating efficiently. For example, the program has increased the use of controlled-marketing where flocks can continue to be slaughtered and receive a market value as a cost-effective alternative to depopulating bird flocks when LPAI is detected in the absence of disease. Other operational changes include reducing the number of APHIS personnel used as instructors in international training courses by 70 percent. APHIS has used the "train the trainer" process and transferred the knowledge to overseas collaborators such as FAO, OIE, and non-governmental organizations.

Because of the improving global AI situation and the completion of significant preparedness projects, APHIS is proposing a \$2.117 million decrease for the Avian Health program to reduce operations based on known risk. In addition, with knowledge gained regarding AI in wild bird populations, APHIS can reduce levels of testing and investigations conducted of mortality events in wild birds. At the requested funding level, APHIS will be able to maintain program activities designed to protect domestic poultry (e.g., commercial production and live bird markets) and detect disease introduction into U.S. poultry. Again, the reduction would not impact the Agency's support for the NPIP.

Without the remaining funding for this program, there would be reduced preparedness, surveillance and response to avian health issues that would increase the likelihood of disease spread resulting in larger and more serious disease outbreaks. In addition, a lack of national standards would likely lead to a patchwork of State level requirements that would diminish interstate commerce and cause a loss in international credibility regarding the U.S. animal health status.

Approximately 50 percent of the Avian Health funding will be used for salaries and benefits, 45 percent will be used for cooperative agreements and programmatic contracts. The remaining funding supports normal operating costs such as travel, supplies, rent and utilities.

*Pay Increase – redirect (+\$189,000)*

An increase of \$189,000 for pay costs which includes \$47,000 for annualization of the FY 2014 pay raise and \$142,000 for the anticipated FY 2015 pay raise.

(d) Cattle Health program (\$92,500,000 and 555 staff years available in 2014).

The Cattle Health program protects the health of cattle and improves the quality, productivity and economic viability of the cattle industry (meat and milk) valued at \$85 billion. APHIS activities include disease prevention, monitoring and surveillance, and investigation and response actions undertaken when cattle health issues are identified. APHIS also maintains regulations, program standards, and guidelines

that direct cattle health activities at both the Federal and State/Tribal level. Establishing and maintaining these national standards is an important Federal responsibility that supports interstate and international commerce by providing assurances regarding the health of animals and products being moved or traded.

APHIS conducts preventive programs to keep exotic pests and diseases out of the country. APHIS collaborates with countries in Central America to prevent the entrance of screwworm and other high-risk transboundary animal diseases, thereby creating a barrier against the spread of disease into the United States. Preventing the spread of screwworm into the United States is estimated to save approximately \$53 million annually. In 1976, a screwworm outbreak in Texas resulted in an estimated \$113 to \$150 million in losses. Nearly four decades later, screwworm damage has been contained because of the APHIS preventative program that continues to keep this serious pest away from U.S. livestock. As a result of successful screwworm eradication programs, most Central American countries have been declared screwworm-free, helping to create an effective barrier to the United States. In addition to screwworm, APHIS works cooperatively with Mexico and other countries in Central America to assist with the detection and control of foot-and-mouth disease (FMD) and bovine spongiform encephalopathy (BSE).

APHIS, States, Tribes, and industry collaborate regularly and exchange ideas on policy and guidelines. The agency also works with international trading partners to facilitate safe trade in cattle and cattle products. APHIS enters into cooperative agreements with State animal health and wildlife agencies and Native American Tribes to carry out surveillance and response programs. APHIS also works through the Binational Committee with Mexico to discuss issues of mutual concern including cattle fever tick, brucellosis, and tuberculosis (TB).

Through cooperative efforts between APHIS and the State of Texas, the Cattle Health program has been 100 percent effective in preventing cattle fever tick from spreading within the United States. One study estimates the costs of a relatively small cattle fever tick outbreak in the free area of Texas would cause losses of \$123 million during the first year of the outbreak.

Early detection of devastating diseases such as FMD is vital; an article published in the *Journal of Veterinary Diagnostics and Investigations* estimated that losses climb from \$2.3 billion if an FMD outbreak is identified at day 7 to \$69 billion if the outbreak is not detected until day 22. This illustrates the value of the Animal Disease Traceability program's capability to quickly locate and contain a disease or incident. It also illustrates the consequence of a slow detection or delayed response. APHIS' cattle surveillance programs are designed to quickly detect foreign, emerging, zoonotic and domestic animal diseases that could have a substantial impact on domestic producers and the economy; cause loss of consumer confidence in the U.S. food supply; and/or have substantial economic impact to responding State, Tribal, and Federal animal health agencies. In addition, surveillance information verifies and documents that certain diseases do not exist in the cattle population, thus facilitating trade and protecting public health. BSE surveillance information from the APHIS Cattle Health program has been instrumental in allowing the United States to maintain the export market for all beef, which was worth approximately \$5 billion in FY 2013.

The Cattle Health program continues to make great strides toward eradicating brucellosis from domestic cattle and bison; wildlife in the Greater Yellowstone Area remains the last known reservoir of brucellosis in the United States. The State of Wyoming conducted an economic analysis that indicated that should brucellosis eradication efforts be discontinued, the costs of producing beef and milk would increase by an estimated \$80 million annually in less than 10 years as the disease would again become active. With the successful eradication of brucellosis in domestic cattle, the program is streamlining surveillance efforts while ensuring that surveillance data are sufficient to demonstrate a national disease-free status to trading partners.

APHIS is also looking at ways it can use science to identify opportunities for greater flexibility in its regulations and other program practices. The Cattle Health program also continues to make progress in eradicating TB from domestic livestock. Iowa State University conducted a study that suggests more than \$13 billion has been returned to the U.S. economy in terms of avoided economic losses since the TB

eradication program began. Instead of recommending whole-herd depopulation as the primary option to manage TB-affected herds, APHIS now bases its approach on the circumstances surrounding each herd. For those herds where depopulation is not recommended, the herd undergoes a test-and-remove protocol, gaining significant savings of Federal dollars while continuing to eliminate the disease.

Funding for this program increases preparedness, surveillance and response to cattle health issues. These activities reduce the likelihood of disease spread resulting in larger and more serious disease outbreaks.

Approximately 56 percent of the Cattle Health funding is for salaries and benefits, 22 percent is for cooperative and programmatic contracts, such as those that support BSE sampling, cattle fever tick treatment, and lab/blood sampling. The remaining funds support normal operating costs such as travel, supplies, rent and utilities.

*Pay Increase – redirect (+\$532,000)*

An increase of \$532,000 for pay costs which includes \$131,000 for annualization of the FY 2014 pay raise and \$401,000 for the anticipated FY 2015 pay raise.

(e) Equine, Cervid and Small Ruminant Health program (\$19,500,000 and 120 staff years available in 2014).

The Equine, Cervid, and Small Ruminant Health (ECSRH) program protects the health and improves the quality, productivity, and economic viability of the equine, cervid, sheep, and goat industries. These industries have a direct annual economic effect of \$39 billion for equine, \$894 million for cervid, and \$785 million for sheep. The direct economic impact for goats has not been reported but is likely to be approximately \$400 million. APHIS activities include monitoring and surveillance, investigation and response, and disease prevention and preparedness actions taken when health issues are identified. APHIS' monitoring and surveillance activities detect foreign, emerging, zoonotic, and domestic diseases that could substantially impact the economy. APHIS works with international and domestic trading partners to facilitate safe trade and establish minimum standards to allow safe trade in equine, cervids, and small ruminants and their products.

Monitoring and Surveillance

APHIS conducts monitoring and surveillance activities with States to protect the health of the equine, cervid, and small ruminant industries. Furthermore, APHIS works with States to ensure that cases of diseases of trade concern found in equine, cervids, and small ruminants are reported to the World Organisation for Animal Health (OIE). In 2013, the ECSRH program conducted disease surveillance and/or monitoring for the following diseases: contagious equine metritis (CEM), chronic wasting disease (CWD), Eastern equine encephalitis (EEE) and Western equine encephalitis, equine herpes virus, equine piroplasmiasis (EP), equine infectious anemia (EIA), scrapie, TB, vesicular stomatitis virus (VSV), and West Nile virus (WNV).

Scrapie is a fatal, degenerative disease that affects the central nervous system of sheep and goats. The industry loss due to classical scrapie is estimated to be \$10 to \$20 million annually, not including lost market opportunities due to export restrictions. APHIS performs the following activities to eradicate classical scrapie from the United States: live-animal, necropsy, and slaughter testing to identify infected animals; genetic testing to reduce the susceptibility of sheep flocks to scrapie and to identify which scrapie exposed sheep from infected and source flocks need to be removed to reduce the risk of recurrence; and testing of exposed animals that have moved out of infected flocks and animals exposed due to sale or movement of exposed or positive animals. In FY 2013, APHIS tested 44,955 samples from sheep and goats for scrapie, compared to 42,299 samples tested in FY 2012. This 6 percent increase is largely due to increased surveillance of scrapie in goats. Since 2003, approximately, there has been a 90 percent decrease in the percentage of positive scrapie sheep found at slaughter (adjusted for face color). At the end of FY 2013, the percent of cull sheep found positive at slaughter and adjusted for face color was 0.0146 percent

compared to 0.0057 percent in FY 2012. During this final phase in the eradication effort, it is likely that the numbers will fluctuate from year to year.

To aid in the eradication of bovine TB in the United States, APHIS conducts surveillance testing on captive cervids for the disease. In FY 2013, APHIS began using a new primary screen serology test that uses a blood serum sample instead of a skin test, and a secondary test to further discriminate the primary test positives. The new tests are more sensitive and specific, reduce animal handling, and produce more timely results. Since the tests were introduced in February 2013, the program has tested 9,500 cervids.

In FY 2013, the program tested approximately 18,100 farmed cervids for CWD, a fatal, degenerative disease that affects the central nervous system and lymphoid system of cervids. Through this routine surveillance, no new CWD cases were reported in farmed cervids in FY 2013. The last CWD positive herd was reported in FY 2012 in an Iowa white tail deer herd. Twelve positive herds remain (seven elk herds in Colorado, three elk herds in Nebraska, one white tail deer herd in Iowa, and one red deer herd in Minnesota).

APHIS safeguards the equine industry by helping State animal health officials monitor equine diseases that threaten animal and human health. In 2013, APHIS continued active and passive surveillance activities in all States for vesicular stomatitis with deployment of foreign animal disease diagnosticians for investigation of suspect cases. As of December 12, 2013, APHIS had reported 338 cases of equine WNV and 181 cases of EEE.

#### Investigation and Response

APHIS conducts investigations, responds to disease outbreaks, and enforces regulations that safeguard the health of the nation's livestock. In FY 2013, APHIS assisted in the epidemiological investigation and cleanup of 11 flocks to which scrapie-positive animals were traced. The Agency worked with affected flock owners to identify, indemnify, and remove at-risk animals to minimize the risk of disease recurrence and spread. Upon completion of the cleanup plan, flocks are placed on post-exposure management and monitoring plans for five years.

Although no new TB cases in captive cervids were detected in FY 2013, two captive cervid herds in Michigan remain under an indefinite quarantine since testing positive in 2009. The herds are located in an area of northeast Michigan where free-ranging white-tailed deer are a reservoir for bovine TB. APHIS is working with the State of Michigan to mitigate the risk of transmission from this wildlife reservoir to livestock.

#### Disease Prevention and Preparedness

APHIS' Herd Certifications Programs (HCPs) for CWD, TB, and scrapie provide criteria and minimum Federal standards for participating livestock owners to meet. APHIS reviews State applications, approves State CWD HCPs that meet the requirements of the national CWD HCP rule, conducts periodic reviews to ensure compliance, and supports confirmatory testing of presumptive cases. There are currently 30 States participating in the national CWD HCP – 21 have Approved Status and 9 have Provision Approved Status. States that meet all the minimum CWD HCP program requirements have Approved Status and States that do not meet all CWD HCP program requirements but have developed a work plan and time frame with APHIS to complete those requirements have Provision Approved Status.

The TB program recognizes three levels of herd qualifications for captive cervid herds. These three levels are Accredited, Qualified, and Monitored, and are based on testing over a specified time frame. At the end of FY 2013, there were 1,049 flocks enrolled in the Scrapie Flock Certification Program (SFCP). Of these, 439 were certified (i.e., the flock has a reduced scrapie risk) and 13 were export certified (i.e., the flock has a negligible scrapie risk). Participation in the SFCP provides producers the opportunity to protect their animals from scrapie and enhance the marketability of their animals by certifying their origin in flocks with minimal scrapie risk.

In FY 2013, there were outbreaks or ongoing occurrences of EP, CEM, VSV, and equine herpes myeloencephalopathy. APHIS supported State and industry responses to these outbreaks with coordination, diseases-specific technical guidance, epidemiological expertise, database maintenance, diagnostic assistance and situation reports. APHIS disseminated a variety of information on equine diseases including WNV and EEE.

A new, privately operated, equine import quarantine station in Chicago was approved. APHIS conducted equine import testing and reported test results within one day to meet the 42-hour equine quarantine target. In 2013, APHIS ran approximately 20,000 tests for dourine and glanders tests for equine importation, two highly contagious diseases that affect equines as well as other animals. APHIS provided laboratory certification and annual proficiency testing for EIA, equine viral arteritis, and EP.

Under the Commercial Transportation of Equines for Slaughter Act (9 CFR Part 88), APHIS' authority and role is to ensure the humane transport of U.S. origin equines to slaughter. A final rule, published in 2011, extended the regulatory protections to horses delivered to intermediate points. In 2013, the program trained 150 Federal, State and industry personnel on enforcing the regulation.

#### Regulatory Development

In FY 2013, APHIS revised the SFCP. The revised program emphasizes targeted sampling of participating sheep and goats for scrapie over passive observation. The new approach will enhance scrapie surveillance in the United States and provide greater assurance to trading partners that participating flocks that reach Export Certified status in the program are at negligible risk.

To further ensure the health of animals moving across State lines, APHIS plans to draft two proposed rules requiring disease testing before interstate movement. These rules include new testing requirements for EIA, a viral disease of equines that can spread to affect the health and productivity of the animal, and a TB/brucellosis rule that included interstate testing requirements for captive cervids. The rules would provide a comprehensive, flexible, and risk-based approach to managing EIA and TB/brucellosis. In November 2012, a CWD Working Group was formed. This group, which is comprised of representatives from the cervid industry, State regulatory agencies (Agriculture and Wildlife), National Animal Health Laboratory Network and The National Veterinary Services Laboratories, and APHIS personnel, provides input on the revisions to the CWD Program Standards, a companion guidance document to the CWD rule. Prior to being implemented, APHIS plans to seek public comments in the *Federal Register*.

The Sheep and Goat Health program protects the health and improves the quality, productivity, and economic viability of the sheep and goat industry valued at \$705 million. Surveillance programs for sheep and goats are designed to quickly detect foreign, emerging, zoonotic, and domestic diseases which could have a substantial impact on domestic producers and the economy; create loss of consumer confidence in the U.S. food supply; and/or have substantial economic impact to responding State, Tribal, and Federal animal health agencies. APHIS' National Scrapie Eradication Program effort continues to make steady progress toward eradicating classical scrapie from the United States. Producers have seen reduced production losses caused by scrapie due to the success of the program. The prevalence of classical scrapie in U.S. sheep has decreased by more than 85 percent since 2003. Eleven new infected or source flocks were identified in FY 2013, compared to 179 in FY 2005. APHIS enters into cooperative agreements with State animal health and wildlife agencies and Native American Tribes to carry out surveillance and response programs.

APHIS has implemented numerous improvements, reducing costs and improving the efficiency of program activities. The Agency has saved more than \$5 million in indemnity costs since FY 2005 as a result of the adoption of a genetics-based flock clean up strategy. This genetics-based strategy recognizes that there are sheep that are genetically resistant to scrapie and that exposed genetically-resistant animals do not need to be culled. Implementing the strategy reduced the number of sheep that are required to be depopulated or permanently restricted by approximately 60 percent.

APHIS' main cervid activities are testing approximately 15,000 captive cervids for tuberculosis (TB) each year and supporting the chronic wasting disease (CWD) herd certification program (HCP). The joint TB and brucellosis rule proposes to bring cervids into the regulatory program for brucellosis, as requested by stakeholders. As a result, surveillance will be enhanced and the number of captive cervids that are tested for TB annually is expected to increase. The CWD HCP allows participating States to enroll herd owners to meet minimum Federal standards to achieve and maintain a herd certification status. APHIS approves State applications for the national voluntary CWD herd certification program, conducts periodic reviews to ensure compliance, and supports confirmatory testing of presumptive CWD cases.

USDA is required to report to the World Organization for Animal Health any cases of foreign animal disease in the United States, including contagious equine metritis and equine piroplasmiasis. States are requested to report to USDA annually any cases of domestic equine diseases such as equine herpes virus, equine infectious anemia, Eastern and Western equine encephalitis, and West Nile virus. APHIS provides information on testing and treatment protocols for select non-foreign equine diseases such as WNV. APHIS collects information, and coordinates response efforts and testing protocols for domestic equine diseases. Additionally, APHIS protects the welfare of equines destined for slaughter. Approximately 100,000 horses are exported from the United States annually for slaughter in Canada and Mexico. To the extent allowed by law, APHIS enforces the Commercial Transport to Slaughter Act, which ensures that these horses are afforded welfare provisions during their transport.

Continued program funding increases the preparedness, surveillance, and response to equine, cervid, sheep, and goat health issues, while decreasing the likelihood of disease spread.

Approximately 67 percent of the Equine, Cervid, and Small Ruminant Health funding will be used for salaries and benefits, less than 8 percent for cooperative agreements and programmatic contracts, and the remaining supports normal operating costs such as travel, supplies, rent and utilities.

*Pay Increase – redirect (+\$117,000)*

An increase of \$117,000 for pay costs which includes \$29,000 for annualization of the FY 2014 pay raise and \$88,000 for the anticipated FY 2015 pay raise.

(f) National Veterinary Stockpile program (\$3,722,000 and 1 staff year in 2014).

The National Veterinary Stockpile (NVS) is the nation's repository for critical veterinary countermeasures and a vital component of USDA's emergency preparedness and response efforts. NVS serves as a primary source of materials, supplies, and equipment needed by Federal, State, Tribal and local officials to respond, control, and contain foreign animal and other significant animal disease outbreaks. NVS includes animal handling equipment, animal vaccines, pharmaceutical products, other veterinary supplies, and transportation and response support services, which are all critical countermeasures in the event of a damaging animal disease event/occurrence.

APHIS maintains the capacity to respond to any significant animal health event and the Agency has specific countermeasures ready to deploy within 24 hours of detection for 4 of the 15 most significant animal disease of concern. The program also has contracts in place to provide animal handling equipment and other vital materials in the event of a protracted emergency. Rapid deployment of veterinary countermeasures through the NVS can help reduce the magnitude of animal health events reducing costs incurred by producers, consumers, and response agencies. NVS has the capability to protect a team of 1,500 responders for 63 days and maintain antivirals to support 3,000 responders for 6 weeks.

The NVS assists States, Tribes, and Territories through operational planning, training events, and test exercises in the rapid acquisition, processing, and distribution of these countermeasures during an event. To maximize cost-efficiency and response, APHIS personnel work with academia and industry modelers to develop a scientifically defensible estimate of the quantity of supplies to stockpile for each of the priority

diseases outlined in APHIS' High-Consequence Foreign Animal Disease and Pests Fact Sheet, - including contract terms that specify stock rotations – and continuously evaluate supply chains seeking opportunities to reduce delivery time. The NVS partners with Federal agencies for scientific input on current commercially available veterinary countermeasures such as vaccines, diagnostic test kits, and pharmaceuticals; develops criteria for deployment, including conducting exercises; and, determines ways to leverage stockpiles.

The capacity of the stockpile is commensurate with the resource level. Without NVS' efforts, if outbreaks were to occur, national response efforts would quickly deplete State and industry response inventories and overwhelm the private sector, leading to larger and more serious disease outbreaks. For FY 2015, the NVS plans to hold a full-scale exercise in Wisconsin to test the State's ability to logistically respond to a damaging animal disease. This exercise is being developed in response to a request from the Wisconsin Department of Agriculture, Trade, and Consumer Protection. Wisconsin is among the top States in value of U.S. sales from dairy products, and could be significantly affected by an outbreak of FMD, for example.

Approximately 6 percent of the NVS program funding supports salaries and benefits. Approximately 66 percent funds contracts and agreements. The remaining supports normal operating costs such as travel, supplies, rent and utilities.

*Pay Increase – redirect (+\$1,000)*

An increase of \$1,000 for pay costs which includes \$300 for annualization of the FY 2014 pay raise and \$700 for the anticipated FY 2015 pay raise.

(g) Swine Health program (\$22,250,000 and 120 staff years available in 2014).

The Swine Health program protects the health and improves the quality, productivity, and economic viability of the swine industry valued at more than \$20 billion. APHIS activities include disease prevention, monitoring and surveillance, and investigation and response actions undertaken when swine health issues are identified. APHIS also maintains regulations and program standards and guidelines that direct swine health activities through the use of cooperative agreements at both the Federal and State/Tribal level. Establishing and maintaining these national standards is an important Federal responsibility that supports interstate and international commerce by providing assurances regarding the health of animals and products being moved or traded.

Early detection of devastating diseases, such as classical swine fever or foot-and-mouth disease, is vital. Surveillance programs for swine are designed to quickly detect foreign, emerging, zoonotic and domestic diseases that could have a substantial impact on domestic producers and the economy; cause loss of consumer confidence in the U.S. food supply; and/or have substantial economic impact to responding State, Tribal, and Federal animal health agencies. APHIS' surveillance efforts for classical swine fever include the collection of more than 15,000 samples annually from swine on farms; samples from slaughter samples; and, diagnostics laboratory samples. The program is pursuing a comprehensive and integrated approach to surveillance where surveillance streams are flexible and scalable as priorities and needs change. Surveillance information verifies and documents that certain diseases do not exist in the swine populations, thus facilitating trade and/or protecting public health.

A major example of APHIS' accomplishment in successfully responding to serious animal health threats is the elimination of pseudorabies from U.S. commercial swine herds. Due to APHIS' efforts, every State in the country has enjoyed PRV-free status for more than 9 years, with a net benefit estimated to be more than \$170 million. On the heels of this success, APHIS is considering ways to modernize the existing regulatory framework through a comprehensive, risk- and science-based approach that enhances surveillance while reducing financial and regulatory burdens on States and producers. APHIS continues to work with States, Tribes, and industry to further develop new approaches to surveillance, monitoring, and disease response for PRV, swine brucellosis, and other livestock pests and diseases. For example, APHIS developed statistical and epidemiological methods to increase the efficiency of animal health

surveillance in the United States by targeting high-risk sampling for swine diseases, including PRV and brucellosis. APHIS has done so without sacrificing the quality of the surveillance system for those diseases.

The program enforces the Swine Health Protection Act, which protects the commerce, health, and welfare of U.S. citizens by ensuring that States that allow food waste to be fed to swine do not contain active disease organisms that pose a risk to the domestic swine population. Raw garbage is one of the primary media through which numerous infectious or communicable diseases of swine are transmitted. APHIS monitors markets, conducts inspections of licensed facilities, monitors the disposition of food waste at restaurants and food service institutions, and reviews handling of food waste at international air and sea ports. In cooperation with the industry and the Centers for Disease Control, the program has also developed a surveillance program for swine influenza.

APHIS, States/Tribes, and industry collaborate regularly on policy and guidelines and exchange ideas. The Agency also works with international trading partners to facilitate safe trade in swine and swine products. APHIS enters into cooperative agreements with State animal health and wildlife agencies and Native American Tribes to carry out surveillance and response programs.

Without funding for this program, there would be reduced preparedness, surveillance, and response to swine health issues that would increase the likelihood of disease spread resulting in larger and more serious disease outbreaks. In addition, a lack of national standards would likely lead to a patchwork of State level requirements that would diminish interstate commerce and cause a loss in international credibility regarding the U.S. animal health status.

Approximately 67 percent of the Swine Health funding is used for salaries and benefits, and 6 percent is used for cooperative agreements. The remaining funds support normal operating costs such as travel, supplies, and rent and utilities.

*Pay Increase – redirect (+\$103,000)*

An increase of \$103,000 for pay costs which includes \$25,000 for annualization of the FY 2014 pay raise and \$78,000 for the anticipated FY 2015 pay raise.

(h) Veterinary Biologics program (\$16,417,000 and 109 staff years available in 2014).

The Veterinary Biologics program safeguards the health of animals by ensuring that veterinary biological products manufactured and/or marketed in the United States meet purity, safety, potency, and efficacy standards as required by the Virus-Serum-Toxin Act. These products, valued at more than \$1.35 billion domestically, are developed for the diagnosis, prevention, and treatment of animal diseases, and are used in all of the major farmed species (cattle, poultry, swine, and sheep), as well as horses, dogs, cats, and other pets.

The Veterinary Biologics program licenses veterinary biological products; issues export certifications; evaluates and tests new products; inspects facilities and products; investigates non-compliance; and conducts post-marketing surveillance to ensure that manufacturers remain in compliance with all laws, regulations, and policies relating to this industry. APHIS' comprehensive approach ensures only quality, Federally-licensed veterinary biological products are available to U.S. customers. More than 100 different manufacturers hold licenses, and their licensed products are used for the control of more than 215 animal diseases. APHIS ensures that animal owners are protected from contaminated, worthless, dangerous, and/or harmful products.

Each year, the Veterinary Biologics program issues more than 35 new/renewed licenses/permits for the control or diagnosis of existing or new/emerging animal diseases while maintaining oversight of more than 2,000 previously licensed veterinary biological products. Licensed products used for domestic animal diseases prevent illness and lost production in livestock; these products are also used to control and prevent

zoonotic diseases such as rabies and influenza. APHIS expedites licensing for economically significant and/or zoonotic diseases such as influenza. Annually, APHIS reviews and processes more than 3,600 Certificates of Licensing and Inspection and issues more than 1,000 Export Certificates for veterinary biological products. Vaccines licensed by APHIS for foreign animal diseases, such as foot-and-mouth disease, can control or limit the spread of these economically catastrophic animal diseases, while pre-harvest vaccines reduce the prevalence of bacteria, thereby improving animal health.

APHIS' main strategy to gain and maintain compliance with its regulations is through the education of both licensed and unlicensed entities. APHIS annually inspects, on average, at least 45 biologics manufacturing sites to assure compliance. More than 99 percent of the unlicensed entities investigated either move towards licensure of the veterinary biological product in question or cease the objectionable activity.

APHIS partners with domestic agricultural research organizations, veterinary biologics manufacturers, commodity producers, and veterinary diagnostic organizations to address animal disease issues from a holistic approach. The Agency gathers input from organizations such as the American Veterinary Medical Association, and international groups such as the International Cooperation on Harmonization of Technical Requirements for the Registration of Veterinary Medicinal Products, to develop and harmonize veterinary biologics standards, promoting the industry's economic viability abroad. APHIS also cooperates with veterinarians and the biologics industry to monitor any undesirable outcomes from using animal vaccines and other biological products. In FY 2013, the Agency received 434 reports of such "adverse events." This surveillance serves as an alert system for detecting the possibility that a product may not be performing as intended. It also provides essential baseline information about the behavior of a vaccine or other biological product under everyday field conditions.

Veterinary biologics derived from biotechnology and other modern technologies have greatly benefited livestock production and trade, animal well-being, and zoonotic disease protection. For example, biotechnology derived biologics played a key role in efforts to eradicate the pseudorabies virus (PRV) from commercial swine in the United States. The Federal-State-industry led PRV eradication program used 'marker' vaccines and companion diagnostic kits to combat the disease. The vaccine virus had a specific gene deleted so that antibodies to that gene were not produced in the vaccinated animal. The companion diagnostic kits tested for those antibodies, which would be present in an infected animal. This provided the means to differentiate vaccinated animals from infected animals, which would otherwise both test positive on a PRV antibody screening test. With the help of this technology, U.S. swine herds were recognized as PRV-free in 2004. APHIS believes that biologics derived from this technology and other modern technology will continue to make valuable contributions to the biologics industry in the future.

Overall, approximately 60 percent of the program's funding supports salaries and benefits of personnel and less than 1 percent of funding is for contracts and agreements. The remaining funds support substantial costs related to supplies and normal operating costs such as travel, rent and utilities.

*Pay Increase – redirect (+\$106,000)*

An increase of \$106,000 for pay costs which includes \$26,000 for annualization of the FY 2014 pay raise and \$80,000 for the anticipated FY 2015 pay raise.

(i) Veterinary Diagnostics program (\$31,540,000 and 190 staff years available in 2014).

Laboratory and diagnostic services are an essential component of the U.S. animal health infrastructure. APHIS' Veterinary Diagnostics program develops and maintains accurate, rapid laboratory diagnostic support for national animal disease prevention, detection, control, and eradication programs; maintains national and international laboratory recognition with the highest quality reference assistance; provides assistance to other Federal agencies and State laboratories, educational institutions, and foreign governments in the diagnosis of animal diseases; and conducts developmental projects for rapidly

advancing technologies. APHIS' reference laboratory services for animal disease diagnosis provide both direct veterinary diagnostic capabilities and assistance to other diagnostic laboratories through animal disease information, technical guidance, reagents, and reference materials.

APHIS provides national leadership in coordination of the National Animal Health Laboratory Network and emergency laboratory response. The Veterinary Diagnostics program trains Federal, State, university, and foreign laboratory personnel; provides proficiency tests and reagents; and develops improved diagnostic technologies. The program approves and certifies laboratories to conduct tests on behalf of USDA for animal health program diseases, as well as movement and export certification. The program also validates diagnostics for program use, increasing the national capacity and efficiency of meeting veterinary diagnostic needs. APHIS' involvement in certification and proficiency testing programs of U.S. veterinary diagnostic laboratories maintains the credibility of U.S. diagnostic test results in the international marketplace.

APHIS conducts more than 500,000 diagnostic tests per year on approximately 250,000 samples. The program screens an estimated 2,500 diagnostic and surveillance submissions for foreign animal diseases, including those diseases that could have a severe impact on the nation's economy such as foot-and-mouth disease (FMD) and classical swine fever. APHIS' National Veterinary Services Laboratories (NVSL) serves as the United States' official diagnostic reference laboratory for agricultural animal diseases and also provides expertise and guidance on diagnostic techniques for these diseases both in the United States and overseas. NVSL is a World Organisation for Animal Health (OIE) reference laboratory for 13 highly significant veterinary diseases, including highly pathogenic avian influenza, anthrax, FMD, exotic Newcastle disease (END), West Nile virus, and others. Although the timing varies based on the disease, APHIS generally conducts proficiency tests annually. This program needs to maintain proficiency for an indefinite period of time for eradicated diseases and needs to constantly monitor these diseases for possible re-introductions to maintain readiness in case of an outbreak situation. In addition, the Food and Agriculture Organization of the United Nations has designated NVSL as a Reference Centre for FMD and other vesicular diseases of the Americas and the Caribbean, animal influenza, and END, as well as for bovine tuberculosis and Johne's disease. NVSL's services improve science-based decisions in disease detection and quarantine, which in turn result in minimizing impacts and disruptions to important domestic and international export markets.

The program provides continuing support for public health investigations that the Food and Drug Administration and Centers for Disease Control and Prevention conduct for salmonella and other zoonotic diseases. The program manufactures and distributes more than 650 reagents, many of which are not available from any other source. Customers for laboratory diagnostic services include individual farmers and ranchers, State and university diagnostic laboratories, private veterinary practitioners, animal importers and exporters, researchers, government officials, and laboratories from other countries. Without APHIS' surveillance and monitoring programs, the United States' ability to prepare and respond to animal and plant health issues would be seriously compromised, increasing the likelihood of pest and disease spread and resulting in larger and more serious outbreaks.

International Organization for Standardization (ISO)-accredited bodies conduct annual peer reviews and external audits for the Veterinary Diagnostic program. APHIS initiates corrective actions and monitors the implementation of improvements as a result of the reviews all in support of the laboratories' internationally-recognized ISO 17025 accreditation for quality. The program also participates in proficiency panel checks on an international level to compare the quality of testing techniques used by APHIS to those used by other countries.

Early detection of diseases can save billions of dollars. An article published in the Journal of Veterinary Diagnostics and Investigations estimated that a detection of FMD identified on day 7 would have an impact of \$2.3 billion on the economy; if not identified until day 22, it could have an impact of \$69 billion. The program's testing services for foreign animal disease investigations are available 24 hours a day, 7 days a week.

Approximately 48 percent of the Veterinary Diagnostics funding will be used for salaries and benefits, and 6 percent will be used for cooperative agreements. The remaining supports operating costs such as equipment, supplies, travel, rent and utilities.

Pay Increase – redirect (+\$185,000)

An increase of \$185,000 for pay costs which includes \$46,000 for annualization of the FY 2014 pay raise and \$139,000 for the anticipated FY 2015 pay raise.

(j) Zoonotic Disease Management program (\$9,523,000 and 45 staff years available in 2014).

The Zoonotic Disease Management program enhances the local, State, national, and international collaborative effort to promote healthy animals, people, and eco-systems. This is commonly referred to as “One Health.” The Zoonotic Disease Management program provides national leadership to the animal health component for One Health issues and events and contributes animal health expertise, infrastructure, networks, and systems. APHIS develops strategies and policies for how animal health agencies can effectively engage with public health counterparts, issues guidance and standard operating procedures, offers training to enhance responses to issues, disseminates information, and ensures reports are published in various media for widespread learning from event management.

According to the World Bank, estimates show that global economic losses from zoonotic diseases, such as nipah virus, West Nile virus, severe acute respiratory syndrome, highly pathogenic avian influenza, bovine spongiform encephalopathy, and Rift Valley fever totaled at least \$80 billion between 1997 and 2009. The scope of APHIS’ activities extends beyond zoonotic agents to also include food safety, antimicrobial resistance, chemical contamination of animals through the environment or feed, residues of veterinary drugs and response during natural disasters to impede the spread of diseases such as Q fever and influenza.

The Zoonotic Disease Management program monitors national and international environments for health events that may benefit from APHIS involvement. Once events are identified, APHIS engages as the situation warrants. While issues/events addressed vary each year, core ongoing surveillance activities do not. To date, the program has participated in collaborative efforts and activities to prevent outbreaks of salmonella infections in humans associated with contact with live poultry from mail-order hatcheries, and provided field and laboratory support to the Centers for Disease Control and Prevention (CDC) during the investigation of a multistate Q fever outbreak associated with exposure to infected goats. An outcome of this Q fever investigation included the development of a national guidance document that provides recommendations for controlling the spread of the bacterium among humans and animals.

The program works with multiple organizations on antimicrobial resistance. Within USDA, the program works with the Agricultural Research Service, the Economic Research Service, the Food Safety and Inspection Service, the National Agricultural Statistics Service, and the National Institute of Food and Agriculture to implement the USDA Antimicrobial Resistance Action Plan. Outside of USDA, APHIS’ support focuses on research and surveillance, as the Food and Drug Administration moves forward with the actions to restrict medically important antibiotics for use in the treatment, control, and prevention of disease. The program also collects information related to antimicrobial use practices on livestock and poultry operations and performs antibiotic resistance testing in organisms of public health importance in livestock and poultry operations. APHIS’ role is strongly supported by other Federal agencies.

In an effort to prevent the spread of zoonotic diseases, APHIS, the U.S. Department of Agriculture’s National Institute of Food and Agriculture, and CDC are partnering with extension 4-H professionals from select States to create a multi-faceted education initiative for 4-H youth around the nation. This initiative will develop educational tools to introduce 4-H participants to public health concepts that will help prevent transmission of diseases between animals and humans. The partnership will also introduce 4-H youth to infectious disease science and public health. Topics will include: sources of zoonotic diseases, risk factors for disease transmission, personal prevention techniques, and zoonotic disease prevention in public places.

Approximately 90 percent of Zoonotic Disease Management funding is used for salaries and benefits, with remaining funds being used for normal operating expenses such as travel, supplies, equipment, and rent and utilities.

*Pay Increase- redirect (+\$44,000)*

An increase of \$44,000 for pay costs which includes \$11,000 for annualization of the FY 2014 pay raise and \$33,000 for the anticipated FY 2015 pay raise.

A decrease of \$30,380,000 and 11 staff years for Safeguarding and Emergency Preparedness/Response - Plant Health

(k) Agriculture Quarantine Inspection program (\$26,900,000 and 360 staff years available in 2014).

APHIS conducts pre-departure agricultural quarantine inspections of passengers and cargo traveling from Hawaii and Puerto Rico to the continental United States to prevent the introduction of non-native agricultural pests and diseases into the mainland. Hawaii and Puerto Rico have tropical climates with distinct ecosystems and pests. For example, a variety of economically devastating fruit flies – particularly the Mediterranean fruit fly and Oriental fruit fly – and scale pests are present in Hawaii, and these pests are easily carried long distances on fruits and cut flowers to cause significant economic damage to the mainland United States. The pre-departure inspection program facilitates the movement of travelers and cargo while preventing the entry of these pests and diseases from affecting agricultural production in the continental United States.

Because of the high volume of travelers from Hawaii and Puerto Rico to the continental United States along with the risks associated with numerous fruits, vegetables, and animal products from these areas, APHIS inspects all baggage of passengers leaving these islands (approximately 13.2 million passengers in FY 2013). As a result of the program, more than 98 percent of passengers destined for the continental United States were in compliance with agricultural quarantine regulations in FY 2013. The program partners with industry groups and State and Commonwealth counterparts to facilitate the safe movement of cargo. In Hawaii, the State Department of Agriculture conducts nursery inspections and certifies nursery stock for shipment to the U.S. mainland. These partnerships and agreements allow APHIS to promote the safe movement of quarantine material to the continental United States. In FY 2015, the program expects the compliance rate to be at least 97 percent (in line with performance for the past several years).

The Agricultural Quarantine Inspection program reduces the impact of agricultural pests and diseases, and protects and enhances plant health. In doing so, it works to facilitate access to safe, plentiful, and nutritious food. In addition, it supports rural communities by minimizing production losses and control costs, and preserving export markets for U.S. agricultural products. If funding for the pre-departure program was eliminated, the risk of pest or disease introduction from Hawaii and Puerto Rico to the mainland United States would greatly increase. Additionally, certain commodities would not be allowed entry to the continental United States without the inspections and treatments provided by the program, impacting Hawaiian and Puerto Rican producers. Maintaining the safeguards this program provides is essential, especially considering increasing U.S. consumer demand for imported fruits and vegetables in recent years.

More than 92 percent of the program's resources support salaries and benefits of inspectors and other staff. The remaining resources are for normal operating expenses such as rent, utilities, travel, and supplies.

*Pay Increase – redirect (+\$334,000)*

An increase of \$334,000 for pay costs which includes \$82,000 for annualization of the FY 2014 pay raise and \$252,000 for the anticipated FY 2015 pay raise.

(1) A decrease of \$3,665,000 for the Cotton Pests program (\$12,720,000 and 58 staff years available in 2014).

The Cotton Pests program, in cooperation with States, the cotton industry, and Mexico, strives to eradicate the boll weevil and pink bollworm (PBW) from all cotton-producing areas of the United States and northern Mexico. For decades, these pests have cost cotton growers tens of millions of dollars each year in control costs and crop losses. APHIS provides national coordination, operational oversight, technology development (such as sterile PBW moths), and a portion of program funding. APHIS' partners have provided more than two-thirds of the funding for the boll weevil eradication effort and most of the operational funds for PBW eradication. The program also maintains capabilities to address other cotton pests that could enter the United States. In addition, APHIS provides technical advice on trapping and treatment protocols to its partners in Mexico to aid their efforts to eradicate boll weevil and PBW. Without continued Federal funding, support and technical expertise for the final phase of eradication would not be possible, and previously eradicated cotton acreage would be vulnerable to reinfestation. Additionally, U.S. cotton production may be at risk of new pests approaching the country through the Caribbean Basin and Mexico.

APHIS has had a longstanding partnership with the cotton industry. APHIS and State and industry cooperators have eradicated boll weevil from more than 99 percent of U.S. cotton acreage, dramatically reducing growers' production and control costs. APHIS' Cotton Pests program directly protects 6.7 million acres of cotton production worth \$1.7 billion in Texas (where the last remaining boll weevil population is present) and indirectly protects 10.2 million acres worth \$6.8 billion nationwide.

As previously mentioned, Texas is the only remaining State with boll weevil populations, which are located in the southern half of the Lower Rio Grande Valley (LRGV). This area is a concern due to tropical storms and high winds that impact it and neighboring areas in the Mexican State of Tamaulipas, along with security concerns related to violence that interrupt trapping and treatment activities. APHIS is working with an International Technical Committee (including U.S. and Mexican representation) to develop strategies to eradicate boll weevil from the LRGV and neighboring Tamaulipas. In addition, the program has eradicated the PBW from California, New Mexico, large areas of Arizona, and the El Paso region of Texas. APHIS develops and distributes sterile insects to reduce PBW populations in the remaining infested areas of Arizona and Mexico. After the boll weevil and PBW are eradicated from an area, cotton growers will experience a 40-100 percent reduction in their overall use of insecticides, thus reducing production costs. The program's efforts have helped cotton farmers become more competitive in the global market, primarily through reducing production costs and increasing yields.

There were no detections of non-sterile PBWs in the cotton producing areas, making the 2013 cotton-growing season the first year without a detection since the eradication program was initiated. If there are no detections of non-sterile PBWs during the 2014 season, the Agency expects to be able to confirm that PBW has been eradicated from Arizona. In FY 2015, APHIS would maintain limited sterile moth production to enable rapid response to any PBW outbreaks. APHIS will continue addressing boll weevil in the LRGV, but does not expect to eradicate the pest until Mexico eradicates the pest on its side of the border. APHIS will continue conducting eradication activities on the U.S. side to prevent pest populations from expanding. APHIS expects that cooperators will increase contributions to conduct these activities at the appropriate level. Once the boll weevil and PBW have been fully eradicated, the program will transition to long-term surveillance to check for re-infestation of U.S. cotton acreage and protection of the investment made in this eradication effort.

Reduction related to progress toward eradicating PBW (-\$3,665,000)

The program will require fewer resources in FY 2015 following eradication of PBW. The program will continue addressing the boll weevil in areas of Texas near the border with Mexico.

Approximately 40 percent of the program's funding covers Federal salaries and benefits, 35 percent supports cooperators' on-the-ground activities, and 15 percent supports the purchase of supplies, such as traps and pink bollworm rearing materials. The remaining funds support operating expenses such as travel, rent, and utilities.

Pay Increase- redirect (+\$55,000)

An increase of \$55,000 for pay costs which includes \$14,000 for annualization of the FY 2014 pay raise and \$41,000 for the anticipated FY 2015 pay raise.

(m) Field Crop and Rangeland Ecosystem Pests program (\$8,826,000 and 58 staff years available in FY 2014).

The Field Crop and Rangeland Ecosystem Pests (FCREP) program protects U.S. agricultural crops and rangelands from the establishment or spread of invasive or economically significant pests. In addition, it facilitates safe international trade and domestic commerce, preserves economic opportunities for U.S. farmers, and fosters healthy ecosystems in rangelands and other areas. APHIS conducts survey and suppression activities in western States to reduce grasshopper and Mormon cricket (GMC) infestations that could cause significant economic losses for livestock producers by requiring them to buy supplemental feed or sell their livestock at reduced prices. In addition, the Agency: develops treatments for land managers to remove imported fire ant (IFA) from their products and prevent re-infestation; conducts regulatory activities to prevent Karnal bunt (KB) and IFA from "hitchhiking" on regulated articles (i.e., nursery stock and farm equipment) to uninfested areas of the United States and foreign countries through trade; and, conducts survey, treatment, and regulatory activities for witchweed infestations in North and South Carolina to protect U.S. corn and sorghum crops. The FCREP program prevents an estimated \$6.3 billion annually in damage to agriculture, industry, and home owners. This program directly protects more than 230,000 acres of wheat and corn worth \$23 million. It indirectly protects all U.S. wheat and corn production worth \$95 billion and covering more than 153 million acres from the spread of KB and witchweed.

Nearly all western U.S. rangeland is located near rural communities where livestock production is vital to the local economy. A 2012 University of Wyoming report entitled "An Economic Analysis of the Comprehensive Uses of Western Rangelands" determined that the value of rangeland forage averages \$10 per acre, and the comprehensive value of rangeland for use as wildlife habitat, stabilizing soils and filtering water, recreation, and other uses is 2-3 times greater. APHIS is implementing new technology—predictive models—in the GMC program to make treatments to protect rangeland for cattle grazing and wildlife more efficient. The models allow for use of early season treatments that use lower rates of insecticides to reduce immature pest populations instead of more expensive and stronger pesticides needed when the pests reach mature stages. APHIS continues to implement improvements for the Grasshopper program identified through an APHIS internal review. These include increasing communication with Federal land managers and cooperators, reviewing contracting officer training needs, and developing an overall program strategic plan. APHIS' GMC program monitors and protects 664 million acres of rangeland each year worth a total of nearly \$8.8 billion. Predictive models suggest that APHIS' IFA program is preventing up to 10 additional States from becoming infested. The program also addresses witchweed, a parasitic plant that can significantly damage corn, sorghum, and sugarcane. If witchweed were to spread throughout the Corn Belt, crop yields for corn and sorghum could decrease by 10 percent and trade in commodities from these areas could be negatively impacted. APHIS will continue conducting surveys and other activities to manage these pests in FY 2015.

Also as part of the FCREP program, APHIS coordinates an annual voluntary survey of the grain delivered to elevators to check for KB across the country and conducts regulatory activities to prevent the spread of the disease from the remaining infested area in Arizona. APHIS is able to issue export certificates that are accepted by countries importing U.S. wheat due to our quarantine and survey efforts. These certificates reassure trading partners about the safety of U.S. wheat exports, retaining export markets, and facilitating wheat movement into international markets. If there was an interruption of the program's ability to certify wheat exports, USDA's Economic Research Service estimated in 2010 that there would be a cumulative

reduction of national net farm income of \$8 billion over the next eight years. If KB funding was eliminated, the disease could enter the grain market system directly impacting almost every State. Many trading partners will not accept U.S. wheat exports unless the commodity is certified to be from areas where KB is not known to occur. Working with cooperators, APHIS has reduced the wheat production areas regulated for KB from four States to just 240,000 acres in Arizona since 1996. In addition, APHIS has significantly increased the efficiency of the KB program by using high-speed optical sorting technology that substantially reduces the number of staff and the time necessary to process samples to allow uninfected wheat to more quickly enter into commerce. This has resulted in a 6-fold increase in sample processing efficiency concomitant with a 50 percent reduction in staffing requirements. APHIS will continue survey and regulatory activities aimed at keeping KB from causing damage in FY 2015.

APHIS cooperates with Federal, State, Tribal, and local agencies, organizations, and institutions to conduct the program's activities. These cooperators are held accountable for meeting their obligations through the terms of cooperative agreements, which include work and financial plans that APHIS and the cooperators develop that specify when accomplishment reports and results must be submitted. APHIS provides national coordination, threat assessment, development of pest control strategies and regulatory requirements, and pest inspections.

Approximately 54 percent of the program's resources support salaries and benefits of APHIS' employees and 30 percent supports cooperators' operations. Another 10 percent goes toward contracts and the purchase of supplies, including those needed for treatments. The remaining resources are for normal operating expenses such as rent, utilities, travel, and equipment.

*Pay Increase – redirect (+\$57,000)*

An increase of \$57,000 for pay costs which includes \$14,000 for annualization of the FY 2014 pay raise and \$43,000 for the anticipated FY 2015 pay raise.

(n) Pest Detection program (\$27,446,000 and 145 staff years available in FY 2014).

The goal of the Pest Detection Program is to document the distribution of plant pests and diseases of Federal regulatory significance in the United States. This information serves as the basis of APHIS' regulatory efforts and pest management programs that preserve economic opportunities for farmers (i.e., interstate commerce and international trade) and safeguards U.S. agricultural and natural resources. The program uses a multi-pronged strategy that includes: identifying and prioritizing plant pest and disease threats; using scientifically sound pest diagnostics and survey protocols; procuring high quality survey materials (traps, lures, etc.); conducting pest surveys; providing direction and support for survey data management and quality control; posting survey results to the Agency's website to provide a clear distribution of pests and identify pest-free areas on a timely basis; and notifying States of significant pest detections through established protocols. APHIS works with Federal agencies, State departments of agriculture, Tribes, academic institutions, and industry partners to conduct these program activities. APHIS and its State cooperators carry out surveys through the Cooperative Agricultural Pest Survey program.

APHIS provides national coordination for the program and develops policies and procedures for commodity-based and resource-based surveys. These surveys enable APHIS and cooperators to target high-risk hosts and commodities, gather data about pests specific to a commodity, and provide accurate assessments of pest distribution, including pest-free areas. Early pest detection is important to avert economic and environmental damage; once a pest becomes established or spreads significantly, the mitigation costs can reach millions of dollars, in addition to lost farm revenues and damage to ecosystems. Additionally, while many entities are involved in protecting crops and resources, APHIS verifies that U.S. products do not pose risks to other countries. For example, when the pale cyst nematode was first detected in Idaho (through a Pest Detection survey), the program had data demonstrating negative survey results in other potato-producing States that kept export markets open for U.S. potatoes. According to the Global Trade Atlas, the value of the market that remained open was \$186 million in 2012. Without the Pest Detection funding, APHIS would not be able to conduct surveys for high-risk pests or provide funding to

cooperators for these surveys. In FY 2013, the program and its cooperators conducted surveys for 266 individual pests, pathogens, and noxious weeds, exceeding its goal of 200. The program also conducted 132 commodity- and taxon-based surveys, with an average of 6-7 pests per survey (surpassing the goal of 5 per survey).

The Pest Detection program communicates and develops partnerships through cooperative agreements with State departments of agriculture and natural resources, universities, industry partners, tribal and local governments and communities, non-profit organizations, and individuals in all 50 states. These entities have common objectives, and initiate activities to safeguard agriculture and the environment from the introduction of harmful plant pests, and to facilitate safe trade by demonstrating absence of pests of phytosanitary significance. Parties are held accountable through required reporting of activities.

In FY 2015, the program and its cooperators will conduct surveys for a minimum of 200 individual pests, pathogens, and noxious weeds, as well as conduct 133 commodity- and taxon-based surveys, with an average of at least 5 pests per survey. The program expects to conduct surveys for an average of 15 pests in each State.

Approximately 54 percent of the program's funding supports Federal salaries and benefits, 36 percent is for cooperative agreements with States and other partners listed above, and the remaining 10 percent is for other operating expenses such as travel, rent, utilities, and supplies.

*Pay Increase – redirect (+\$141,000)*

An increase of \$141,000 for pay costs which includes \$35,000 for annualization of the FY 2014 pay raise and \$106,000 for the anticipated FY 2015 pay raise.

- (o) A decrease of \$4,000,000 for the Plant Protection Methods Development program (\$24,549,000 and 141 staff years available in 2014).

The goal of the Plant Protection Methods Development (PPMD) Program is to develop scientifically viable and practical tools for exotic plant pest exclusion, detection, and management. These tools preserve economic opportunities for farmers and industries that engage in interstate commerce and international trade, and safeguard U.S. agricultural and natural resources from invasive plant pests. The program plays an essential role in APHIS' efforts to protect agriculture and natural resources from invasive plant pests and to support trade by developing tools to enable or improve the detection of exotic pests in survey programs; developing molecular diagnostic tests and identification tools for pest identification in support of domestic programs and imports of plants for planting; developing integrated pest management methods, including biological control, to help eradicate or manage invasive pests; conducting pest risk analysis to address phytosanitary requirements for imports, and support for exports of U.S. agricultural products; and developing phytosanitary commodity treatments to support interstate and international trade.

APHIS provides coordination for national pest detection surveys and pest management programs, which depend on accurate and effective tools. The PPMD program develops pest trapping, identification and survey technologies that support these efforts. The program also develops pest management techniques that APHIS national programs use to manage or eradicate invasive pest threats. For example, PPMD staff developed survey and management methods for the European grapevine moth when it was first detected that allowed APHIS and cooperators to reduce populations by more than 99 percent within the first year. The program continues to refine the survey methods to support the eradication effort.

The PPMD Program partners with States, universities, Tribes, other Federal agencies, and international partners to accomplish its goals. Coordination of biological control activities for the emerald ash borer is a good example that involves each of these stakeholder groups. APHIS also is partnering with USDA's Agricultural Research Service, the University of Maryland, and the University of Hawaii to manage and control varroa mites, small hive beetles, and other pests and diseases harmful to honey bee health. APHIS will continue these efforts in FY 2015 by surveying 30 States for honey bee pests and diseases to determine

the extent of the threat as well as what factors assist in supporting honey bee health. APHIS collaborates with stakeholders through participation in scientific review panels, technical working groups, and interagency and cooperative agreements. These partnerships and cooperative agreements allow APHIS to tap into scientific expertise or infrastructure that is not available within the Agency. This is particularly necessary when APHIS needs to quickly access scientific knowledge on a new pest issue to develop exclusion, detection and management techniques.

To hold parties accountable, PPMD works closely with cooperators to communicate goals, develop work plans and establish timelines for the delivery of agreed upon products. The program has consistently met or exceeded its performance measure targets. For example, the program met its 2013 target by developing, implementing or completing technology transfer for 76 biological control projects. The program also met its annual performance target of developing or improving at least five phytosanitary commodity treatments, resulting in an increase in trade and a reduction in methyl bromide fumigations. The PPMD program conducts reviews of each project area with APHIS program managers on at least an annual basis. These reviews are designed to evaluate project progress, ensure the projects are meeting APHIS program needs, and prioritize future work. APHIS will continue to conduct these activities in FY 2015. Without this program, APHIS would not be able to provide the tools needed to carry out plant pest eradication and detection programs. In FY 2015, the program and its cooperators will develop a minimum of five new/improved regulatory treatments for commodities of trade.

Reduction related to the National Clean Plant Network (-\$4,000,000)

The Consolidated Appropriations Act of 2014 made \$4 million in additional funding available for the National Clean Plant Network (NCPN), which provides reliable sources of pathogen-free planting stock of high-value specialty crops such as apples, peaches, almonds, grapes, oranges, lemons, strawberries, raspberries, blueberries, and hops. The Agricultural Act of 2014 (Farm Bill) also provided funding for the NCPN. Because funding for the NCPN will be available on an ongoing basis from the Commodity Credit Corporation via the Agricultural Act of 2014, discretionary funding for the NCPN is not needed in the Plant Protection Methods Development line item.

Approximately 70 percent of the program's funding supports Federal salaries and benefits, and another 14 percent supports contracts and agreements. The program currently partners with institutions in 28 States and territories and one Native American Tribe.

Pay Increase - redirect (+\$137,000)

An increase of \$137,000 for pay costs which includes \$34,000 for annualization of the FY 2014 pay raise and \$103,000 for the anticipated FY 2015 pay raise.

- (p) A decrease of \$14,107,000 and 7 staff years for the Specialty Crop Pests program (\$151,500,000 and 688 staff years available in the FY 2014).

The goal of the Specialty Crop Pests (SCP) Program is to protect U.S. fruits and vegetables, tree nuts, horticulture, and nursery crops from adverse impacts associated with invasive pests, such as crop damage or threats to international trade and interstate commerce. APHIS works in coordination with State, Tribal, university, and industry partners to develop and implement practices, policies, and regulations that prevent or mitigate impacts for invasive pests of Federal regulatory significance. These activities include verifying pest distribution, creating conditions that mitigate risk pathways and prevent long distance spread of the pest, developing and implementing diagnostic tools and pest mitigation strategies, and communicating with the public to gain support for program strategies and modify behaviors that introduce or spread pests. These efforts promote the ability of U.S. farmers and producers to export their products, prevents damage to specialty crop production (helping to ensure the availability of fresh fruits and vegetables), and protects natural resources, including forests and residential landscapes. Specialty crops are grown in all 50 States, and they have a high value; APHIS' Specialty Crop program directly protects production (including citrus, grapes, potatoes, nursery stock, and tree fruit) worth more than \$11 billion annually. APHIS is currently

using SCP resources to address the following pests and diseases: the light brown apple moth (LBAM), European grapevine moth (EGVM), pale cyst nematode (PCN), a variety of citrus diseases, and exotic fruit flies (among others).

While Federal response activities take place in concentrated areas where the infestations occur (e.g., PCN in Idaho or LBAM in California), they also protect all at-risk States producing specialty crops. For example, the SCP program works to address the PCN in Idaho and conduct nationwide surveys for the pest, protecting fresh potato export markets worth \$186 million in FY 2012 (according to the Global Trade Atlas). Without the SCP program, a variety of export markets for U.S. specialty crops would be at risk—the program protects trade worth more than \$7 billion.

The SCP program partners with affected industries, States, Tribes, academic institutions, and other Federal agencies, to deliver domestic programs. Additionally, the program works with its counterparts in foreign countries to address pest risks offshore. For example, the SCP program works with Mexico and Guatemala to mitigate the risk of exotic fruit flies entering the United States. For example, the program has kept the United States free of Mediterranean fruit fly (Medfly) for many years by conducting preventative releases of sterile insects to disrupt normal population growth in at-risk areas; detecting and responding to outbreaks when they occur; and maintaining a barrier against the natural spread of the pest in Mexico and Central America. Medfly has been recorded infesting 300 cultivated and wild fruits. Without the program's efforts, many important crops would become impossible to grow due to fruit fly infestations.

To protect the U.S. citrus, grape, and wine industries, APHIS has partnered with Florida citrus producers to slow the spread of citrus greening and preserve citrus acreage and California grape growers to eradicate EGVM. In both collaborative efforts, APHIS provides funding, expertise, and operational support for surveys and regulatory efforts to find and prevent the spread of the target pests, while industry funds and conducts the necessary control treatments (with technical guidance from APHIS and State officials). APHIS and its State, county, and industry partners have had significant success in eliminating EGVM from California—only 687 square miles remain quarantined out of 85,000. The program aims to eradicate EGVM in FY 2015 and continue surveys for several additional years to confirm that it has been eliminated. Eradicating this pest will dramatically lower growers' production costs and protect or expand export opportunities. Because of the ongoing threat posed by citrus greening and other citrus diseases, APHIS is expanding its partnership with the citrus industry to explore new strategies and opportunities for supporting and preserving U.S. citrus production and markets.

APHIS is taking a new approach by moving away from specific regulatory requirements in cases where industry-based best management practices can minimize pest and disease damage more effectively and efficiently. For example, APHIS worked with the American Nursery and Landscape Association to address the recent appearance of boxwood blight in the United States. Because the disease was already present in the nursery production system when it was detected, APHIS worked with nursery stock producers and State cooperators to develop a systems approach to producing clean stock. This approach allows the nursery industry to minimize damage and disease spread while preserving trade opportunities for this popular and valuable landscaping product.

*Reduction to adjust cost-share rates (-\$14,107,000)*

APHIS is requesting an overall decrease of \$14.107 million for the SCP program in FY 2015 related to cost-sharing adjustments for three pest and disease programs that will allow for more equitable Federal contributions to the programs. The decrease includes:

- A reduction of \$7.950 million for the Citrus Health Response Program, which would reduce the Federal cost-share rate from 94 percent to 78 percent.
- A reduction of \$2.369 million for the Glassy-winged Sharpshooter Program, which would reduce the Federal cost-share rate from 54 percent to 47 percent.
- A reduction of \$3.788 million for the Light Brown Apple Moth Program, which would reduce the Federal cost-share rate from 100 percent to 60 percent.

Approximately 55 percent of the program's resources support cooperators' on-the-ground operations, such as surveys, regulatory inspections, and outreach to affected growers and the public as well as methods development activities at other USDA agencies. These cooperators are held accountable for meeting their obligations through the terms of cooperative agreements, which include work plans and financial plans developed by APHIS and the cooperating entity that specify when accomplishment reports and results must be submitted. Approximately 30 percent of program funding is for salaries and benefits for oversight, national coordination, threat assessment, development of pest control strategies and regulatory requirements, and on-the-ground inspections and trapping activities for some pests, among other things. The remaining funds support services, supplies, equipment, rent, and other operating expenses.

Pay Increase – redirect (+\$667,000)

An increase of \$667,000 for pay costs which includes \$164,000 for annualization of the FY 2014 pay raise and \$503,000 for the anticipated FY 2015 pay raise.

- (q) A decrease of \$8,608,000 and 4 staff years for the Tree and Wood Pests program (\$54,000,000 and 319 staff years available in 2014).

America's forests are valuable resources that provide jobs and recreation opportunities and create habitat for wildlife. They provide economic opportunities and ecosystem services worth an estimated \$1.2 trillion. APHIS works with various Federal and State agencies, local governments, industry groups, and other partners to protect forests, urban landscapes, private working lands, and other natural resources from harmful pests and diseases. Through the Tree and Wood Pests (TWP) program, APHIS addresses devastating pests such as the Asian longhorned beetle (ALB), emerald ash borer (EAB), and European gypsy moth. Numerous native hardwood tree species that are common throughout U.S. forests and urban landscapes are hosts to these pests. Conserving forests enhances the economic vitality of rural communities by protecting the value of forest-related industries, the tourism and recreational value of lands and their related commercial activities, and the environmental and ecological value of lands. For example, in States such as Ohio, New York, and Massachusetts, ALB threatens the forest-based manufacturing and forest-related tourism and recreation economy, which totals some \$35 billion. When forest pests like EAB kill large numbers of trees in urban and suburban areas, they can cause tremendous, wide-ranging impacts to communities, landscapes, and commerce. Such losses, if unchecked, could cost local governments up to \$1.7 billion in tree damage and removal expenses and another \$830 million in losses to residential property values. In addition, exports of forest products such as logs and timber could be at risk due to trade restrictions put in place by other countries. Nationwide, APHIS programs protect 596 million acres of forested land by preventing the spread of damaging pests. With each acre of forested land valued between \$1,000 and \$2,000, the program protects land/property valued on average at \$21,000 for each dollar it spends.

APHIS cooperates with State and local agencies and organizations in 48 States to conduct various activities to manage and, in some cases, eradicate these pests. These activities include conducting surveys; developing and enforcing regulations, implementing control measures; developing methods and processes to combat pests; and conducting outreach efforts to prevent pest spread. APHIS' role in the TWP program is to oversee the regulatory framework to prevent the human-assisted movement of these pests and to provide national oversight and coordination for program activities to detect and eradicate or manage the pests. APHIS and its cooperators continue to improve program delivery and to create more efficient projects. For example, APHIS and cooperators have modified ALB survey and control protocols, resulting in more efficient use of resources required to eradicate the pest. In addition, the program is examining new detection technologies and evaluating an extended timeframe for the application of preventive treatments to potentially saving funds by treating less frequently to achieve the same results.

APHIS works with a variety of partners in State departments of agriculture and natural resources, other Federal agencies, Tribal representatives, local governments and communities, university scientists, industry groups, and private citizens to protect forests and urban trees. For example, APHIS and the U.S. Forest

Service worked to develop a computer-based survey design tool that State and local agencies can use to implement EAB surveys and provide more accurate representations of established EAB populations. APHIS is also working with USDA's Agricultural Marketing Service (AMS) and the American Firewood Producers and Distributors Association to develop a firewood certification program that will help mitigate the spread of EAB and other forest pests. AMS would manage a third-party certification program, which would allow firewood dealers to demonstrate that their products meet pest mitigation standards, thus facilitating commerce and preventing the spread of damaging insect pests to new areas.

In FY 2015, APHIS will continue addressing ALB outbreaks in Massachusetts, Ohio, and New York; pursuing biological control options as a long-term EAB management strategy; and slowing the spread of gypsy moth through inspections and regulatory activities. By FY 2015, APHIS aims to declare ALB eradicated from Norfolk and Suffolk Counties in and around Boston, Massachusetts.

Reductions related to cost-share rates (-\$8,608,000)

APHIS is requesting an overall decrease of \$8.608 million for the TWP program in FY 2015 related to cost-sharing adjustments for two pest and disease programs that will allow for more equitable Federal contributions to the programs. The decrease includes:

- A reduction of \$6.583 million for the ALB program, which would reduce the Federal cost-share rate from 95 percent to 80 percent.
- A reduction of \$2.025 million for the EAB, which would reduce the Federal cost-share rate from 97 percent to 75 percent.

Approximately 45 percent of TWP funding supports personnel costs, 15 percent is for cooperative agreements, 28 percent supports contracts, and the remaining 12 percent funds other expenses. APHIS typically awards contracts to tree companies for surveys, treatments, and tree removal. Agreements may be made with Federal, State, Tribal, and local government agencies; nongovernmental organizations; and academic and research institutions to conduct survey, management and control activities; develop and oversee outreach efforts; and develop new methods to combat these pests.

Pay Increase- redirect (+\$304,000)

An increase of \$304,000 for pay costs which includes \$75,000 for annualization of the FY 2014 pay raise and \$229,000 for the anticipated FY 2015 pay raise.

Safeguarding and Emergency Preparedness/Response – Wildlife Services

(r) Wildlife Damage Management program (\$87,428,000 and 620 staff years available in FY 2014).

The Wildlife Damage Management (WDM) program resolves human/wildlife conflicts and protects agriculture, human health and safety, personal property, and natural resources from wildlife damage and wildlife-borne diseases in the United States. This program protects agriculture by protecting livestock from predators, managing invasive species such as feral swine and beaver damage, conducting a national rabies management program, and managing wildlife species and diseases.

Livestock losses attributed to predators cost producers more than \$138 million annually, according to the most recent surveys by National Agriculture Statistics Service. Cost-benefit analyses have shown that for each dollar spent on livestock protection, APHIS saves producers between \$2 and \$7 in losses. APHIS prevents and reduces livestock predation through education, technical assistance to producers, and management programs. In FY 2013, APHIS' WDM program helped more than 14,000 producers in the western United States with livestock valued at more than \$2.3 billion. On average, APHIS provides technical and direct management for approximately 27,000 projects each year.

APHIS' natural resource protection includes protecting natural areas and native wildlife from invasive species such as the brown tree snake (BTS), nutria, and feral swine. An article published by the University of Hawaii indicates that the annual projected economic impacts of the potential translocation of the BTS from Guam into Hawaii would range from \$593 million to \$2.4 billion. In FY 2013, APHIS intercepted approximately 18,000 BTS in Guam to prevent movement into Hawaii and the continental United States.

Feral swine have quickly established themselves throughout the nation, increasing from 1 million animals in 17 States to about 5 million animals in 38 States in the last 20 years, making them one of the fastest growing invasive species in the United States. In 2013, APHIS implemented a pilot program specifically designed to strategically removal feral swine from regions in New Mexico. In only a few months, the WDM program removed 640 feral swine over an area expanding more than 4.5 million acres, saving New Mexico property owners approximately half a million dollars in annual damages alone. Nationally, the WDM program removed approximately 31,105 feral swine in 27 States in FY 2013. To date, APHIS has conducted these activities through requests from State and local cooperators. However, this problem warrants a national, strategic approach to feral swine management. In FY 2014, APHIS is implementing a national, cooperative cost-share program to slow -- and eventually stop -- the leading edges of population spread; eliminate swine populations where possible; and control swine numbers to achieve acceptable levels in other States. The Agency will continue these efforts in FY 2015.

Rabies remains a significant wildlife management and public health challenge. Approximately 6,000 to 8,000 rabid animals are reported to the Centers for Disease Control and Prevention annually, with more than 90 percent of cases occurring in wildlife. APHIS is the lead Federal agency for preventing wildlife rabies from spreading to new areas of the United States, while working to eliminate rabies where practical. In FY 2013, APHIS and its cooperators distributed more than 6.8 million oral rabies vaccine baits in 15 States. The cooperative WDM program has eliminated canine rabies in coyotes in south Texas (allowing the United States to gain canine rabies free status in 2007) and has prevented raccoon rabies from spreading beyond the Eastern United States. In addition, no cases of gray fox rabies in Texas have been reported since 2009. The Agency's WDM activities also benefit the American public as a whole by monitoring wildlife across the country for other diseases that help protect animal and human health, and saving wildlife species in emergency response situations.

APHIS' WDM activities benefit private landowners, businesses, and Federal, State, county, and city government offices. They enable farmers and ranchers to remain profitable, feed consumers here and abroad, and contribute to their communities. Without these important WDM services, people might use methods that compromise America's agriculture, human health and safety, personal property, and natural resources.

This program estimates that it will use 62 percent of its funding on personnel costs, 1 percent on contracts and cooperative agreements, and the remaining 37 percent to support normal operating costs such as travel, supplies, rent and utilities.

Pay Increase – redirect (+\$599,000)

An increase of \$599,000 for pay costs which includes \$148,000 for annualization of the FY 2014 pay raise and \$451,000 for the anticipated FY 2015 pay raise.

(s) Wildlife Services Methods Development program (\$18,856,000 and 163 staff years available in 2014).

APHIS provides the only dedicated Federal leadership in managing wildlife problems and developing methods to resolve human-wildlife-agricultural conflicts. The Wildlife Services Methods Development (WSMD) program works with cooperators to conduct research and develop socially responsible methods to prevent and mitigate damage caused by wildlife and invasive species on agricultural productions, and to detect and prevent wildlife diseases that may impact animal health and agricultural biosecurity. This program provides scientific information to support the development and implementation of socially-acceptable methods for managing wildlife damage. These methods enable APHIS, cooperators, and

individuals to protect crops, livestock, natural resources, property, and public health and safety. The WSMD program tests between 14 to 16 new methods each year.

In recent years, APHIS' WSMD program has developed methods to mitigate wildlife-aviation strike hazards, and studied the role of fish-eating birds in the epidemiology of diseases impacting aquaculture and fisheries, and evaluated the use of passive lighting systems to alert birds to oncoming aircraft. Each of these examples has reduced damage to property, agriculture, human health and safety, and/or native wildlife and ecosystems. Additionally, the WSMD program develops data to register products that enables the private sector to further manage human-wildlife conflicts. An example of this type of technology transfer is the registration of a contraceptive to control the white-tail deer population, with the U.S. Environmental Protection Agency and the Food and Drug Administration. Finally, the program explores ways to reduce the spread and transmission of zoonotic diseases; develops disease diagnostic methods; develops strategies to monitor wildlife pathogens; assesses risks to agriculture and human health and safety; and assists APHIS' operational programs with surveillance and monitoring.

These methods are essential to cooperators, and preserve businesses and regional employment opportunities. For example, internal assessments determined that cormorant control activities saved between \$20 and \$50 million in damages and 100 and 300 regional jobs over an eight year period. In North Carolina, the WSMD methods applied to a beaver management program has saved municipalities, counties, and private landowners almost \$9 for every \$1 spent. Without funding available, the WSMD program will not be able to develop and evaluate new tools and strategies to manage wildlife damage, including managing the expanding feral swine population, register safe toxicants, and develop new methods for improving trapping and oral bait delivery systems.

The program estimates that it will use 68 percent of its funding on personnel costs, 7 percent on contracts and cooperative agreements, and the remaining 25 percent to support normal operating expenses such as facility maintenance, supplies, travel, security, and other research related operational costs.

*Pay Increase – redirect (+\$158,000)*

An increase of \$158,000 for pay costs which includes \$39,000 for annualization of the FY 2014 pay raise and \$119,000 for the anticipated FY 2015 pay raise.

Safeguarding and Emergency Preparedness/Response – Regulatory Services

- (t) Animal and Plant Health Regulatory Enforcement program (\$16,224,000 and 142 staff years available in 2014).

The Animal and Plant Health Regulatory Enforcement (APHRE) program promotes the integrity of APHIS programs by providing effective and efficient investigative and enforcement services. APHIS's four regulatory programs and the Agricultural Quarantine Inspection activities at the Department of Homeland Security Customs and Border Protection are all national programs that require Federal investigative and enforcement support to promote compliance and program integrity and, ultimately, protect American agriculture. The APHRE program centralizes this function into one national program, thereby promoting greater efficiency, effectiveness, and consistency than would not be possible if each program handled these functions independently. The program serves as APHIS's primary liaison with USDA's Office of the Inspector General (OIG) and Office of the General Counsel (OGC), the U.S. Department of Justice (DOJ), and other Federal and State law enforcement organizations.

The APHRE program ensures compliance through comprehensive investigations, sound enforcement actions, and strong educational efforts. The program uses monetary penalties and alternative enforcement actions, including non-monetary settlement agreements, and works with OIG, OGC, and/or DOJ to pursue administrative, civil, or criminal action, as appropriate, in response to alleged violations of APHIS-administered laws. This helps to foster deterrence of those who may attempt to circumvent U.S.

agricultural laws. Program activities serve to deter individuals and companies from engaging in acts that could otherwise cause extensive economic damage and/or tremendous expenses related to eradication or mitigation efforts designed to protect the American agriculture system.

APHIS developed and applies criteria to focus resources on the highest priority cases. In doing so, the Agency is able to expedite the processing time for enforcement actions involving violations that pose the greatest risk to animal and plant health, while expeditiously resolving hundreds of lower priority cases to reduce the overall back log of cases. In FY 2013, APHIS improved the efficiency of its investigative and enforcement services (compared to FY 2012), by reducing its inventory of open investigations by 28 percent (from 766 to 549 open investigations), and reducing the average number of days to complete an investigation and resulting enforcement action by 28 percent (from 643 days to 464 days). By FY 2015, APHIS expects to meet its goal of processing a complete investigation and enforcement action in 365 days, further promoting timely resolution.

Approximately 88 percent of funds will be used for salaries and benefits, 1 percent for information technology management, and 11 percent for normal operating expenses including travel for mission-critical investigative and enforcement activities, supplies, printing, rent and utilities.

*Pay Increase – redirect (+\$138,000)*

An increase of \$138,000 for pay costs which includes \$34,000 for annualization of the FY 2014 pay raise and \$104,000 for the anticipated FY 2015 pay raise.

(u) Biotechnology Regulatory Services program (\$18,135,000 and 92 staff years available in 2014).

The biotechnology industry—valued worldwide at \$246 billion—continually develops innovative products of modern biotechnology (including genetically engineered (GE), organisms) that can greatly benefit the public. For example, GE crops can increase yields or decrease crop losses due to pests and diseases. However, before any of these products can be brought to market, it is essential to demonstrate—through rigorous, scientific review—that they do not pose a plant pest risk to America’s agricultural and natural resources. APHIS’ Biotechnology Regulatory Services program provides the regulatory controls that ensure new GE crops will not pose plant pest risks when released into the environment. In addition to protecting America’s agriculture, these controls instill confidence in the public and in our trading partners that GE products produced in America are of the highest quality. These activities support USDA’s strategic goal to “Help America promote agricultural production and biotechnology exports as America works to increase food security.”

APHIS regulates the importation, interstate movement, and field release—or “introduction”—of GE organisms that may pose a plant pest risk. As part of its science-based framework, APHIS requires developers to apply for a permit or notification before introducing these organisms into the environment and conducts thorough scientific analyses to evaluate potential plant risks and environmental impacts before authorizing such introductions. Once a developer can demonstrate that a GE crop does not pose a plant pest risk, the developer can petition APHIS to seek nonregulated status. Every day, American farmers and consumers benefit from the role APHIS has played in bringing biotech products to the marketplace. More than 90 percent of the soybean, 90 percent of the corn, and 90 percent of the cotton grown by U.S. farmers were derived from biotechnology and APHIS’ initial review and approval of these GE crop lines was the first key step to them being made available.

In FY 2013, APHIS made six determinations of nonregulated status, bringing the total to 102 petitions consisting of 165 plant lines that, as indicated previously, have been an immense benefit to farmers, producers, and consumers. Agricultural biotechnology gives farmers and producers more tools to address pest and disease issues and contributes to the adoption of no-till and low-till agricultural practices, and helped safeguard crops against disease. APHIS’ reviews and regulatory determinations allow new and innovative GE technologies to enter commerce and the worldwide marketplace, supporting global strategies to meet the need for food security, energy production, carbon offsets, and the economic sustainability of

farms. APHIS expects the number of determinations of nonregulated status to increase from 102 in FY 2013 to 112 in FY 2015.

APHIS is dedicated to improving its review and permitting processes and finding efficiencies and cost savings. In FY 2012, APHIS implemented changes to its petition review process and reduced the review time required from an average of 3 years to about 13 to 16 months (with the exception of petitions for which APHIS is developing an environmental impact statement, or EIS). The changes include establishing specific timelines for each step, using new management and tracking tools, and getting the public involved earlier to identify risks and controversial issues. In FY 2013, APHIS realized significant time savings in the next year for petitions without an EIS. The determinations in FY 2013 for nonregulated status occurred, on average, 12 months faster than the issuance of nonregulated status for petitions from 2009 – 2012. The change to the enhanced process increased efficiency and makes agricultural products more readily available to producers and growers.

In addition to compliance efforts, which include investigations and audits, APHIS also provides education and other outreach to the biotechnology community to ensure understanding of regulatory requirements. In FY 2013, APHIS authorized 2,054 new permits and notifications at 10,698 locations in the United States, and conducted 735 site inspections. Of those sites inspected in FY 2013, 97.7 percent were found to be in compliance; APHIS' goal for upcoming years is for 99 percent of those sites inspected to be in compliance).

APHIS also seeks to enhance its efforts through partnerships with State departments of agriculture. The program partners with the National Plant Board to allow State inspectors to conduct inspections of field release sites. This partnership makes additional staff available for inspections and ensures cost-effective use of resources, as the States often have staff located in the areas where the inspections occur. On April 29, 2013, APHIS published a proposed rule to allow sharing of confidential business information with Tribes and States. This proposed rule could allow for expanded collaboration with Tribes and State partners both in conducting inspections and in reviewing permit and notification applications for potential plant health risks.

During FY 2013, the Agency continued implementation of the Biotechnology Quality Management System (BQMS) program, which is a nonregulatory solution that provides tools to facilitate compliance while raising awareness and compliance of regulatory responsibilities. In FY 2013, APHIS recognized six new entities that had completed the program and successfully implemented a BQMS. There are currently 21 participants in the BQMS program. BQMS participants account for more than 97.7 percent of the acreage of GE field test sites that APHIS oversees.

Overall, approximately 80 percent of the program's funding supports salaries and benefits of personnel, 15 percent funds contracts and agreements, 5 percent funds major IT system costs, and the remaining supports normal operating costs such as travel, supplies, and rent and utilities. Pay Increase – redirect (+\$88,000)

An increase of \$88,000 for pay costs which includes \$22,000 for annualization of the FY 2014 pay raise and \$68,000 for the anticipated FY 2015 pay raise.

#### Safeguarding and Emergency Preparedness/Response – Emergency Management

(v) Contingency Fund (\$470,000 and 5 staff years available in 2014).

The APHIS Contingency Fund provides the Agency with resources to implement emergency, short term activities that are relatively small in scale and not otherwise supported by the Agency's commodity line items within the appropriation. The Agency can quickly access the resources needed for the control of outbreaks of plant and animal diseases, and for the control of insects, pest animals, and birds to the extent necessary to meet emergency conditions. For example, the Agency was able to initiate activities to

effectively address outbreaks of the European grapevine moth, rabies, contagious equine metritis, giant African land snail and, most recently, feral swine.

APHIS used contingency funding in FY 2013 to continue a partnership with the Florida Department of Agriculture and Consumer Services (FDACS) to carry out extensive surveys and treatments for the giant African land snail. The giant African land snails are one of the world's most damaging types of snails because they can consume at least 500 types of plants, including fruit and vegetable crops. The snails can also cause significant structural damage to buildings by eating plaster and stucco. In FY 2013, APHIS and FDACS treated 605 properties within the quarantined zones and exterminated 134,907 snails. Because of its potential as a pest of nursery stock, APHIS and FDACS have surveyed 1,342 nurseries in the impacted areas. One nursery was positive for the snail and is cooperating with FDACS to ensure that the population is eliminated and not transmitted through nursery stock sales.

In FY 2013, APHIS also used the contingency fund to address feral swine in New Mexico. The feral swine population and expanding range are significantly affecting animal and human health; crops and livestock; rural, suburban, and even urban areas; and, natural resources, causing an estimated \$1.5 billion in damages annually. Of that, more than \$800 million in damages has been to agriculture alone. The population of feral swine in New Mexico has remained relatively low compared to neighboring States. However, without management activity, the feral swine population and associated damage would rise, as it has in other States, requiring a more expansive program in the future if action is delayed further. Since the cooperative feral swine project officially began in January 2013, APHIS and its cooperators have removed 640 feral swine over an area expanding more than 4.5 million acres. Based on a cumulative projection of reproduction rates of one litter per year and an average litter size of six pigs, APHIS projects having prevented the birth of more than 1,700 additional animals. The result is the prevention of additional feral swine populations that could cause damage to the environment, roads, crops, and irrigation systems; compete with native wildlife; spread noxious weeds; and, threaten the health of our livestock, wildlife and pets. Availability of the Contingency Fund allows APHIS to address small-scale emergency situations in a timely manner.

Approximately 11 percent of the program's funding supports salaries and benefits, 70 percent is for contracts and agreements, and the remaining 19 percent is for other operating expenses such as postage, equipment, travel and supplies.

Pay Increase – redirect (+\$15,000)

An increase of \$15,000 for pay costs which includes \$4,000 for annualization of the FY 2014 pay raise and \$11,000 for the anticipated FY 2015 pay raise.

(w) Emergency Preparedness and Response program (\$16,966,000 and 90 staff years available in 2014).

The Emergency Preparedness and Response (EPR) program improves the Agency's capability to prevent, prepare, respond, and recover from animal health emergencies. The emergencies range from small-scale incidents to catastrophic events caused by any type of hazard, including foreign animal diseases or pests and natural or man-made disasters. The program also implements and oversees compliance with the Public Health Security and Bioterrorism Preparedness Response Act of 2002, which authorizes APHIS to regulate agents or toxins deemed a threat to animals, plants, or animal and plant products (known as select agents and toxins). These actions safeguard the health and value of U.S. agriculture.

As leaders in animal health emergency management, the EPR program develops strategies and policies for effective incident management and incident response coordination and maintains an animal health emergency reserve corps of more than 2,800 private veterinarians, animal health technicians, and veterinary students. The program also ensures that APHIS' emergency management policies, strategies, and responses meet the latest national and international standards. To date, the program has developed and made available to State animal health officials and industry partners 28 guidance documents covering all of the major components of an animal health emergency response. These guidance documents support greater national preparedness and enable swift and efficient local responses.

Each year, the EPR program coordinates investigations and disseminates information about suspected outbreaks of foreign animal diseases (FADs) and other animal health emergencies. The program also has participated in more than 40 joint Federal, State and local animal health and all-hazards test exercises designed to improve plans and response capabilities and performs after-action reviews following an exercise or a real incident. These reviews lead to the development of corrective action plans that are then used to update national guidance documents and help States to update their response plans that steadily improve program capability.

The EPR program facilitates planning sessions with all major commodity groups to develop business continuity plans that would ensure the continuous movement of livestock products during an animal health emergency. While APHIS was successful in allowing many of the markets to remain in business during an outbreak of exotic Newcastle disease in 2003, these plans would allow non-infected premises and non-contaminated animal products to move more freely in the event of an outbreak. This would avoid unnecessary economic consequences and animal welfare issues. APHIS is working with State and regional partners to develop continuity plans to allow for a continuous supply of milk from farms not impacted by a FAD.

The program also funds APHIS' coordination of Emergency Support Function #11– Agriculture and Natural Resources under the National Response Framework at the national and regional level. Coordinators work daily with the Federal Emergency Management Agency, other Federal departments and agencies, Tribes, Territories States, and local governments to develop coordinated and integrated response plans in the event of hurricanes, earthquakes, floods, and other disasters impacting agriculture, natural resources, and the care of household pets. In FY 2015, APHIS will participate in planning, training and exercises to strengthen preparedness, continue to support response activities, and will work with recovery entities to effectively transition activities into a long-term strategy for the affected communities.

The EPR program provides national leadership in managing select agents and toxins ensuring a better understanding of security, biosafety and bio-containment concerns and practices by the scientific community. Key practices for managing the select agents and toxins are now uniform across human, animal and plant research laboratories in the United States. The program regulates laboratories that possess, use or transfer select agents and toxins due to the high risk created when entities possess, use or transfer potential agents of bioterrorism. The program balances the statutory requirements to protect human, animal, plant, and animal and plant products with the need to allow research to advance and be productive. Since the program was established in 2002, there have been no intentional breaches of containment.

Overall, approximately 85 percent of the program's funding supports salaries and benefits of personnel, 10 percent funds contracts and agreements, and the remaining supports normal operating costs such as travel, supplies, rent and utilities.

*Pay Increase – redirect (+\$89,000)*

An increase of \$89,000 for pay costs which includes \$22,000 for annualization of the FY 2014 pay raise and \$67,000 for the anticipated FY 2015 pay raise.

(2) Safe Trade and International Technical Assistance

(a) Agriculture Import/Export program (\$14,099,000 and 92 staff years available in 2014).

APHIS works with other Federal agencies, States, foreign governments, industry, and academia to protect U.S. agriculture while facilitating the safe trade of animals and animal products. APHIS animal health experts ensure that U.S. import requirements safeguard U.S. livestock health and negotiate requirements for the export of U.S. animals and animal products worldwide. These requirements and negotiations are based

on compliance with international standards, sound scientific principles, and fair trading practices for animals and animal products. Moreover, APHIS sets quarantine, testing, and other requirements under which animals and animal products can be imported or exported. These requirements help ensure that global markets can be accessed, expanded, or maintained with little or no risk to U.S. animal production and human health.

APHIS also conducts activities related to the 2008 Farm Bill amendments to the Lacey Act, which prohibit the importation of any plant, with limited exceptions, that are taken or traded in violation of domestic or international laws. The Act requires a declaration for imported shipments of most plants or plant products. APHIS' role is to issue regulations, provide guidance to importers regarding the declaration, perform compliance checks, provide enforcement agencies with declaration information to assist their investigations, and house documents.

### Imports

To facilitate imports, APHIS evaluates the animal health status of regions that wish to export animals and/or animal products to the United States. This process minimizes the risk of introducing animal diseases through imports. In FY 2013, APHIS completed several evaluations that were published in the Federal Register. These evaluations involved classifying Hungary, Slovakia, Slovenia, and Estonia as low risk for classical swine fever, and recognizing 25 Member States of the European Union (EU) as free of highly pathogenic avian influenza (HPAI) and Newcastle Disease. In addition, APHIS added six regions of Italy to the list of regions recognized as free of swine vesicular disease. The new classifications further facilitated trade between the U.S. and the other countries. APHIS also addressed import issues related to live animals and animal products arising at the ports, especially with regard to facilitating cattle imports from Mexico. In FY 2013, APHIS issued 9,235 import permit applications for live animals, animal products, organisms and vectors, and select agents. This was roughly the same number of permits issued in FY 2012. In addition, the Agency ensures that import regulations are effective and science-based. In FY 2013, APHIS revised import requirements for ruminant germplasm imported from the EU to mitigate concerns about Schmallenberg Syndrome, an emerging disease found in Europe. The Agency revised import requirements for birds and poultry exported from Australia and Mexico due to reports of HPAI in those countries. In addition, APHIS audited EU veterinary oversight of ruminant germplasm and live swine exported to the United States to ensure that import requirements were being properly implemented overseas.

### Exports

APHIS estimated the value of new or maintained export markets for live animals, germplasm, and animal products to be approximately \$2 billion for FY 2012. To open, re-open and maintain U.S. access to worldwide export markets, APHIS negotiates science based conditions with trading partners for various commodities that protect their country while also facilitating trade. In FY 2013, APHIS negotiated, or re-negotiated 74 export protocols for animal products (16 new markets, 19 expanded markets, and 39 retained markets), and 158 export protocols for live animals (33 new markets, 78 expanded markets, and 47 retained markets). Also, in FY 2013, APHIS reopened the market for live cattle to Kazakhstan, opened new markets for cattle to Iraq and Jordan, and swine to the EU. The Agency also opened the market for day-old chicks to the Customs Union (Russia, Kazakhstan, and Belarus). In addition, APHIS eliminated BSE-related restrictions on U.S. exports of beef or other commodities to Bahrain, Mexico, Indonesia, Panama, Peru, Trinidad and Tobago, and Turkey. APHIS reopened poultry exports from several States to Japan, China, Cuba, Ecuador, Hong Kong, Iraq, Kazakhstan, Russia, Singapore and Taiwan. APHIS conducted voluntary inspections of more than 500 U.S. manufacturing facilities to maintain, expand, or open export markets in many countries, including the EU, Australia, Mexico, China and others. APHIS participated in industry stakeholder meetings, provided technical support for World Trade Organization cases, and attended bilateral trade meetings with Mexico, EU, Japan, Brazil, and Taiwan. APHIS also developed 24 information packages and questionnaire responses from various countries to maintain, expand, or open export markets. In addition, APHIS provided information to the World Organization for Animal Health

which resulted in the recognition of the United States as a country having negligible risk for bovine spongiform encephalopathy.

APHIS has launched a new application for electronically issuing export health certificates, which currently allows for certificates to be issued for 9 commodities to 2 countries. The Agency is expanding the capabilities of the system and the numbers of certificates issued by this system, which has received extremely positive feedback from industry stakeholders.

#### Lacey Act

APHIS is continuing to assemble a dedicated staff, evaluate options for storing paper declarations, provide outreach to industries and importers, and develop a web-based system for collecting declarations. Currently, importers submit declarations either by mailing paper forms to APHIS or electronically through a licensed customs broker and a database operated by the U.S. Customs and Border Protection (CBP) agency. Approximately 10 percent of the declarations are submitted on paper forms that require significant resources to analyze and store securely. The web-based system that APHIS is developing will provide an easier, more efficient alternative for filing declarations and allow the Agency to analyze and monitor a larger portion of the declarations for compliance. APHIS will use the increase received in FY 2014 to support this system. The program plans to test the system before full implementation, which is scheduled for 2014. APHIS will also use the funds to continue expanding outreach to importers on how to comply with the Lacey Act and strengthen its analysis of the declaration information for compliance with the Act as well as program improvements to better serve stakeholders. APHIS is also working with CBP to further streamline the process for filing declarations in CBP's database. In addition, APHIS has two initiatives underway to save importers time and potentially money in filing Lacey Act declarations: implementing Special Use Designations (SUDs) and proposing a rule to develop de minimis exemptions. SUDs are short-hand designations for some commodities that can be used in place of listing potentially dozens of plant species contained in the product to help importers expedite their reporting, and the de minimis exemptions would eliminate the need to declare products comprised of minimal plant material, with the exception of plants under protected status (such as those covered by the Convention on International Trade in Endangered Species of Fauna and Flora). On July 9, 2013, APHIS published an interim final rule to establish definitions for "common cultivar" and "common food crop," which are excluded from the Act. The definitions in this rule are designed to exclude most commercially grown food and fiber items from the Lacey Act requirements. Most of the provisions of the interim rule became effective on August 8, 2013, and are allowing importers of these items to bring in commodities without having to file a Lacey Act declaration. The next step for two provisions (defining the terms "tree" and "commercial scale") will be decided after all public comments have been considered.

Overall, approximately 85 percent of the program's funding supports salaries and benefits of personnel and 1 percent funds contracts and agreements. The remaining supports normal operating costs such as travel, supplies, rent and utilities.

#### Pay Increase- redirect (+\$90,000)

An increase of \$90,000 for pay costs which includes \$22,000 for annualization of the FY 2014 pay raise and \$68,000 for the anticipated FY 2015 pay raise.

#### (b) Overseas Technical and Trade Operations program (\$20,114,000 and 76 staff years available in the 2014).

Through the Overseas Technical and Trade Operations (OTTO) program, APHIS uses its technical expertise in animal and plant health to resolve sanitary and phytosanitary (SPS) issues that affect export opportunities for U.S. producers, allowing U.S. companies to be competitive in international trade and ensuring the fast and safe movement of agricultural exports. Specifically, the program opens, expands, and retains foreign markets for U.S. agriculture; monitors trading partners' SPS import conditions for U.S. agricultural products; ensures the smooth and safe movement of agricultural commodities to and from the United States; resolves technical issues affecting shipments of U.S. exports at foreign ports of entry by

placing technical experts overseas; and, monitors emerging pest and disease situations to prevent the introduction of exotic animals, plant pests, and diseases to the United States, among other responsibilities. APHIS' employees – including headquarters personnel, field staff, and personnel stationed in 30 countries – play a critical role in the success of these efforts. All together, these actions directly protect U.S. agriculture, expand international markets for U.S. exporters, and help generate more than 1 million jobs around the country. In FY 2013, APHIS successfully intervened in 280 releases of U.S. cargo held up at foreign ports-of-entry, which prevented the rejection of shipments worth more than \$34.8 million. In FY 2013, APHIS also successfully negotiated and resolved 200 SPS trade-related issues involving U.S. agricultural exports, with an estimated market value of \$2.9 billion.

Working with other Federal partners, such as the U.S. Trade Representative's Office and USDA's Foreign Agricultural Service, APHIS also provides the technical expertise needed to successfully address the animal and plant health regulatory issues associated with free trade agreement negotiations. APHIS places a priority on its support of ongoing negotiations for the Trans-Pacific Partnership (TPP) and the Trans-Atlantic Trade and Investment Partnership (TTIP). The TPP includes 11 Pacific Rim countries, including the United States, and has the potential to expand U.S. producers' export opportunities significantly. TTIP involves a proposed free-trade agreement with the European Union, and formal negotiations began in July 2013 and will likely involve a multiyear negotiating process before a final agreement is reached. To date, bilateral side meetings at TPP negotiating rounds have provided necessary impetus to secure: (1) New access for peaches and nectarines to Australia, (2) Expanded table grape access to the State of Western Australia and (3) Removal of Vietnam's import suspension on animal-origin offals. Negotiations to finalize the TPP agreement are proceeding. The TPP SPS Chapter text is largely finalized, however, the parties have not yet agreed if the SPS Chapter will be subject to formal TPP dispute settlement. The SPS negotiating group will next meet in Singapore during FY 2014. APHIS provides technical support in addressing bilateral SPS issues with TPP and TTIP partners. For TPP, APHIS has provided guidance to the U.S. government negotiating team regarding criteria for animal and plant health components of the text of the agreement's SPS chapter. APHIS' participation in the negotiation helps ensure that the SPS framework incorporated into the agreement is compatible with U.S. animal and plant health policies while promoting the export interests of U.S. agricultural producers. APHIS plays a similar role in negotiations under the TTIP with the European Union. Once implemented, the TTIP will be the largest and most economically significant trade agreement. Because of the intense focus on harmonizing regulations in an effort to enhance trade - including those related to plants, animals, and their products - APHIS has an active role in TTIP negotiations.

Through the OTTO program, APHIS also conducts capacity building activities to reduce risks to U.S. agriculture by helping developing countries strengthen their agricultural health and risk detection systems. These activities reduce risks to U.S. agriculture and trade by assisting developing countries in addressing pest and disease threats within their borders. APHIS encourages developing countries to use the same science-based, international standards that the Agency uses to evaluate import requests, increasing their capacity to engage in safe agricultural trade and potentially allow more U.S. imports. During FY 2013, APHIS acted upon 1,383 requests for technical assistance. APHIS' major capacity building activities included six training courses in animal and plant health for international participants. The courses included training in risk analysis for both animal and plant health, creating a model plant health system, and laboratory networks and diagnostics. In addition to U.S.-based courses, APHIS provided subject matter expertise for overseas programs that established and strengthened relationships with foreign veterinary services in Haiti, Peru, Kenya, and Mexico for example, for the detection and confirmation of diseases such as classical swine fever, porcine teschovirus, or bovine spongiform encephalopathy. APHIS also supports projects related to plant health and biotechnology activities, with continued focus on the Caribbean, Central America, and support for Free Trade Agreement partners. APHIS partners with and leverages resources with a number of collaborators including the State Department, Department of Defense, and the U.S. Agency for International Development to conduct these capacity building programs.

Agricultural trade is a bright spot for the U.S. export market but is subject to costly disruptions from animal and plant health barriers. APHIS' technical trade and capacity building activities support food security and export opportunities to U.S. producers. The activities also provide safe, nutritious products like fruits,

vegetables, and animal protein sources to international markets. APHIS is monitoring shifts in global trade trends and is aligning overseas officials to critical areas. Without this program, APHIS' ability to efficiently and effectively respond to SPS issues, work with foreign counterparts and international organizations to protect the United States from foreign plant and animal pests and diseases, and support U.S. producers' exports would decrease. With continued resources, APHIS expects to retain, expand, and open markets worth at least \$1.9 billion for U.S. agricultural products in FY 2015 and facilitate the release of at least 210 shipments.

Approximately 70 percent of the program's funding supports salaries and benefits of personnel, 15 percent represents contributions toward an agreement for the mandatory cost share with the Department of State for International Cooperative Administrative Support Services, and 15 percent is for other operating expenses including rent, utilities, and equipment.

Pay Increase – redirect (+\$74,000)

An increase of \$74,000 for pay costs which includes \$18,000 for annualization of the FY 2014 pay raise and \$56,000 for the anticipated FY 2015 pay raise.

(3) Animal Welfare

(a) Animal Welfare program (\$28,010,000 and 218 staff years available in 2014).

APHIS' Animal Welfare (AW) program has the unique Federal role of ensuring the humane care and treatment of animals covered by the Animal Welfare Act (AWA) through inspection, education, compliance, and enforcement efforts. Through its on-site inspections, educational efforts and enforcement actions, the AW program ensures facilities licensed and registered by the USDA are adhering to the Federal animal welfare standards. APHIS also re-inspects problem facilities, educates regulated entities, provides detailed training for inspectors, investigates complaints, and pursues civil penalties and other enforcement measures when necessary.

As part of its regulatory function, the program oversees more than 7,400 licensees and registrants, associated with more than 15,000 facilities, to assure these animals are being provided adequate humane care and treatment provided for in the regulations. Licensed entities are subject to unannounced inspections to monitor compliance with the regulations over time. In FY 2013, the program either conducted, or attempted to conduct, more than 9,000 random-based inspections to entities located across the United States, many of them located in rural areas.

APHIS assists new facilities with gaining the knowledge and skills necessary to operate in compliance with the AWA. Specifically, APHIS' pre-licensing program works with prospective dog dealer licensees to ensure they fully understand the AWA's requirements before obtaining a license, which reduces overall noncompliance over time. Beginning in FY 2014, the Agency will implement a mechanism to track the compliance of facilities within a year of receiving their license or registration. Additionally, beginning in FY 2014, APHIS will implement a new compliance initiative that seeks not only to bolster regulatory understanding with new applicants, but also seeks to increase the compliance rates of those licensed facilities that have had difficulty adhering to the regulations.

In the past five years, APHIS has seen an average compliance rate of 95 percent. In addressing the five percent not in substantial compliance, APHIS' Risk Based Inspection System identifies those entities that pose the highest risk of not providing humane care and treatment to the animals. The Agency flags high risk entities and conducts re-inspections for repeat noncompliance within 90 days to assess the welfare of the affected animals. APHIS exercises immediate deterrent options, such as letters of warning and the publication of such letters on the internet. The Agency issues between 400 and 600 letters of warning for regulated entities annually. In responding to serious noncompliance, APHIS uses enforcement procedures

that range from civil penalties, the issuance of "cease and desist" orders, the confiscation of animals, or license suspension and revocation.

The partnerships and collaborations built through APHIS' Center for Animal Welfare are essential in balancing the current and future workload. Working with State Departments of Agriculture, universities, industry groups, animal advocacy organizations and noted experts from throughout the world, the Center conducts educational workshops, scientific seminars, and listening sessions to convey current, critical information regarding animal welfare. Because of the collaboration and the advances being made at the Center, APHIS has been able to reduce inspection frequencies (within legal requirements) for facilities that have implemented and documented strong animal welfare programs. The Agency can remain focused on addressing the egregious violators of the Animal Welfare Act – who comprise two to five percent of all licensees/registrants.

The welfare of animals nationwide is subject to significant media attention and passionate public engagement. The American public holds APHIS accountable for ensuring all regulated animals are healthy and treated humanely. Should the AW program not be funded, the Agency will no longer be able to enforce the AWA, and the health and safety of more than two million animals would be severely compromised.

Overall, approximately 90 percent of the program's funding supports salaries and benefits of personnel, one percent of funds are spent on contracts and agreements, and less than one percent on IT system costs. The remaining funds are used to support normal operating costs such as travel, supplies, rent and utilities.

*Pay Increase – redirect (+\$212,000)*

An increase of \$212,000 for pay costs which includes \$52,000 for annualization of the FY 2014 pay raise and \$160,000 for the anticipated FY 2015 pay raise.

(b) Horse Protection program (\$697,000 and 6 staff years available in 2014).

APHIS' Horse Protection program strives to eliminate the cruel and inhumane practice of soring, which is a technique used to irritate or blister a horse's forelegs through the injection or application of chemicals or mechanical irritants. Soring changes the gait of a horse so that the animal steps higher, thereby allowing its rider to gain a competitive edge and improve his/her chances of winning at horse events. The Horse Protection Act (HPA) is the law that prohibits sored horses from being shown, exhibited, sold or auctioned. The HPA ensures that responsible horse owners and trainers will not face unfair competition from those who sore their horses and that the horses will not be subjected to the abusive practice of soring.

Horse show sponsors and/or show management have statutory responsibility under the HPA to prevent unfair competition and must identify and disqualify sored horses. The Horse Protection program works collaboratively with the twelve current Horse Industry Organizations to train and license Designated Qualified Persons (DQPs) used to inspect horses for soring at all events covered by the HPA.

The Horse Protection program employs its own inspectors to conduct unannounced inspections at horse shows/exhibitions/sales/auctions, as well as evaluates the effectiveness of the DQPs. Increased oversight at shows, combined with the increased use of technology that assists in confirming substances used to sore the horses, has had a positive impact on compliance. In FY 2015, APHIS expects to see a further reduction in the soring of horses protected by the HPA from the progress achieved in FY 2013. The decline in soring is correlated with increased oversight by APHIS inspectors.

About 2.6 million Americans are involved in the horse industry as service providers, employees, and volunteers. According to a 2005 study conducted for the American Horse Council, the direct economic value of the horse show industry is \$10.8 billion. APHIS's Horse Protection program serves as the sole Federal entity to uphold the HPA. Without continued funding, the abuse of horses would increase, impacting more than two million horses at 600 events around the country.

Overall, approximately 39 percent of the program's funding supports salaries and benefits of personnel, 33 percent of funds is for travel, 25 percent of funds is for contracts and agreements for sampling and testing of foreign substances used in soring. The remaining funding supports necessary equipment for completing programmatic functions.

*Pay Increase – redirect (+\$8,000)*

An increase of \$8,000 for pay costs which includes \$2,000 for annualization of the FY 2014 pay raise and \$6,000 for the anticipated FY 2015 pay raise.

(4) An increase of \$42,567,000 for Agency-Wide Programs

(a) APHIS Information Technology Infrastructure program (\$4,251,000 available in 2014).

The APHIS Information Technology Infrastructure (AITI) program provides funding for the hardware, software (including licensing and supports costs) and telecommunications infrastructure that gives Agency employees office automation tools, Internet access and access to mission-critical programs and administrative applications. The funding for this program supports the stable and secure information infrastructure for those mission-critical applications and the day-to-day business of APHIS. The AITI objectives and priorities are to continually improve sharing of information across the Agency; improve coordination and accessibility of information, processes, and resources available to enable APHIS employees to provide day-to-day services and support programs in emergencies; and, improve APHIS' cyber-security.

APHIS works with USDA's Office of the Chief Information Officer to support the program goals and manage information technology in a manner consistent with both USDA and Federal requirements. APHIS also works with other Federal partners, including the Department of Homeland Security's Customs and Border Protection and the Department of Health and Human Services' Centers for Disease Control and Prevention to ensure that AITI provides interoperability and required availability for partner agencies as needed for program delivery.

APHIS reviews system security patching rates for the APHIS Enterprise Infrastructure workstations and servers to determine the percentage of systems kept current with the latest security patches. In FY 2013, AITI achieved timely renewal of the security level accreditation and upgraded APHIS firewalls to allow for more functionality without sacrificing high levels of security. Systems not updated with current security patches make the Agency vulnerable to IT security threats. Furthermore, APHIS monitors the security controls associated with its IT infrastructure through a process called Certification and Accreditation. Without continued dedicated funding, many of these services would need to be provided at the expense of other programs and activities. Additionally, in FY 2013, AITI completed the Assessment and Authorization for the Enterprise Infrastructure. This project authorized the risk management for the core computing resources for all APHIS employees and cooperators.

While security is important to APHIS, accessibility to information technology tools is vital to the operations of the Agency. In FY 2013, AITI maintained its 99.97 percent availability for its key computing systems as well as a 20.6 minute service-desk response time for the occasions that personnel experience difficulties accessing computing systems.

AITI expenditures fund day-to-day operations for the Agency's IT infrastructure, with more than 75 percent of expenditures used to fund software licenses renewals and support. The remaining supports normal operating costs such as data center supplies and equipment.

(b) Physical and Operational Security program (\$5,146,000 available in 2014).

APHIS oversees and implements precautionary measures to ensure continued, efficient mission operations, and protection from disruption, degradation, or destruction of its facilities through the Physical and Operational Security (POS) program. These measures are essential for a safe and secure work environment. In addition, this program supports APHIS' contribution to the U.S. Department of State's continuing implementation of the Capital Security Cost Sharing (CSCS) program, which provides safe and secure workplaces for all U.S. government employees located overseas.

The POS program provides year-round security measures, such as physical security upgrades, alarms, badging and identification systems, guard services, security assessments, safety and risk assessments, workplace violence training and investigations of both internal and external threats (those potentially made by employees and those coming from an external source). These measures protect employees, visitors, and stakeholders from violence and acts of terrorism. For example, the program ensures that work at laboratories with sensitive material can continue without interruption from negative outside influences or threats. The program also provides protection (through a nationwide contract with a firm that employs off-duty senior law enforcement officials) for employees attending events as part of their official responsibilities, such as those attending horse shows to enforce the Horse Protection Act (HPA). In FY 2013, the program's personnel investigated 156 workplace violence allegations and 27 external threats to APHIS employees, and upgraded 20 Agency facilities with controlled access to use Federal Smart Cards for building access. Additionally, APHIS security specialists consistently investigate threats, and respond to requests for protection throughout the country for APHIS veterinarians who enforce Animal Welfare Act (AWA) and the HPA at horse shows. The program provided security for APHIS employees enforcing HPA regulations during 5 inspections related to the AWA, and at horse shows in 13 States. APHIS also worked with the Department of State to provide increased physical security measures to APHIS employees in Mexico, including improved communications and tracking technology.

APHIS works with other USDA agencies, and with Federal partners such as the Department of Justice, the Department of Homeland Security, the Department of State, and local law enforcement agencies, to ensure that the appropriate organization takes the lead, shares costs, and integrates security where co-location of employees exist. Without continued funding for a physically secure environment, the efficiency and effectiveness of all APHIS programs would be compromised. The costs associated with providing the services would need to be absorbed by each of the programs. In FY 2015, the POS program will continue to enhance security at APHIS' international facilities and provide protection for employees attending events such as horse shows.

In addition, the Department of State continues to implement the CSCS program, which is part of a \$17.5 billion effort over a 19-year period to construct 150 New Embassy Compounds (NECs). Since APHIS maintains a presence overseas to facilitate trade and monitor pest and disease threats, the Department of State requires APHIS to help fund the construction of the NECs based on the number of authorized APHIS positions. The cost-sharing program requires each participating Agency provide funding for several years in advance of actual occupancy for its share of the costs for new, safe, and secure diplomatic facilities on the basis of the total overseas presence of each Agency. The NECs house APHIS employees in more than 30 countries around the world.

APHIS operates the POS program in accordance with Homeland Security Presidential Directive (HSPD) 8 – National Preparedness, which strengthens the preparedness of the United States to prevent and respond to threatened or actual domestic terrorist attacks, major disasters, and other emergencies; HSPD 9 – Defense of United States Agriculture and Food, which establishes a national policy to defend the agriculture and food system against terrorist attacks, major disasters and other emergencies; HSPD 12 – Policy for a Common Identification Standard for Federal Employees and Contractors, which establishes a mandatory government-wide standard for secure and reliable forms of identification issued by the Federal government to its employees; and, the Secure Embassy Construction and Counterterrorism Act of 1999, which authorizes the Secretary of State to provide new, safe, secure U.S. diplomatic facilities.

Approximately 5 percent of the funding supports salaries and benefits of APHIS personnel, and 90 percent is for contracts and agreements, including but not limited to security equipment and installations, guard services, protection operations, and mandatory cost share with the Department of State for the CSCS program. The remaining 5 percent is for other operating expenses such as travel and supplies.

- (c) An increase of \$42,567,000 to fund Decentralized General Services Administration (GSA) Rental and Department of Homeland Security (DHS) Security Payments

USDA proposes in FY 2015 the decentralization of GSA Rental Payments and DHS payments. The amount is the equivalent share of the current GSA Rent and DHS central appropriations based upon current space occupancy across the continental United States. The appropriations request for the central GSA rent account and the DHS payment account has been reduced accordingly.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Summary of Proposed Legislation

Program: Animal Welfare  
 Proposal: Establish A New User Fee  
 Rationale: Under the Animal Welfare Act (AWA), APHIS carries out activities designed to ensure the humane care and treatment of animals covered under the Act. These activities include licensing and inspection of certain establishments that handle animals intended for biomedical research, sold as pets, transported in commerce, or used for exhibition purposes. Regulated entities already pay minimal fees for licenses, but they do not cover the full cost of the activity or the cost of the inspections.  
 Goal: A mandatory user fee would allow fees collected from regulated entities to be used to finance activities related to the review and maintenance of licenses and registrations, and inspections conducted under the Act.  
 Offsets: The user fee would offset a portion of the appropriation for the Animal Welfare Act program in future years.

Budget Impact: (\$ in thousands)

	2014	2015	2016	2017	2018
Discretionary Budget Authority	0	\$9,000	\$12,261	\$12,635	\$13,027
Discretionary Outlays	0	8,550	12,098	12,166	12,844

Program: Biotechnology Regulatory Services  
 Proposal: Establish A New User Fee  
 Rationale: Under the authority of the Plant Protection Act, APHIS regulates the introduction—meaning the importation, interstate movement, and field-testing—of organisms derived through biotechnology that may pose a plant pest risk. APHIS assesses the agricultural and environmental safety of organisms derived through biotechnology and evaluates petitions for the Agency to cease to regulate such organisms according to 7 CFR Part 340. Additionally, APHIS operates a compliance and inspection program to ensure compliance with its regulations governing organisms and products derived through biotechnology.  
 Goal: A user fee that would enable APHIS to maintain improved biotechnology reviews in the face of an increasing workload. APHIS would like to develop legislation using, as a guide, the authorities provided to other regulatory agencies.  
 Offsets: The user fee would supplement current appropriations for the BRS program. There is no offset with this proposed legislation.

Budget Impact: (\$ in thousands)

	2014	2015	2016	2017	2018
Discretionary Budget Authority	0	\$3,750	\$5,109	\$5,265	\$5,428
Discretionary Outlays	0	3,563	5,041	5,069	5,352

Program: Veterinary Biologics

Proposal: Establish A New User Fee

Rationale: Under the authority of the Virus-Serum-Toxin Act, APHIS regulates veterinary biologics (vaccines, bacterins, antisera, diagnostic kits, and other products of biological origin) to ensure that those products produced in or imported into the United States are not “worthless, contaminated, dangerous, or harmful.” APHIS reviews license applications for production facilities and biological products and operates a compliance and inspection program to ensure that its regulations governing veterinary biologics are met.

Goal: APHIS seeks to ensure that veterinary biologic manufacturers remain in compliance with all laws, regulations, and policies. APHIS’ licensing activities allow manufacturers to market their products. The user fee would recover a portion of the costs of APHIS’ activities from the beneficiaries.

Offsets: The user fee would offset a portion of future appropriations for the Veterinary Biologics program.

Budget Impact: (\$ in thousands)

	2014	2015	2016	2017	2018
Discretionary Budget Authority	0	\$6,750	\$9,196	\$9,476	\$9,770
Discretionary Outlays	0	6,413	8,736	9,003	9,282

## ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Salaries and ExpensesGeographic Breakdown of Obligations and Staff Years (SYs)

(Dollars in thousands)

State/Territory	<u>2012 Actual</u>		<u>2013 Actual</u>		<u>2014 Estimate</u>		<u>2015 Estimate</u>	
	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs
<b><u>UNITED STATES:</u></b>								
Alabama.....	\$3,628	23	\$3,442	21	\$4,152	25	\$4,276	25
Alaska.....	1,065	1	479	1	543	1	557	1
Arizona.....	23,487	83	10,056	74	18,300	81	19,053	81
Arkansas.....	3,969	26	3,453	20	4,276	24	4,402	24
California.....	96,790	138	71,540	114	90,662	131	96,819	127
Colorado.....	49,507	344	48,711	301	57,978	309	59,669	306
Connecticut.....	1,553	6	1,226	6	1,563	8	1,608	8
Delaware.....	725	2	966	2	623	2	640	2
Florida.....	45,271	266	41,396	238	55,260	247	62,032	242
Georgia.....	5,060	35	4,480	32	4,119	32	4,249	32
Hawaii.....	25,475	287	20,701	266	21,923	268	22,714	268
Idaho.....	10,674	87	8,749	86	13,079	95	13,485	95
Illinois.....	5,505	40	3,555	27	5,955	31	6,128	31
Indiana.....	4,721	32	3,495	22	5,467	27	5,624	27
Iowa.....	60,451	348	63,191	361	59,913	361	61,702	361
Kansas.....	3,649	29	3,000	23	3,699	25	3,812	25
Kentucky.....	4,751	33	4,683	33	5,023	36	5,179	36
Louisiana.....	3,276	30	2,662	21	3,027	23	3,122	23
Maine.....	1,290	9	1,284	8	1,147	8	1,182	8
Maryland.....	200,823	964	176,206	998	170,323	1,038	170,819	1,029
Massachusetts.....	21,904	122	21,684	120	22,290	120	22,942	120
Michigan.....	8,680	66	7,233	57	10,371	62	10,680	62
Minnesota.....	16,575	161	18,237	166	17,967	166	18,561	163
Mississippi.....	6,702	45	5,855	38	7,251	40	7,463	40
Missouri.....	9,824	47	6,804	51	5,303	51	5,481	51
Montana.....	4,978	36	5,759	41	4,526	41	4,675	41
Nebraska.....	4,144	25	3,714	25	3,231	25	3,333	25
Nevada.....	2,237	18	2,047	17	2,368	18	2,443	18
New Hampshire.....	13,364	16	13,222	18	13,580	18	13,921	18
New Jersey.....	5,722	32	4,222	22	5,693	24	5,853	24
New Mexico.....	5,313	40	4,531	35	6,319	40	6,510	40
New York.....	29,856	152	19,747	144	24,426	132	26,140	132
North Carolina.....	33,248	132	34,209	164	28,956	164	30,810	160
North Dakota.....	3,975	30	3,523	26	3,358	26	3,465	26
Ohio.....	22,027	54	6,536	51	11,340	55	11,665	55
Oklahoma.....	4,418	31	3,873	26	4,319	27	4,449	27
Oregon.....	5,834	26	4,975	23	6,325	25	6,501	25
Pennsylvania.....	6,642	44	6,468	42	7,160	43	7,373	43
Rhode Island.....	465	1	438	1	463	1	475	1
South Carolina.....	2,821	21	2,814	16	2,918	16	3,004	16
South Dakota.....	2,454	16	2,073	16	2,307	16	2,378	16
Tennessee.....	6,700	31	4,593	32	5,785	36	5,959	36
Texas.....	44,366	329	43,159	345	53,003	363	56,141	360
Utah.....	5,350	37	5,884	44	5,167	44	5,334	44
Vermont.....	1,066	8	1,037	7	1,067	7	1,100	7
Virginia.....	4,209	23	3,913	23	4,536	26	4,670	26
Washington.....	7,270	34	5,376	26	7,610	31	7,823	31
West Virginia.....	2,715	19	2,183	14	2,977	15	3,063	15
Wisconsin.....	5,337	30	4,727	27	6,371	34	6,557	34
Wyoming.....	4,184	30	3,867	30	4,005	33	4,133	33

State/Territory	2012 Actual		2013 Actual		2014 Estimate		2015 Estimate	
	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs
<b>U.S. TERRITORIES:</b>								
District of Columbia.....	13,390	88	21,324	106	13,947	106	14,050	104
Guam.....	159	1	730	-	163	-	162	-
Puerto Rico.....	9,182	110	7,687	108	9,560	114	9,672	114
Virgin Islands.....	78	1	32	-	80	-	80	-
<b>INTERNATIONAL REGIONS</b>								
<b>AFRICA:</b>								
South Africa.....	482	1	499	1	491	1	492	1
Senegal.....	559	1	414	1	569	1	570	1
Other.....	310	-	423	-	314	-	314	-
<b>ASIA/PACIFIC:</b>								
China.....	1,274	3	1,281	3	1,299	3	1,302	3
Japan.....	968	1	888	1	984	1	985	1
South Korea.....	422	1	409	1	430	1	431	1
Other.....	1,969	2	1,459	2	2,002	4	2,006	4
<b>CARIBBEAN:</b>								
Dominican Republic.....	488	-	408	-	495	-	495	-
Other.....	323	-	9	-	328	-	328	-
<b>CENTRAL AMERICA:</b>								
Guatemala.....	26,652	4	21,394	5	27,046	6	27,052	6
Nicaragua.....	258	-	-	-	262	-	262	-
Panama.....	15,177	6	16,286	9	15,413	9	15,422	9
Other.....	951	1	939	1	967	1	968	1
<b>EUROPE/NEAR EAST:</b>								
Austria.....	692	1	208	-	703	-	703	-
Belgium.....	1,413	2	1,521	2	1,438	2	1,440	2
Other.....	1,175	2	934	2	1,197	2	1,199	2
<b>NORTH AMERICA:</b>								
Canada.....	354	1	221	-	360	-	360	-
Mexico.....	6,462	4	6,385	4	6,688	4	6,692	4
<b>SOUTH AMERICA:</b>								
Brazil.....	880	2	598	2	898	3	901	3
Chile.....	543	1	574	1	553	1	554	1
Other.....	2,781	1	2,254	1	2,824	2	2,826	2
<b>Total direct obligations:</b>	<b>\$930,992</b>	<b>4,673</b>	<b>\$812,854</b>	<b>4,551</b>	<b>\$897,035</b>	<b>4,732</b>	<b>\$929,240</b>	<b>4,699</b>

Note: Total direct obligations; does not include advances and reimbursements or Agricultural Quarantine Inspection User Fees.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Salaries and Expenses

Classification by Objects

(Dollars in thousands)

		2012	2013	2014	2015
		<u>Actual</u>	<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>
<b>Personnel Compensation:</b>					
	Washington, DC.....	\$85,100	\$79,233	\$87,955	\$88,839
	Field.....	255,301	237,698	263,865	266,518
11	Total personnel compensation.....	340,401	316,931	351,820	355,357
12	Personnel benefits.....	104,600	98,780	108,080	109,167
13	Benefits for former personnel.....	4,599	1,376	2,090	2,111
	Total, pers. comp. & benefits.....	<u>449,600</u>	<u>417,087</u>	<u>461,990</u>	<u>466,635</u>
<b>Other Objects:</b>					
21	Travel & transportation of personnel.....	20,216	15,812	22,356	21,356
22	Transportation of things.....	1,342	863	1,460	1,460
23	Rent, Communications, and Utilities.....	22,677	23,287	22,735	64,243
24	Printing and reproduction.....	422	669	523	523
25.0	Other Services.....	22,246	24,484	23,609	25,668
25.1	Contractual Services Performed by Other				
	Federal Agencies.....	50,590	51,931	45,054	44,554
25.2	Related Expenditures.....	2,910	2,633	2,736	2,736
25.3	Repair, Alteration or Maintenance of				
	Equipment, Furniture or Structure.....	6,456	5,366	6,069	6,069
25.4	Contractual Services - Other.....	26,160	23,996	9,572	12,572
25.5	Agreements.....	244,354	179,419	220,576	207,069
25.6	ADP Services and Supplies.....	5,075	4,171	4,440	4,440
25.7	Miscellaneous Services.....	7,762	5,394	7,452	7,452
25.8	Fees.....	1,616	586	1,551	1,551
26	Supplies and materials.....	47,353	37,530	45,161	42,161
31	Equipment.....	17,082	15,230	17,105	16,105
32	Land & Structure.....	220	51	220	220
41	Grants, Subsidies & Contributions.....	2,094	3,164	1,927	1,927
42	Indemnity/Compensation.....	2,713	1,150	2,395	2,395
43	Int. & Div.....	34	31	34	34
45	Special Payments.....	70	-	70	70
	Total, other objects.....	<u>481,392</u>	<u>395,767</u>	<u>435,045</u>	<u>462,605</u>
	Total direct obligations.....	<u>\$930,992</u>	<u>\$812,854</u>	<u>\$897,035</u>	<u>\$929,240</u>
<b>Position Data:</b>					
	Average Salary, ES positions.....	\$163,872	\$163,957	\$164,032	\$164,360
	Average Salary, GS positions.....	\$87,124	\$87,175	\$87,225	\$87,399
	Average Grade, GS positions.....	10.53	10.58	10.60	10.62

Note: Total direct obligations does not include advances and reimbursements or Agricultural Quarantine Inspection User Fees.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Shared Funding Projects  
(Dollars in thousands)

	2012 Actual	2013 Actual	2014 Estimate	2015 Estimate
<b>Working Capital Fund:</b>				
Administration:				
Beltsville Service.....	1,239	1,104	983	1,054
Mail and Reproduction.....	178	138	133	145
Integrated Procurement.....	1,399	1,414	1,372	1,435
Procurement Operations.....	-	3	3	3
Subtotal.....	2,816	2,660	2,491	2,637
Communications:				
Creative Media & Broadcast Center.....	219	114	493	221
Finance and Management:				
NFC/USDA.....	1,453	1,823	2,107	2,113
Controller Operations.....	2,438	2,359	2,597	2,606
Financial Systems.....	4,483	4,033	3,606	3,572
Internal Control support Services.....	74	162	112	121
Subtotal.....	8,448	8,376	8,423	8,412
Information Technology:				
NITC/USDA.....	6,530	6,341	3,454	3,719
International Technology Services.....	1	85	2	2
Telecommunications Services.....	2,026	1,868	1,372	1,576
Subtotal.....	8,557	8,294	4,828	5,297
Correspondence Management.....	357	345	268	319
Total, Working Capital Fund.....	20,398	19,788	16,504	16,886
<b>Department-Wide Reimbursable Programs:</b>				
1890's USDA Initiatives.....	226	214	215	215
Advisory committee Liaison Services.....	30	23	28	28
Continuity of Operations Planning.....	128	152	153	153
E-GOV Initiatives HSPD-12.....	464	484	493	493
Emergency Operations Center.....	176	170	169	169
Facility and Infrastructure Review and Assessment.....	35	31	33	33
Faith-Based Initiatives and Neighborhood Partnerships.....	30	28	29	29
Federal bio-Based Preferred Procurement Program.....	26	25	25	25
Hispanic-Serving Institutions National Program.....	149	145	146	146
Honor Awards.....	4	3	6	6
Human Resources Transformation (Inc. Diversity Council).....	124	117	119	119
Intertribal Technical Assistance Network.....	147	-	-	-
Medical Services.....	39	53	56	56
Personnel and document Security.....	342	151	155	155
Pre-authorizing Funding.....	257	249	272	272
Retirement Processor/Web Application.....	40	42	42	42
Sign Language Interpreter Services.....	118	154	163	163
TARGET Center.....	66	66	67	67
USDA 1994 Program.....	59	56	57	57
Virtual University.....	156	151	151	151
Visitor Information Center.....	59	63	71	71
Total, Department-Wide Reimbursable Programs.....	2,677	2,379	2,449	2,449
<b>E-Gov:</b>				
Budget Formulation and Execution Line of Business.....	7	7	7	7
Enterprise Human Resources Integration.....	214	183	164	164
E-Rulemaking.....	34	77	75	75
E-Training.....	204	175	203	203
Financial Management Line of Business.....	5	13	13	13

	2012	2013	2014	2015
	<u>Actual</u>	<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>
Geospatial Line of Business.....	-	9	-	-
Grants.gov.....	45	52	-	-
Human Resources Line of Business.....	18	20	20	20
Integrated Acquisition Environment - Loans and Grants.....	89	100	139	139
Integrated Acquisition Environment.....	43	51	49	49
Total, E-Gov.....	<u>660</u>	<u>686</u>	<u>670</u>	<u>670</u>
Agency Total.....	23,918	23,027	19,803	20,185

Physicians' Comparability Allowance (PCA) Worksheet

APHIS Table 1

		CY 2013 (Actual)	CY 2014 (Estimates)	BY 2015 (Estimates)
1) Number of Physicians Receiving PCAs		1	1	1
2) Number of Physicians with One-Year PCA Agreements				
3) Number of Physicians with Multi-Year PCA Agreements		1	1	1
4) Average Annual PCA Physician Pay (without PCA payment)		\$126,251	\$126,251	\$126,251
5) Average Annual PCA Payment		\$30K	\$30K	\$30K
6) Number of Physicians Receiving PCAs by Category (non-add)	Category I Clinical Position			
	Category II Research Position			
	Category III Occupational Health	1	1	1
	Category IV-A Disability Evaluation			
	Category IV-B Health and Medical Admin.			

7) If applicable, list and explain the necessity of any additional physician categories designated by your agency (for categories other than I through IV-B). Provide the number of PCA agreements per additional category for the PY, CY and BY.

Not applicable

8) Provide the maximum annual PCA amount paid to each category of physician in your agency and explain the reasoning for these amounts by category.

Thirty thousand (\$30k) per annum is paid to the category III physician currently employed by APHIS. A physician was needed who had both category III and IV-B experience due to the nature of APHIS' mission. APHIS is responsible for protecting the health and value of American agriculture and natural resources. The incumbent is instrumental in protecting the Agency's employees from zoonotic pathogens in addition to other hazards in the workplace. The incumbent has expert knowledge of the workplace infrastructure and is able to expertly interface at all levels in addition to being instrumental in developing policies and practices to protect workers.

9) Explain the recruitment and retention problem(s) for each category of physician in your agency (this should demonstrate that a current need continues to persist).

As this is a singular position, staffing difficulties, per se, are not an issue at this time. However, should the incumbent opt to leave, it is anticipated that without a PCA to move the salary closer to parity with private sector physician salaries, staffing difficulties would clearly ensue. It is inherently difficult to recruit physicians for Federal service within the DC area due to the area's high cost of living and the discrepancy in salary levels offered between private industry and the Federal service. Salary data from 2008 – 2012 indicates that physicians salaries in occupational medicine and family practice range from \$145,000 to \$204,000. Offering a PCA brings closer parity with these figures to ensure retention of the physician currently employed.

10) Explain the degree to which recruitment and retention problems were alleviated in your agency through the use of PCAs in the prior fiscal year.

As this is a singular position, staffing difficulties, per se, are not an issue at this time. However, should the incumbent opt to leave, it is anticipated that without a PCA to move the salary closer to parity with private sector physician salaries, staffing difficulties would clearly ensue. The PCA has ensured the retention of the current incumbent.

11) Provide any additional information that may be useful in planning PCA staffing levels and amounts in your agency.

Not applicable

# ANIMAL AND PLANT HEALTH INSPECTION SERVICE

## SALARIES AND EXPENSES

### STATUS OF PROGRAM

#### SAFEGUARDING AND EMERGENCY PREPAREDNESS/RESPONSE

Current activities: Together with its stakeholders, APHIS promotes the health of animal and plant resources to ensure abundant agricultural products and services for U.S. customers. APHIS monitors and responds to potential acts of agricultural bio-terrorism, invasive species, diseases of wildlife and livestock, and conflicts between humans and wildlife as it strives to assure its stakeholders that it is on guard against the introduction or re-emergence of animal and plant pests and diseases that could limit agricultural production.

When a pest or disease is detected in the United States, APHIS works cooperatively with other Federal, State, Tribal and industry partners to conduct plant and animal health monitoring programs to rapidly diagnose them and determine if there is a need to establish new pest or disease management programs. APHIS, in conjunction with States, Tribes, industry, and other stakeholders, protects American agriculture by eradicating harmful pests and diseases or, where eradication is not feasible, by minimizing their economic impact. The Agency monitors endemic pests and diseases through surveys to detect their location and through inspection to prevent their spread into non-infested parts of the country.

The Agency maintains a cadre of trained professionals prepared to respond immediately to potential animal and plant health emergencies. Program personnel investigate reports of suspected exotic pests and diseases and take emergency action if necessary. To facilitate these efforts, APHIS develops pathway studies and thoroughly investigates the progression of outbreaks to determine the origin of plant and animal pests and diseases. APHIS also actively engages State, Tribal, and local governments, and industries to advance their emergency preparedness and response capabilities.

Through its Wildlife Services program, APHIS protects agriculture from detrimental animal predators through identification, demonstration, and application of the most appropriate methods of control. APHIS also develops methods to control animals and pests that are detrimental to agriculture, wildlife, and public safety. The Agency's regulatory structure brings the benefits of genetic research to the marketplace, while protecting against the release of potentially harmful organisms into the environment. APHIS also conducts diagnostic laboratory activities that support the Agency's veterinary disease prevention, detection, control, and eradication programs. The Agency also provides and directs technology development in coordination with other groups in APHIS to support plant protection programs of the Agency and its cooperators at the State, national, and international levels.

#### Selected Examples of Recent Progress - Animal Health:

##### 1. Animal Health Technical Services

APHIS' Animal Health Technical Services (AHTS) program enhances the tools available for acquiring and managing information vital for maintaining and improving global market access. The incorporation of national surveillance data standards into data management applications makes it possible for animal health information, entered by Federal, State, Tribal, and private individuals in multiple systems, to be compiled nationally, thus leveraging the work of animal health professionals across the country to meet local, State, and national veterinary health objectives. Private veterinarians trained and accredited by APHIS help producers meet export requirements and disease program standards, allowing U.S. animals and animal products to compete in the global economy. Disease transmission and spread models developed and shared by the Agency allow improved planning and management of animal health incidents.

### Information Management

The AHTS program develops new information management systems, while maintaining and improving existing data systems and applications. APHIS makes these systems available to States and Tribal Nations, who use them to support their traceability plans and other animal health activities. In FY 2013, the AHTS program upgraded its national animal health surveillance system by completing the replacement of APHIS' Generic Disease Database (GDB) with commercial off-the-shelf (COTS) software known as Surveillance Collaboration Services. Using a COTS product instead of developing the entire system internally is consistent with government and agency initiatives for improving information technology (IT) management. The move will allow for quicker development of meaningful functionality and consolidation of existing IT systems, thereby increasing the efficiency of data capture and providing a streamlined national approach. The software will be housed in a USDA enterprise data center and will be available for State and Federal animal health officials in all 50 States, 2 tribal nations, Puerto Rico, and the U.S. Virgin Islands by January 2014. This system will enhance communication and data accuracy, create significant lifecycle and maintenance efficiencies, and make standardized data readily available. The savings were generated because the GDB system required investments in APHIS staff development, software procurement, and services to help architect the system within Oracle. As opposed to an in-house system, a COTS system generates significant savings in the areas of procurement, development, and maintenance. APHIS is using the savings to further integrate data features into the COTS system. With many data sources from several partners, IT systems, and locations, data integration becomes vital in moving into this system information that was not captured previously.

In addition, APHIS implemented a business intelligence reporting tool for State partners. The reporting tool enables users without technical knowledge to extract and analyze data, and assemble reports. Also in FY 2013, APHIS enhanced the report writing options for the ADT Information System, which enables Federal and State agencies to document the movement history of an animal throughout its life. Further, the Agency implemented a warehouse inventory management and provisioning system at the National Center for Animal Health in Ames, Iowa, and established an inter-system communication of laboratory test results from the National Veterinary Services Laboratories information management system to the National Animal Health Laboratory Network repository.

The speed of commerce demands that information move as expeditiously and efficiently as possible to meet client expectations and demands. The U.S. veterinary diagnostic laboratory community has struggled to accomplish such information transfers for years. Many parts of the necessary infrastructure to support these transfers exist – including Laboratory Information Management Systems, messaging software, messaging standards, and State and Federal databases – but there is currently no overall linkage between these parts. The development of a State Animal Laboratory Messaging Service (SALMS) is designed to complete the linkages and provide an end-to-end infrastructure for the electronic transfer of information. The “missing link” is a central message routing site. SALMS is intended to address this and bridge the gap between what are now isolated systems. Specifically, the SALMS will provide a messaging service for all State or Federal veterinary diagnostic laboratories; create a communication path between participants for any testing service; and improve the efficiency and accuracy of information transfer. In addition, it will require that messages be in a standardized language format and require a participant to create and receive messages in this format. SALMS will be administered by Cornell University, inside its secure firewall with 24/7 availability. It will be free to qualified participants. In FY 2013, APHIS achieved parallel deployment of both SALMS and the Laboratory Messaging Services.

In FY 2013, the Licensing, Serial Release, Testing Information System (LSRTIS) became fully functional. This system provides APHIS a means for processing, tracking, and authorizing more than 73 billion doses of vaccine and related animal biologic products. The modifications allow LSRTIS to further track inspections and investigations; improve data sharing and accuracy; provide more secure, remote data access; and enable trend analysis as well as more efficient data queries and reports generation. Furthermore, electronic processing of Certificates of Licensing and Export Certificates is now possible, providing considerable time and cost savings.

### Modeling

APHIS uses models to improve our understanding of historical events, to estimate future consequences, and inform strategic, logistical, and budgetary decisions based on an evaluation of the effectiveness of varying interventions.

In FY 2013, APHIS and their collaborators at the University of Minnesota and the National Center for Foreign Animal and Zoonotic Disease Defense completed work to quantify the epidemiologic impact of delayed detection of foot-and-mouth disease (FMD), examine diagnostic testing strategies for an FMD outbreak response, and assess vaccination strategies for FMD control in New Mexico. These strategies consisted of vaccinating susceptible herds within varying distances of detected herds, in circles or rings around detected herds. The modeling demonstrated the need for early detection and a robust laboratory capacity, as well as the effectiveness of applying vaccine to address a hypothetical FMD incursion in New Mexico.

Also in FY 2013, APHIS completed the development and application of the U.S. Animal Movement Model and the U.S. Disease Outbreak Simulation Model. These models are designed to provide a quantitative, national scale understanding of cattle movements in the United States. In addition, they assess the potential for the spread of diseases, such as bovine tuberculosis and FMD. In FY 2013, APHIS used these models to evaluate the effectiveness of movement restrictions under varying conditions of a hypothetical FMD outbreak. The development and application of these models highlights the role models play in developing animal health emergency response plans and strategies.

### Animal Disease Traceability

The national Animal Disease Traceability (ADT) framework allows Federal, State, Tribal, and private animal health professionals to work together to identify diseased animals, quickly trace their movements, and control disease spread to protect the livestock industry, whose production value was approximately \$70 billion in 2012 (National Agricultural Statistical Service, USDA). Knowing where diseased and at-risk animals are located helps preserve animal health, reduce the number of animal illness and deaths if outbreaks occur, and limit economic loss to owners and communities.

On January 9, 2013, USDA published a final rule establishing general regulations for improving traceability of U.S. livestock moving interstate. The rule took effect on March 11, 2013, and requires the official identification of covered livestock as well as a defined movement document unless otherwise exempt. In FY 2013, USDA expanded the availability of official animal identification eartags at no cost to producers. Other official, USDA-approved identification methods are readily available for producers to purchase to ensure that the identification options work best for their individual management system. The commonly used interstate certificates of veterinary inspection certificates (ICVI) are the primary movement documentation used to obtain movement information. This practice minimizes the regulatory burden on producers when shipping livestock to other States. APHIS has collaborated with the impacted States and industries to expand options for increasing the availability of electronic ICVIs. Electronic ICVIs are easier to search than paper documents when animals need to be traced. The administration of trace test exercises by the States was initiated to support the development of traceability performance baseline values. These measures will be used to document progress made through ADT implementation in the future. Using performance measures provides flexibility to the States to work with producers at the local level to determine solutions that work best for them while enhancing traceability.

### National Veterinary Accreditation Program

Approximately 71,000 accredited veterinarians act as the first line of defense for reportable domestic and foreign animal diseases. The voluntary National Veterinary Accreditation Program (NVAP) authorizes private veterinary practitioners to work cooperatively with Federal veterinarians and State animal health officials. In FY 2013, the NVAP created a supplemental training module for accreditation renewals for the first time in the veterinary accreditation program's 92-year history. More than 8,000 accredited veterinarians applied for renewal online, saving an estimated 7,000 staff hours that would have been needed to process paper applications. APHIS now hosts 20 web-based supplemental training modules for accredited veterinarians and is on schedule to complete 3 additional modules in the near future. These supplemental training and renewal requirements provide increased

knowledge of animal disease surveillance, prevention, zoonoses, and disaster preparedness. Accredited veterinarians have completed more than 70,000 web modules, as well as over 10,000 modules at major and minor veterinary conferences.

## 2. Aquatic Animal Health

The Aquatic Animal Health Program activities focus on protecting the animal health of the U.S. aquaculture industry, valued at \$1.4 billion in 2007 (USDA- National Agricultural Statistics Service 2007 Census of Agriculture). This program carries out activities consistent with the National Aquatic Animal Health Plan (NAAHP) by providing national coordination, surveillance, and testing for important high-consequence aquatic animal diseases. The NAAHP is a set of guiding principles and recommendations on protecting the health of our nation's farmed and wild aquatic animal resources. It was developed and signed by the three Federal government agencies responsible for the national oversight of aquatic animal health (APHIS, the National Oceanic and Atmospheric Administration (NOAA), and the U.S. Fish and Wildlife Service (FWS)) with input from key stakeholders (e.g., industry, universities, Federal and State governments, and tribal agencies). APHIS serves as the NAAHP lead to facilitate collaboration with stakeholders and to consult with an advisory group called the Subcommittee on Aquatic Animal Health on aquatic animal health priorities that support interstate and international commerce.

In FY 2013, APHIS collaborated with NOAA, FWS, the U.S. Geological Survey, the States of Washington and Alaska, and the Northwest Indian Fisheries Commission to continue the infectious salmon anemia (ISA) surveillance project. This project is designed to determine the risk posed to wild Pacific salmon and the coastal economies that rely on the industry. ISA has caused devastating losses in domestic and international Atlantic salmon farming operations. In FY 2013, APHIS continued to collect health information about ISA in wild and farmed salmon populations throughout Alaska and Washington using improved detection methods. At the end of Year 1 of a two year surveillance study, more than 2,500 samples had been collected and tested, with no ISA virus detections. Year two sampling is underway and the surveillance project will be completed in FY 2014. The samples are collected by a variety of Federal, State, tribal, and industry partners.

In FY 2013, APHIS continued to support the health of the nation's aquaculture industry by providing confirmatory testing at the National Veterinary Services Laboratories in Ames, Iowa. In FY 2013, APHIS developed a strategic plan to establish aquatic animal pathogen testing with the National Animal Health Laboratory Network (NAHLN) starting with ISA and viral hemorrhagic septicemia (VHS). Adding aquatic animal testing to the NAHLN will enable APHIS to build our nation's capacity for accessible, timely, accurate, and consistent aquatic animal disease laboratory services under a quality management system. Through the NAHLN, APHIS will standardize testing for targeted surveillance to be used for baseline and zonation studies (disease freedom), monitoring of high-consequence aquatic diseases of regulatory or industry concern, responding to disease outbreaks, and interstate movement and international and trade. APHIS will implement the plan in early FY 2014.

At the end of FY 2013, there have been no reports of VHS in U.S. aquaculture facilities. In FY 2013, APHIS evaluated VHS surveillance data, conducted a risk assessment, and engaged stakeholder groups to re-assess whether Federal requirements are still necessary for fish movement within and out of the Great Lakes Region. APHIS is considering all of the information and will make a decision in early 2014.

## 3. Avian Health

The Avian Health program protects the health of avian species, improving the quality, productivity, and economic viability of the poultry industry, valued at \$38 billion in 2012. APHIS activities include disease prevention, monitoring and surveillance, and investigation and response actions undertaken when avian health issues are identified. APHIS' surveillance programs for avian species detect foreign, zoonotic, and domestic diseases that could substantially impact domestic production and the economy. Surveillance information can demonstrate that certain diseases do not exist in the poultry populations, thus facilitating trade and protecting public health. APHIS also maintains regulations and national program standards and guidelines that direct avian health activities at the Federal, State, and Tribal levels. Establishing and maintaining these standards is a vital Federal responsibility that

supports interstate and international commerce by providing assurances regarding the health of avian species and products being moved or traded.

This program focuses on notifiable avian influenza (AI), which are forms of AI that are reported to the World Organization for Animal Health (OIE) due to their potential for health threat and disease spread. The AI virus changes rapidly in nature by mixing its genetic components to form slightly different virus subtypes. Domestically, APHIS works with other Federal agencies, States, and industry to prevent AI introduction in U.S. commercial broilers, layers and turkeys, their respective breeders, and the Live Bird Marketing System (LBMS). Internationally, APHIS works with organizations such as the OIE, the Food and Agriculture Organization of the United Nations (FAO), and the OIE/FAO Network of Expertise on AI to rapidly identify and respond to AI.

The National Poultry Improvement Plan (NPIP) is a Federal-State-industry cooperative program that, along with the LBMS, has 42 States and Puerto Rico participating in AI prevention and control. More than 95 percent of the commercial broiler, turkey, and egg industries and 100 percent of the commercial poultry breeding industry participate in the NPIP. In addition, the NPIP has 1,290 authorized laboratories with trained technicians approved to provide the diagnostic testing necessary for the NPIP. APHIS' State cooperators conduct surveillance and diagnostic activities for the LBMS, upland game, commercial surveillance outside of the LBMS, and assistance to the broiler industry for AI surveillance in commercial operations. These activities enable the United States to certify to our trading partners that many classes of poultry originate from flocks that are monitored or free of diseases such as salmonella, mycoplasma, and notifiable AI. The NPIP enables diagnostic technology to be applied to the improvement of poultry and poultry products nationwide. LBMS testing is vital to preventing and controlling the disease in markets, but also among production premises and poultry distributors that supply those markets. In 2013, APHIS performed approximately 1.8 million tests through the NPIP, with an additional 149,232 tests for AI surveillance under the LBMS for the first fiscal three quarters. The number of LBMS premises that tested positive for AI decreased from 34 in 2007 to 5 in 2013. The positive premises were depopulated, cleaned, and disinfected according to established standards.

APHIS continued to work with the Centers for Disease Control and Prevention, the Department of the Interior (DOI), and other government agencies to monitor the H7N9 virus in China, assess potential introduction pathways, and modify preparedness and response plans if appropriate. APHIS and the DOI concluded that the risk of introduction and spread of H7N9 to the United States is low. USDA surveillance activities in wild birds would detect the virus should an introduction occur. In addition, USDA trade requirements will prevent the legal entry of potentially infected materials. APHIS offices in Asia help collect real-time information on avian health and the H7N9 virus. APHIS conducts surveillance and capacity building activities, provides training and oversees epidemiology and diagnostic testing throughout the region. To open markets for U.S. poultry in Asia, APHIS has negotiated sanitary protocols for trade of various poultry and poultry-related products. When markets have been abruptly closed to certain U.S. States or regions in response to low pathogenic AI detections, APHIS provides science-based rationales for reopening the markets, coordinates informational visits and exchanges, facilitates the United States' industry access to decision-makers, and participates in continued negotiations.

APHIS protects against the introduction of highly pathogenic AI into the United States and the spread of low pathogen avian influenza within the United States. The Agency works with State animal health officials and the poultry industry to conduct surveillance of breeding flocks at slaughter plants, live-bird markets, livestock auctions, and poultry dealers. The Agency continues to work closely with stakeholders to address issues and ensure program activities are sufficient to protect the health of U.S. poultry.

APHIS conducted additional AI sampling in upland game birds to increase knowledge on the transmission mechanisms from wild birds to poultry and humans. In 2013, APHIS sampled 3,253 apparently healthy birds for AI and found no highly pathogenic avian influenza (HPAI). Of the samples tested, 2.5 percent were positive for low pathogenic AI. In addition to testing bird populations, APHIS oversees the importation of poultry and poultry product imports to minimize disease spread through trade. To support AI detection at U.S. ports of entry in FY 2013, APHIS' Investigative and Enforcement Services initiated more than 3,100 cases, issued 145 official warnings, and issued 2,523 pre-litigation settlements that resulted in the collection of more than \$1.3 million in stipulated penalties.

Outreach efforts further prevent avian disease. For example, the Biosecurity for Birds (BFB) program raises awareness about preventing the introduction and spread of AI and other infectious poultry diseases. This program enables APHIS to reach targeted segments of the avian marketplace, including backyard poultry producers and pet bird owners, and educates them on AI and how they can reduce HPAI threats. The campaign reaches a wide variety of audiences through educational materials and an expanded social media presence. Bird Health Awareness Week featured a Twitter chat with an APHIS veterinarian and an online game. The Healthy Harry and Dr. Kate video series has received 80,000 views. The BFB campaign continues to distribute educational materials, including a bilingual calendar, fair packages, and biosecurity information in numerous languages.

While prevention is the ultimate goal of the Avian Health program, APHIS also prepares for the possibility of disease spread. The Agency uses disease spread modeling to evaluate disease outbreak scenarios, planning, and assessment of disease control strategies. In FY 2013, APHIS continued to sponsor the Crisis Management Center (CMC) for Animal Health at FAO. The CMC is an emergency response branch of FAO's Emergency Center for Trans-boundary Animal Diseases. Its strategic goal is to respond to and contain disease outbreaks threats. The CMC provides resources to quickly respond to outbreaks such as AI in countries where the United States cannot place personnel or respond bilaterally. This approach reduces the threat of disease outbreaks such as AI from becoming a pandemic. Another principle role of APHIS is to ensure that our trading partners adhere to the Sanitary and Phytosanitary rules set forth by the World Trade Organization, as well as the other relevant international standards-setting organizations, as the United States and FAO-Rome continue to expand their trade relationships and establish new partnerships.

#### 4. Cattle Health

The Cattle Health program protects the health of cattle and improves the quality, productivity, and economic viability of the \$85 billion cattle industry (National Agricultural Statistics Service). APHIS activities include disease prevention, monitoring and surveillance, and disease investigation and response actions. APHIS also maintains regulations, national program standards, and guidelines that direct cattle health activities at the Federal, State, and Tribal level. Establishing and maintaining these standards is a vital Federal responsibility that supports interstate and international commerce by providing assurances regarding the health of animals and products being moved or traded.

##### *Surveillance and Monitoring*

APHIS conducts surveillance and monitoring for diseases to safeguard the health of U.S. cattle and demonstrate disease status to trading partners. In FY 2013, APHIS conducted surveillance through the testing of cows and bulls at slaughter, first-point testing (at livestock markets, shows, sales, buying stations, etc.), whole herd and individual animal testing on-farm, and testing of cattle at rendering facilities (operations that collect dead, dying, disabled, and diseased animals). APHIS worked with States, Tribes, and producers to survey for critical cattle health diseases, including bovine tuberculosis (TB), bovine spongiform encephalopathy (BSE), brucellosis, and cattle fever tick (CFT).

Bovine TB was once the most prevalent infectious disease of cattle and swine in the United States. Although cattle are considered to be the primary host of the disease, TB has been reported in several other animal species, as well as in humans. APHIS' surveillance for bovine TB includes testing cattle and slaughter surveillance that is conducted in conjunction with the USDA's Food Safety and Inspection Service. Since the Bovine TB program began in 1917, it has markedly decreased the prevalence of the disease in U.S. livestock. The disease prevalence rate in cattle herds has dropped from 5 percent to less than 0.001 percent. In FY 2013, the program tested 11,312 slaughter samples. Through on-going surveillance testing and slaughter surveillance, TB was detected in seven cattle herds- four beef and three dairy.

Another disease of concern is BSE, a chronic degenerative disease that affects the central nervous system of cattle. BSE is extremely rare and is not contagious. The Food and Drug Administration's (FDA) 1997 ban on feeding mammalian protein to ruminants has been an effective means for mitigating the disease. Removing risk materials from cattle slaughtered for human consumption further mitigates the human health risk. APHIS' BSE surveillance effort is designed to detect one BSE case in one million adult cattle with 95 percent confidence. This goal exceeds

the standard required by the World Organization for Animal Health (OIE). The Agency's surveillance approach includes testing samples from slaughter and livestock markets, farms, rendering facilities, and diagnostic laboratories. The testing at livestock markets is done on tissue removed from down or disabled cattle that are euthanized at these markets to remove them from live animal commerce. This approach enables APHIS to detect BSE at very low prevalence and assess any change in the BSE status of cattle. In FY 2013, APHIS tested approximately 43,000 samples for BSE, with no new cases detected.

Bovine brucellosis, caused by the bacteria *Brucella abortus* in cattle and bison, is a serious infectious and contagious disease that significantly affects animal and public health, and national and international trade. In cattle, this disease can cause decreased milk production, weight loss, abortions, infertility, and lameness, impacting the livelihood of cattle producers and the supply of meat and dairy products available to the public. The Federal-State brucellosis eradication effort has eradicated bovine brucellosis from domestic cattle and bison herds. All 50 States have been Class Free for this disease since July 2009. In FY 2013, brucellosis was detected in one cattle herd in the Greater Yellowstone Area (GYA) in the State of Montana. Five other herds detected in FY 2011 and FY 2012 remain under quarantine with affected-herd management plans, including movement controls and additional herd testing. There is no indication that brucellosis has spread outside the GYA. This area is APHIS' primary focus for brucellosis in livestock because the disease is endemic there in wild elk and bison. APHIS continued carrying out the national bovine brucellosis slaughter surveillance plan to increase the efficiency of this surveillance stream. In FY 2013, APHIS tested approximately 2.9 million head of cattle under the Market Cattle Identification (MCI) slaughter surveillance program and an additional 164,700 head of cattle at livestock markets. Approximately 143 epidemiologic investigations were conducted on suspicious MCI surveillance tests. APHIS tests cattle and domestic bison on farms or ranches for movement, private sale, issue of herd certification, and for show or exhibition purposes. In FY 2013, APHIS tested 383,400 animals for such purposes. Also in FY 2013, approximately 3.6 million calves and approximately 19,500 adult cattle were vaccinated for brucellosis, and approximately 539 herds were certified as brucellosis certified-free cattle herds.

APHIS continues to conduct surveillance and monitoring to eliminate cattle fever. APHIS focuses on controlling the spread of CFT as it is the vector of bovine babesiosis, a severe disease of cattle that caused losses to the cattle industry in 1906 equivalent to more than \$1 billion in today's dollars. Although the United States is free of cattle fever, there is a permanent quarantine buffer between Texas and Mexico. Bordering Mexican states harbor tick species and the disease, and tick-infested white-tailed deer located near the U.S./Mexico border continue to affect the U.S. cattle population. In FY 2013, APHIS conducted 25,301 inspections of individual premises for ticks, including 7,406 river trail patrols. Surveillance for ticks includes inspection of cattle before they leave quarantined areas, surveillance at local markets, inspection of hunter-killed white-tailed deer, and horseback river trail patrols to capture stray Mexican livestock who serve as hosts for the ticks to enter the United States. In FY 2013, APHIS identified 19 newly infested premises inside the border, 31 fewer than in FY 2012. Further, there were 11 newly affected premises at the end of FY 2013 outside the border – the same number as FY 2012. Twenty percent (6 out of 30) of the new infestations in FY 2013 were identified due to infested white-tailed deer. Forty-five of the 88 stray cattle apprehended along the border were infested with CFT, along with 4 of the 47 stray horses/mules. Two stray goats were infested as well.

In FY 2013, APHIS continued working with neighboring countries to prevent the entrance of cattle diseases such as bovine TB, foot-and-mouth disease, BSE, and screwworm. APHIS and its cooperators have eradicated screwworm from the United States, Mexico, Belize, Guatemala, Honduras, El Salvador, Nicaragua, Costa Rica, and Panama. APHIS' international efforts prevent the reestablishment of screwworm in the United States by working with Panama, Mexico, and Central American countries to maintain a screwworm-free barrier zone in the Darien Gap, a narrow 102-mile stretch of jungle along the border of Colombia and Panama. APHIS produces approximately 40 million sterile flies per week at its Panama rearing facility. In FY 2013, there were no outbreaks or detections of screwworm infestations in Panama north of the barrier zone in Darien Province.

#### Investigation and Response Activities

In FY 2013, seven new TB-affected herds were identified. APHIS helped States conduct investigations in North Dakota (one beef herd), Michigan (three beef and two dairy herds), and California (one dairy herd). Of the seven new herds, four cattle herds (one Michigan dairy and three Michigan beef herds) were depopulated with Federal

indemnity funds and the remaining three herds are under test-and-removal management plans. APHIS restricts animal movement from TB-affected areas to control the spread of the disease. The Cattle Health Program has five State TB classifications, where a higher prevalence rate results in a lower ranking and more restrictive movement requirements. The classifications are, in descending order: accredited free (AF), modified accredited advanced (MAA), modified accredited (MA), accreditation preparatory, and non-accredited. At the end of FY 2013, 48 States, 2 Territories, and 1 zone were TB AF, including Puerto Rico and the U.S. Virgin Islands. California was MAA. Michigan continued to be divided into three classification zones: AF, MAA, and MA status. Four cases of brucellosis were detected in one cattle herd in FY 2013. This herd is located in Montana within the State's designated surveillance area and was detected as a result of Montana's designated surveillance area testing requirements.

APHIS controls CFTs along the quarantine line using a partial tick control barrier fence, livestock movement quarantines, and tick treatments for cattle and deer. To prevent the spread and re-establishment of the tick vectors, the program designated a permanent quarantine area along 500 miles of the Mexican border from the Gulf of Mexico to Del Rio, Texas, and established a cooperative Federal-State program. The cooperative efforts by APHIS and the Texas Animal Health Commission (TAHC) since FY 2010 have decreased the prevalence of ticks and have enabled Texas to release all acreage under quarantine for two of the three temporary preventive quarantine areas. This represented a release of 861,245 acres from quarantine with only 33,024 acres remaining under quarantine in the free area. The TAHC establishes these zones in areas outside of the APHIS-monitored permanent tick quarantine zones. To release a quarantine area, every infested premise must have all cattle treated for at least nine months, including inspections and treatments every two weeks. As a result, APHIS conducted more than 126,000 individual animal inspections and approximately 74,000 treatments. In FY 2013, the quarantine buffer zone and the free area of Texas contained 30 newly quarantined premises, compared to 61 in FY 2012. Although the permanent quarantine buffer zone has remained the same size during FY 2012 and FY 2013, the temporary quarantine zone decreased by approximately 88,000 acres in FY 2012 and by approximately 23,000 acres in FY 2013. Free-ranging and tick-infested white-tailed deer populations in the remaining temporary quarantine area, including the buffer zone, continue to challenge tick eradication efforts. The Cattle Health program's investigation and response to these cases protected more than 97.8 million cattle.

#### Scientific and Regulatory Development

In May 2013, the OIE changed the BSE risk status for the United States from controlled risk to negligible risk. This change in risk classification resulted from the recognition of the high standards and effectiveness of APHIS' BSE surveillance efforts over the past decade, as well as FDA's 1997 feed ban. The negligible risk status will enhance trade opportunities for the U.S. cattle and beef industries.

In FY 2013, APHIS continued work on final drafts of a proposed comprehensive brucellosis and bovine TB rule and accompanying program standards. This rule is designed to modernize program regulations and is intended to reduce administrative burdens placed on producers while maintaining cattle health, consumer confidence, and trade opportunities. The documents are predicated on the regulatory framework developed by a joint TB and Brucellosis Regulatory Working Group published in the *Federal Register* in May 2011, the comments received, and stakeholder feedback from FYs 2011 and 2012.

On December 27, 2010, APHIS published an interim rule that provides for a national brucellosis surveillance plan and includes a risk-based disease management area concept rather than loss-of-State status. Since then, APHIS has been working with States to transition to the new plan. This plan is designed to detect brucellosis infection with 95 percent confidence that the prevalence level of brucellosis does not exceed one infected animal per 100,000 animals, reduces slaughter surveillance sampling by more than 50 percent, and eliminates redundancies in surveillance activities. From FY 2009 to FY 2013, APHIS has reduced the number of slaughter surveillance samples collected for brucellosis from 7.3 million to 2.9 million. To further improve efficiencies, APHIS consolidated laboratory testing and established a standardized testing protocol. These changes enable the Agency to focus resources where disease risk is greatest, meet international surveillance standards, and maintain the integrity of U.S. export products. APHIS continues to work with stakeholders to improve surveillance efficiency.

In FY 2013, APHIS continued to work with a small South Texas livestock feed company to register a product with the FDA to control the spread of CFT. APHIS began field studies in FY 2012 to collect data for the registration process. Currently, APHIS is working with the Agricultural Research Service (ARS) and a major veterinary pharmaceutical company to evaluate a new anti-tick vaccine for use in South Texas. ARS completed laboratory trials with the experimental vaccine in FY 2013, and they plan to conduct field evaluation trials in FY 2014.

#### 5. Equine, Cervid and Small Ruminant Health

The Equine, Cervid, and Small Ruminant Health program protects the health and improves the quality, productivity, and economic viability of the equine, cervid, sheep, and goat industries. These industries have a direct annual economic effect of \$39 billion for equine, \$894 million for cervid, and \$785 million for sheep. The direct economic impact for goats has not been reported but is likely about half that of sheep. APHIS activities include monitoring and surveillance, investigation and response, and disease prevention and preparedness actions taken when health issues are identified. APHIS' monitoring and surveillance activities detect foreign, emerging, zoonotic, and domestic diseases that could substantially impact the economy. APHIS works with international and domestic trading partners to facilitate safe trade in equine, cervids, and small ruminants and their products.

##### Monitoring and Surveillance

APHIS conducts monitoring and surveillance activities with States to protect the health of the equine, cervid, and small ruminant industries. Further, APHIS works collaboratively with States to ensure that cases of diseases of trade concern found in equine, cervids, and small ruminants are reported to the World Organization for Animal Health (OIE). In 2013, the Equine, Cervid, and Small Ruminant Health program conducted disease surveillance and/or monitoring for the following diseases: contagious equine metritis (CEM), chronic wasting disease (CWD), Eastern equine encephalitis (EEE) and Western equine encephalitis, equine herpes virus, equine piroplasmiasis (EP), equine infectious anemia (EIA), scrapie, tuberculosis (TB), vesicular stomatitis virus (VSV), and West Nile virus (WNV).

Scrapie is a fatal, degenerative disease that affects the central nervous system of sheep and goats. The industry loss due to classical scrapie is estimated to be \$10 to \$20 million annually, not including lost market opportunities due to export restrictions. APHIS performs the following activities to eradicate classical scrapie from the United States: live-animal, necropsy, and slaughter testing to identify infected animals; genetic testing to reduce the susceptibility of sheep flocks to scrapie and to identify which scrapie exposed sheep from infected and source flocks need to be removed to reduce the risk of recurrence; and testing of exposed animals that have moved out of infected flocks and animals exposed due to sale or movement of exposed or positive animals. In FY 2013, APHIS tested 44,955 samples from sheep and goats for scrapie, compared to 42,299 samples tested in FY 2012. This 6 percent increase is largely due to increased surveillance of scrapie in goats. Since 2003, approximately, there has been a 90 percent decrease in the percentage of positive scrapie sheep found at slaughter (adjusted for face color). At the end of FY 2013, the percent of cull sheep found positive at slaughter and adjusted for face color was 0.0146 percent compared to 0.0057 percent in FY 2012. During this final phase in the eradication effort, it is likely that the numbers will fluctuate from year to year.

To aid in the eradication of bovine TB in the United States, APHIS conducts surveillance testing on captive cervids for the disease. In FY 2013, APHIS began using a new primary screen serology test (the Cervid TB Stat-Pak) that uses a blood serum sample instead of a skin test, and a secondary test (Dual Path Platform VetTB) to further discriminate the primary test positives. The new tests are more sensitive and specific, reduce animal handling, and produce more timely results. Since the tests were introduced in February 2013, the program has tested 9,500 cervids.

In FY 2013, the program tested approximately 18,100 farmed cervids for CWD, a fatal, degenerative disease that affects the central nervous system and lymphoid system of cervids. Through this routine surveillance, no new CWD cases were reported in farmed cervids in FY 2013. The last CWD positive herd was reported in FY 2012 in an Iowa white tail deer herd. Twelve positive herds remain (seven elk herds in Colorado, three elk herds in Nebraska, one white tail deer herd in Iowa, and one red deer herd in Minnesota).

APHIS safeguards the equine industry by helping State animal health officials monitor equine diseases that threaten animal and human health. In 2013, APHIS continued active and passive surveillance activities in all States for vesicular stomatitis with deployment of foreign animal disease diagnosticians for investigation of suspect cases. As of November 11, 2013, APHIS had reported 316 of cases of equine WNV and 179 cases of EEE.

#### Investigation and Response

APHIS conducts investigations, responds to disease outbreaks, and enforces regulations that safeguard the health of the nation's livestock. In FY 2013, APHIS assisted in the epidemiological investigation and cleanup of 11 flocks to which scrapie-positive animals were traced. The Agency worked with affected flock owners to identify, indemnify, and remove at-risk animals to minimize the risk of disease recurrence and spread. Upon completion of the cleanup plan, flocks are placed on post-exposure management and monitoring plans for five years.

Although no new TB cases in captive cervids were detected in FY 2013, two captive cervid herds in Michigan remain under an indefinite quarantine since testing positive in 2009. The herds are located in an area of northeast Michigan where free-ranging white-tailed deer are a reservoir for bovine TB. APHIS is working with the State of Michigan to mitigate the risk of transmission from this wildlife reservoir to livestock.

#### Disease Prevention and Preparedness

APHIS' Herd Certifications Programs (HCPs) for CWD, TB, and scrapie provide criteria and minimum Federal standards for participating livestock owners to meet. APHIS reviews State applications, approves State CWD HCPs that meet the requirements of the national CWD HCP rule, conducts periodic reviews to ensure compliance, and supports confirmatory testing of presumptive cases. There are currently 29 States participating in the national CWD HCP – 22 have Approved Status and 7 have Provision Approved Status. States that meet all the minimum CWD HCP program requirements have Approved Status and States that do not meet all CWD HCP program requirements but have developed a work plan and time frame with APHIS to complete those requirements have Provision Approved Status.

The TB program recognizes three levels of herd qualifications for captive cervid herds. These three levels are Accredited, Qualified, and Monitored, and are based on testing over a specified time frame. At the end of FY 2013, there were 1,049 flocks enrolled in the Scrapie Flock Certification Program (SFCP). Of these, 439 were certified (i.e., the flock has a reduced scrapie risk) and 13 were export certified (i.e., the flock has a negligible scrapie risk). Participation in the SFCP provides producers the opportunity to protect their animals from scrapie and enhance the marketability of their animals by certifying their origin in flocks with minimal scrapie risk.

In FY 2013, there were outbreaks or ongoing occurrences of EP, CEM, equine herpes myeloencephalopathy, and VSV. APHIS supported State and industry responses to these outbreaks with coordination, diseases-specific technical guidance, epidemiological expertise, database maintenance, diagnostic assistance, and situation reports. APHIS disseminated a variety of information on equine diseases including WNV and EEE.

A new, privately operated, equine import quarantine station in Chicago was approved. APHIS conducted equine import testing and reported test results within one day to meet the 42-hour equine quarantine target. In 2013, APHIS conducted approximately 20,000 tests for dourine and glanders for equine importation, two highly contagious diseases that affect equines as well as other animals. APHIS provided laboratory certification and annual proficiency testing for EIA, equine viral arteritis, and EP.

Under the Commercial Transportation of Equines for Slaughter Act (9 CFR Part 88), APHIS' authority and role is to ensure the humane transport of U.S. origin equines to slaughter. A final rule, published in 2011, extended the regulatory protections to horses delivered to intermediate points. In 2013, the program trained 150 Federal, State and industry personnel on enforcing the regulation.

### Regulatory Development

In FY 2013, APHIS revised the SFCP. The revised program emphasizes targeted sampling of participating sheep and goats for scrapie over passive observation. The new approach will enhance scrapie surveillance in the United States and provide greater assurance to trading partners that participating flocks that reach Export Certified status in the program are at negligible risk.

To further ensure the health of animals moving across State lines, APHIS plans to draft two proposed rules requiring disease testing before interstate movement. These rules include new testing requirements for EIA, a viral disease of equines that can spread to affect the health and productivity of the animal, and a TB/brucellosis rule that included interstate testing requirements for captive cervids. The rules would provide a comprehensive, flexible, and risk-based approach to managing EIA and TB/brucellosis.

Implementation of the interstate movement requirements in the CWD interim final rule began December 2012. Public comments are being considered. In November 2012, a CWD Working Group was formed. This group, which is comprised of representatives from the cervid industry, State regulatory agencies (Agriculture and Wildlife), National Animal Health Laboratory Network and The National Veterinary Services Laboratories, and APHIS personnel, provides input on the revisions to the CWD Program Standards, a companion guidance document to the CWD rule. Prior to being implemented, APHIS plans to seek public comments in the *Federal Register*.

### 6. National Veterinary Stockpile

Through the Agricultural Quarantine Inspection (AQI) program, APHIS and the Department of Homeland Security's (DHS) Bureau of Customs and Border Protection (CBP) safeguard U.S. agricultural and natural resources from the introduction of invasive pests and diseases. To exclude foreign pests and diseases, APHIS assesses the risks associated with international trade and specific imported agricultural products and develops regulatory import policies to protect agricultural health. In addition, the Agency conducts off-shore risk reduction activities including pre-departure inspections of passenger baggage destined for the continental United States from Hawaii and Puerto Rico and foreign commodity pre-clearance programs; trains agricultural inspectors and detector dog teams to work at U.S. ports of entry; fumigates arriving containers and cargo; inspects and quarantines imported plant propagative materials; conducts trade compliance activities to prevent smuggling; and provides the scientific support necessary to carry out these activities and those carried out by CBP.

APHIS receives appropriated funding for pre-departure inspections of passengers and cargo traveling from Hawaii and Puerto Rico to the continental United States to prevent the introduction of non-native agricultural pests and diseases into the continental United States while maintaining the highest level of agricultural security. Because of the high volume of travelers from these islands to the continental United States, along with the risks associated with numerous fruits, vegetables, and animal products associated with these areas, APHIS inspects all baggage of passengers leaving these islands. When inspectors identify an item that poses a specific risk, they take immediate action to prevent the entry of materials that could harbor the pest or disease in question. This action could prevent significant damage to the country's agricultural industry and negate the need for costly control and eradication programs. APHIS also partners with industry groups and State and Commonwealth counterparts to facilitate the safe movement of cargo. In Hawaii, the State Department of Agriculture conducts nursery inspections and certifies nursery stock for shipment to the continental United States. In addition to the appropriated funding, APHIS collects AQI User Fees under the authority of the Food, Agriculture, Conservation, and Trade Act of 1990 to recover costs for services provided by APHIS and CBP associated with preclearance or the port-of-entry arrival of commercial vessels, trucks, loaded railroad cars, aircraft, and passengers entering the United States from a foreign destination.

### Cooperative Program Management

APHIS works with CBP to protect America's agricultural resources and food supply by inspecting international passenger baggage, cargo, and conveyances. During FY 2013, APHIS and CBP' Joint Task Force worked to develop a strategic plan for AQI activities. Based on recommendations from a General Accountability Office audit, the draft strategic plan (still in review as of 11/4/2013) focuses on key priorities such as enhancing detection, identification, and interdiction capabilities at ports of entry; enhancing targeting and analysis of incoming shipments

for agricultural purposes; and enhancing communication between the two Agencies. Toward these goals, APHIS has created a new position for an APHIS analyst at CBP's Commercial Targeting and Analysis Center. This collaboration will help the two Agencies track and close pathways for pest and disease introductions. To ensure the effectiveness of inspection policies, APHIS and CBP continue to conduct a quality assurance program, which includes port reviews. In FY 2013, APHIS and CBP conducted quality assurance reviews at six ports of entry and one follow-up review in Laredo, Texas. The program conducts follow-up reviews at ports of entry that have been selected from the previous year's reviews to verify the completion and implementation of tasks and recommendations issued to the port. In FY 2013, APHIS held 3 academies for CBP agriculture specialists, training 96 new officers. APHIS also held 14 sessions of basic agricultural threat training for first-line CBP officers, training 672 officers, and 3 sessions of agriculture fundamentals training for CBP import specialists, training 72 officers. APHIS and CBP are also beginning a new outreach effort to express carriers, and an analysis project to improve inspection and handling of express packages from foreign locations. The goal of the initiative is to reduce administrative requirements on express carriers while continuing to inspect high-risk packages and reduce the threat of invasive pest introductions. As part of the effort, APHIS and CBP toured several express courier hubs throughout the United States to evaluate current practices and identify potential changes.

#### Pre-Departure Inspections

APHIS inspected the baggage of approximately 13.2 million passengers before they left Hawaii and Puerto Rico and intercepted 262,821 prohibited items and 5,247 reportable pests (quarantine-significant pests that must be reported to Federal or State authorities) in FY 2013. APHIS evaluates the effectiveness of its pre-departure program by measuring the percentage of passengers destined for the continental United States from Hawaii and Puerto Rico that comply with agriculture quarantine regulations. In FY 2013, more than 98 percent of passengers were in compliance (calculated by determining how many passengers are carrying prohibited items through random sampling and comparing it to the actual number of prohibited items intercepted through inspections). To facilitate interstate trade between Hawaii and Puerto Rico and the continental United States, APHIS conducts commodity certification and inspection programs. In FY 2013, the program conducted 142,642 inspections of regulated agricultural commodities shipped from Hawaii and 10,408 inspections of regulated agricultural commodities shipped from Puerto Rico. In addition, the program oversaw or conducted 3,026 cargo treatments in Hawaii and 4,704 cargo treatments in Puerto Rico. APHIS continues to conduct methods development activities that expand the treatments available to allow additional fruits and vegetables to be shipped from these islands to the continental United States.

#### Port-of-Entry Inspections and Pest Interceptions

In FY 2013, more than 155 million passengers and pedestrians entered the United States by air, bus, ship, train, or on foot. CBP agriculture specialists inspected the baggage of approximately 23 million (nearly 15 percent) of these travelers, through manual inspection, x-ray technology, or detector dogs. Also in FY 2013, the program inspected 695,540 of the 91 million passenger vehicles entering the United States from Canada and Mexico. Inspectors also cleared approximately 38,000 ships and 1.38 million cargo, mail, and express carrier shipments, intercepting more than 111,000 pests. Of the travelers inspected, approximately 96.7 percent of international air passengers, 97.4 percent of southern border vehicles, and 92.1 percent of northern border vehicles were found to be in compliance with agriculture quarantine regulations.

#### Plant Germplasm Quarantine

APHIS' Plant Germplasm Quarantine Program (PGQP) is the largest plant quarantine program in the United States. This program provides quarantine services for importing plant cultivars and germplasm safely, to prevent foreign pathogens from entering our environment and agricultural production areas. In FY 2013, the PGQP released from quarantine 84 bamboo clones, 81 grass clones, 72 pome fruits, 82 potato clones, 12 potato true seed lots, 76 rice seed accessions, 1 gooseberry, 30 stone fruit clones, 332 stone fruit seedlings, 36 sugarcane, 14 sweet potatoes, and 9 woody ornamentals. New crops imported in FY 2013 include cassava and kiwis. These high-risk crops are prohibited entry into the United States in commercial quantities, but importers can bring in small quantities through an APHIS-approved plant quarantine program, like the one at the PGQP. The PGQP implemented new detection procedures for several pathogens, including Asian Prunus virus, plum bark necrosis stem pitting virus, *Xanthomonas albilineans* in sugarcane, potato leafroll virus, and sweet potato chlorotic stunt virus – East African

strain. Evaluations are underway to use multiplex polymerase chain reaction testing for detection of potato potyviruses, sweet potato DNA viruses, and viruses and viroids of pome fruits. Multiplex testing allows scientists to test for multiple diseases at once, rather than running separate tests for each disease of concern. The PGQP's outreach efforts included a presentation to Agricultural Research Service (ARS) scientists at the National Arboretum, reports to various Crop Germplasm Committees, and tours of the program for foreign visitors from Bosnia, China, Israel, and South Africa, as well as for U.S. visitors from Ball Ornamentals, a retailer/distributor, and the Department of State. The program also discovered new pathogens during testing of bamboo, *Miscanthus*, potato, stone fruits, and sweet potatoes. When the program finds a new pathogen, APHIS collaborates with other scientists in ARS or universities to characterize it and publish information about it. These collaborations may result in improvements in the PGQP's testing protocols to enhance our ability to detect new pathogens.

#### Pre-Clearance Inspections

APHIS conducts commodity pre-clearance programs in 29 countries to minimize pest and disease risks outside the United States and allow perishable products to reach markets promptly. This number includes one new country, Italy, where exporters initiated a pre-clearance program for apples and pears.

APHIS works with the U.S. Department of Defense and the DHS to inspect military passenger baggage and equipment before it returns from overseas. This work is necessary to prevent the entry into the United States of foreign plant and animal pests and diseases in returning military cargo, equipment, and vehicles. In FY 2013, APHIS fulfilled this role by training and providing technical assistance visits to military personnel serving worldwide in 20 countries. Designated APHIS personnel delivered agricultural preclearance training and certification to military personnel, stateside and in forward deploy locations in the Middle East, Central Asia, Europe, and Africa. In FY 2013, APHIS trained more 2,400 personnel in the United States alone. During technical assistance visits of up to 30 days, APHIS agriculture advisors evaluated passenger and cargo preclearance operations to ensure compliance with APHIS requirements. These activities enabled the expansion of the military preclearance capacity needed to support the increasing number of returning military personnel, cargo, and equipment, resulting from the current military drawdown in Afghanistan.

#### Smuggling Interdiction and Trade Compliance (SITC)

Through the SITC program, APHIS officials analyze and identify potential smuggling pathways, conduct product traces, and coordinate with investigative organizations to increase compliance with APHIS' regulatory requirements. APHIS also notifies CBP about potential agricultural risks at the ports of entry. In FY 2013, APHIS made 2,473 seizures of prohibited agricultural items in commercial locations, such as food/grocery/ethnic markets, swap meets, and other retail outlets. Those seizures totaled 132,790 pounds of prohibited and/or restricted plants and plant products and meat and meat products valued at approximately \$771,929. Of these products, 2,626 pounds, worth \$93,294, were directly linked to 18 Agency recalls. Items seized through these recalls included animal and plant products such as decorative items containing noxious weed seeds and prohibited poultry products from countries where highly pathogenic avian influenza is present. In conjunction with CBP, APHIS conducted 16 port-of-entry Special Operations and found additional prohibited plants and plant products as well as various high-risk animal products. For example, at the Miami International Post Office, APHIS and CBP inspected 72 packages and found that 63 contained prohibited agricultural items, such as seeds and other high-risk material. Through other special operations, APHIS and CBP found prohibited chicken gizzards from China labeled as turmeric root, mislabeled sliced deer antlers, and beef products from France. These items are all capable of transmitted high-risk animal diseases or are protected by international conservation treaties. APHIS is continuing to enhance its ability to prevent smuggling and is working to refine the best use of SITC resources to target the highest-risk items.

#### Asian Gypsy Moth

APHIS supports the exclusion of Asian gypsy moth (AGM) through negotiations and support of offshore AGM ship inspection and certification from Far East Russia, Japan, Korea, and China. Due to an increase in AGM egg masses that CBP agriculture specialists intercepted on ships in 2012, APHIS, CBP, and the Canada Food Inspection Service conducted increased outreach to the maritime shipping trade throughout 2013. APHIS coordinated joint U.S./Canada technical visits to Japan, Korea, and China in early 2013 to address the risk to forest resources from

shipping. As a result, although AGM ship inspections were still high in 2013, they were reduced by 25 percent from 2012 levels. APHIS, CBP, and the Canadian Food Inspection Agency are continuing discussions on strategies to enhance the exclusion effort in 2014.

### Plant Inspection Stations

Importations of nursery stock and other propagative plant materials can serve as significant pathways for invasive pests and diseases. To reduce the risks associated with such imports, APHIS requires that certain imported plant materials enter the United States through plant inspection stations, which are located at ports of entry throughout the country at major international airports and seaports and at major crossings along the U.S.-Mexican border. Specialists at these stations inspect shipments to ensure that imported plants do not contain pests and diseases of regulatory significance. In addition, they enforce the regulations that apply to the import and export of plant species protected by the Endangered Species Act and the Convention on International Trade in Endangered Species of Wild Fauna and Flora. In 2013, inspectors cleared more than 22,000 imported shipments containing 1.3 billion plant units (cuttings, whole plants, or other propagative materials) and approximately 1,777,000 kilograms of seeds. Through these inspections, they intercepted more than 5,000 reportable pests. In addition, the stations conducted more than 900 treatments remediating more than 8 million plant units and almost 38,000 kilograms of seed. During FY 2013, APHIS also worked to develop a risk-based sampling method to improve inspection of imported plant material. The new protocol will maximize the effectiveness of inspections by incorporating statistically sound sampling for shipments based on the level of risk posed by the type and origin of the plant material. To help inspectors implement the new method, APHIS developed an on-line sampling tool that calculates the number of samples to inspect for each shipment. APHIS started using the new sampling method at four locations on October 1, 2013, and will review the data from these locations in FY 2014.

### Risk Analysis and Scientific Support

APHIS' Plant Epidemiology and Risk Analysis Laboratory (PERAL) develops pest risk analyses and epidemiological approaches to pest exclusion. In 2013, PERAL personnel completed 211 risk analyses associated with imports, exports, invasive pest threats, and programmatic requirements. This work included 30 analyses to open, expand, or maintain export markets for U.S. producers. It also included evaluations of 53 new pests for potential risk to U.S. agriculture and 28 risk analyses for import requests from foreign countries. APHIS National Identification Services processed and identified 174,676 pests in FY 2013 (with 85,384 being reportable pests.)

### Phytosanitary Export Certification

APHIS facilitates the export of agricultural shipments by tracking plant health import requirements for more than 200 countries, and provides certifications to U.S. exporters to help ensure that U.S. products meet other countries' requirements. More than 2,300 Authorized Certification Officials at the Federal, State, and county levels can access countries' certification requirements on-line and conduct inspections to issue phytosanitary certificates. These certificates facilitate the entry of commodities into foreign markets and represent approximately \$25 billion in trade annually. This program employs a web-based Phytosanitary Export Database, known as PExD. This database, which is free to exporters, enables them to research requirements and better prepare for shipping. In addition, this program uses a Phytosanitary Certificate Issuance and Tracking (PCIT) database, which allows exporters to apply for certificates, schedule inspections, and pay certification fees. PCIT also collects State and county cooperator fees in addition to the USDA fees for phytosanitary certificates. Participating States/Counties save up to 160 staff hours each month by allowing APHIS to handle the collection and remittance of the fees for certificates issued by the States/Counties on APHIS' behalf. Currently, 31 States and 22 counties use this feature. PCIT also enables APHIS to capture export application information, document inspection and certification information, print an original phytosanitary certificate on secure paper, and generate export reports. The Agency is continuing its effort with international counterparts to begin exchanging phytosanitary certificates electronically. The United States began accepting electronic phytosanitary certificates for some seed shipments in FY 2013. Pilot exchanges with Australia and New Zealand will begin in FY 2014. In FY 2013, APHIS, State, and county officials issued more than 605,000 Federal export certificates for agricultural shipments.

## 7. Swine Health

The Swine Health program protects the health and improves the quality, productivity, and economic viability of the swine industry, valued at more than \$20 billion. APHIS activities include disease prevention/education, monitoring and surveillance, and investigation and response actions. In addition, the Agency maintains regulatory and programmatic guidelines that direct activities at the Federal, State, and Tribal levels. Establishing and maintaining national standards directly supports interstate and international commerce by providing assurances regarding the health of animals and products being moved or traded.

### Monitoring and Surveillance for Swine Diseases

APHIS conducts surveillance activities to detect foreign, emerging, zoonotic, and domestic swine diseases that could potentially and substantially impact domestic producers and the national economy. The Agency collects swine samples from various locations (surveillance streams) for multiple diseases. In FY 2013, APHIS collected samples for the following diseases: pseudorabies virus (PRV), swine brucellosis, classical swine fever (CSF), and influenzas that affect swine. This comprehensive and integrated approach allowed APHIS to maintain surveillance, and target higher-risk samples while reducing surveillance costs.

APHIS collected samples from the following surveillance streams: veterinary diagnostic laboratories, slaughter plants, producer premises, livestock markets, and feral swine samples collected from elimination projects. For FY 2013 (quarters 1-3), the program tested 205,254 swine for PRV through various surveillance streams. More specifically during that time, APHIS tested 185,267 swine for PRV through slaughter surveillance and 18,075 swine through samples submitted to diagnostic laboratories. APHIS also tested 176,587 samples for swine brucellosis. In FY 2013 (quarters 1-3), APHIS tested 9,197 samples for CSF, a highly contagious viral disease that affects swine health. At the end of FY 2013, all commercial swine herds were free from brucellosis, PRV, and CSF.

Domestic swine remain at risk from diseases such as PRV and swine brucellosis in part due to the increasing number of feral swine in the United States (population estimated to be approximately five million in FY 2013), which may come in contact with domestic herds. APHIS sampled a subset of feral swine to monitor/test for diseases of concern that included 1,912 samples for PRV, 1,836 samples for swine brucellosis, and 2,257 samples for CSF.

APHIS has the responsibility under the Swine Health Protection Act to license and inspect swine production facilities that feed cooked garbage to swine, and to conduct searches for unlicensed facilities that may feed raw garbage to swine. This practice is a major risk factor for transmitting infectious diseases such as foot-and-mouth disease or CSF to swine. In FY 2013, APHIS supported 5,478 inspections of licensed premises and 35,601 searches for non-licensed facilities. Through these searches, 221 non-licensed feeders were identified. Through collaborative efforts with the States, facilities were either brought into compliance or ceased non-licensed garbage feeding.

APHIS prepares multiple reports outlining surveillance activities that are shared with industry stakeholders to provide information on animal disease activities. These reports support trade negotiations and assist States' animal health officials in science-based decision making. APHIS also prepares educational and scientific documents to support the industry. In FY 2013, APHIS collected random swine samples for the 2013 National Animal Health Monitoring System (NAHMS) report and is in process of documenting findings. NAHMS collects, analyzes, and disseminates data on animal health, management, and productivity across the United States. NAHMS also conducts studies designed to meet the information needs of the industries associated with domestic livestock populations.

### Investigations and Responses to Disease Outbreaks

In FY 2013, APHIS' National Veterinary Services Laboratories confirmed the first detection of porcine epidemic diarrhea virus (PEDV) in the United States. PEDV is an emerging transboundary disease that impacts production through dramatic losses, primarily of baby pigs. PEDV does not impact trade because it is not a listed disease with the World Organization for Animal Health (OIE) and, therefore, has not caused trading partners to respond negatively. Since the discovery, APHIS has worked with State and industry stakeholders to investigate the incident, share information to understand the epidemiological findings, and inform the public of the disease. APHIS

continues to work with industry stakeholders, States, and diagnostic laboratories to obtain information to monitor disease trends.

In cases of PRV and swine brucellosis where testing and removing infected animals is not deemed an effective disease management approach, APHIS supports whole herd depopulation. In FY 2013, APHIS identified one infected domestic herd requiring whole herd depopulation. In all cases, APHIS and State partners quarantine infected herds, conduct routine testing to determine prevalence in the herd, and perform whole herd depopulation or removal of infected animals. These response efforts are essential to safeguarding commercial herds that may come in contact with infected small backyard herds.

In FY 2013, public health officials reported 20 human variant influenza cases from multiple States associated with exposure to swine, with most caused by extended close contact with swine at exhibition events (fairs). All outbreaks were jointly investigated by State public and animal health officials, with support from APHIS and the Centers for Disease Control. APHIS helps States and industry identify the isolates from the swine associated with these outbreaks. This information is used to improve animal health diagnostics and animal vaccines, and may be used by human health experts in forecasting human influenza activities. Subtyping and sequencing data were entered into the USDA Influenza A in Swine Surveillance Database. Genetic sequences from these samples and from other swine isolates are entered into GenBank (a publicly accessible genomic database).

#### Regulatory Developments

APHIS has been highly successful in eliminating PRV from the U.S. commercial swine herds. At the end of FY 2013, all States had maintained PRV-free status for ten years. Because of this success, APHIS is considering options to modernize the existing regulatory framework to reflect a comprehensive, risk-based, and science-based program to enhance surveillance while reducing the burden on States and producers. In FY 2013, APHIS published a concept paper on potential changes to regulatory programs. Based on the comments received, APHIS is continuing to work with States, Tribes, and industry to further develop a more comprehensive approach to swine surveillance, monitoring, and disease response.

#### 8. Veterinary Biologics

APHIS' Center for Veterinary Biologics (CVB) regulates veterinary biological products under the Virus-Serum-Toxin Act, to ensure that these products are pure, safe, potent, and effective. These products, which include vaccines, bacterins, antisera, diagnostic test kits, and analogous products, are developed to diagnose, prevent, and treat animal diseases. CVB accomplishes its mission by developing rules and regulations concerning the production and licensing of veterinary biologics; evaluating pre-licensing dossiers and issuance of licenses and permits; testing products submitted for licensure; conducting facility and product inspections; approving product certifications; conducting investigations of non-compliance; and conducting post-marketing surveillance. This comprehensive regulatory approach is the most effective way to ensure that only quality, Federally-licensed veterinary biological products are available to U.S. consumers, and plays an essential role in the protection of animal health and agriculture.

#### Licensed Products and Inspections

APHIS licenses and inspects facilities to ensure that all veterinary biologics produced and distributed in, or imported into, the United States are of the highest quality, and not worthless, contaminated, dangerous, or harmful. Before veterinary biologics were regulated, farmers and animal health officials found products to be ineffective or contaminated with harmful diseases, including foreign animal diseases (FAD). In FY 2013, APHIS received 195 applications for new and renewal licenses and issued 60 licenses/permits for the prevention, diagnosis, management, or cure of existing or new/emerging animal diseases. By the end of FY 2013, there were 100 different manufacturers licensed for approximately 1,850 active veterinary biological product licenses/permits for the control of more than 216 animal diseases. These are critical for protecting American agriculture, facilitating trade, and enhancing agricultural economic opportunities.

APHIS inspects manufacturing facilities to ensure that biologics are produced in accordance with regulations. In FY 2013, APHIS conducted 67 on-site inspections, 17 percent of which supported a new establishment or product license for the industry. Licensing veterinary biologics is vital as they provide products to diagnose, prevent, or treat new and emerging animal diseases, or improve existing biologics. In FY 2013, CVB licensed the first vaccine for Rift Valley Fever, a zoonotic, FAD of economic and strategic significance. APHIS also performed 89 regulatory actions, issued 36 violation notices, and conducted 32 investigations of possible regulation violations. In addition, the Agency received 434 adverse event reports related to veterinary biological products. Adverse events are undesirable effects that occur after the use of a biological product. These events may, or may not, be caused by the product. APHIS gathers this information to better learn how products are used in field conditions and applied to the evaluation process to assure pure, safe, potent, and efficacious products are available.

The United States and foreign countries require import and export certificates to certify that products have been prepared in accordance with the Virus-Serum-Toxin Act. In FY 2013, APHIS reviewed/processed 3,351 Certificates of Licensing and Inspection, and reviewed/processed 1,158 Export Certificates for veterinary biological products. The Agency processed all Export Certificates within 4 days, and processed all Certificates of Licensing and Inspection within 28 days. Timely processing helps ensure that markets are accessible for veterinary biologics manufacturers who export their product. APHIS helped to ensure there were no FAD events related to the importation of nearly 167 million biologics doses.

In FY 2013, APHIS continued implementing several business process improvement projects designed to decrease the turnaround time for submissions. The Veterinary Biologics program focused on electronic submissions and notifications for serial release. In addition to reducing APHIS resources required for serial release notification, this business process change has an economic benefit for the industry as it allows products to reach the market faster. Other proactive steps to improve processes will continue in FY 2014 including the development of a portal to improve information exchange with stakeholders. APHIS also continued improvements to its pharmacovigilance information system, allowing better analysis and evaluation of licensed products.

#### Collaborative Efforts

In FY 2013, APHIS provided expertise and training at a joint Center for International Cooperation in Animal Biologics education program. More than 165 delegates from 37 countries participated in this course aimed at educating industry personnel and foreign officials on U.S. regulatory processes. The program promotes U.S. policy as a regulatory model for both established and developing markets, and it improves world-wide marketability of USDA-licensed biologics. APHIS also participated in harmonization efforts with major trading partners including Japan and the European Union through the International Cooperation on Harmonisation of Technical Requirements for Registration of Veterinary Medicinal Products.

APHIS responded to 41 requests for assistance with export issues, which addressed urgent concerns from the biologics industry regarding continued access to international markets, including Indonesia, Turks and Caicos, Turkey, Taiwan, Thailand, and Mexico.

APHIS also worked with the industry in developing a policy to address the licensure of production platforms. A production platform is a manufacturing process for incorporating one or a few specific genes inserts of contemporary microorganisms into biological products. The policy offers a more streamlined licensing pathway for certain classes of biotechnology-derived products, allowing a more rapid response to emerging diseases resulting from antigenic shift and drift.

#### 9. Veterinary Diagnostics

Laboratory and diagnostic services are an essential component of the U.S. animal health infrastructure. The Veterinary Diagnostics line item provides partial funding for the National Veterinary Services Laboratories (NVSL), which is the only national reference and confirmatory laboratory for APHIS animal health programs. This line item also funds personnel associated with the National Animal Health Laboratory Network (NAHLN) and specific infrastructure support.

Diagnostic testing of surveillance samples improves the security of the nation's livestock. In FY 2013, APHIS handled more than 378,000 diagnostic tests and 47,000 accessions (one or more diagnostic samples received from the same submitter on the same day), and produced and provided more than 650 types of reagents. Because many of these tests and reagents are not available to customers from another source, stakeholders depend on APHIS to conduct or provide them. APHIS also validated new test methods and platforms, and provided training and assistance to U.S. and international laboratories upon request.

The Veterinary Diagnostics program also provides funding for foreign animal disease (FAD) investigations through NVSL's Foreign Animal Disease Diagnostic Laboratory and Diagnostic Virology Laboratory. In FY 2013, NVSL participated in 433 FAD investigations, received 7,661 classical swine fever surveillance submissions, and supported international capacity building activities in Brazil, the Dominican Republic, Guatemala, Indonesia, Kazakhstan, Kenya, Mexico, and Panama.

APHIS conducts proficiency testing of Federal, State, and university laboratories to ensure standardized, rapid diagnostic techniques are used, and to maintain the credibility of U.S. diagnostic test results in the international marketplace. In FY 2013, APHIS provided 31 types of proficiency panels to international, Federal, State, and private laboratories. To help other laboratories develop and validate diagnostic tests, APHIS made available the necessary controls and reference strains for approximately 200 diseases, including FADs. Cost recovery for some reagents and proficiency panels is supported through user fees. In FY 2013, the NAHLN conducted studies to validate tests used for identifying high-consequence emerging animal and/or zoonotic diseases. These studies provided data to determine how assays should be used, and how assays perform on U.S. animal populations that are negative for the disease. An assay is an investigative procedure for qualitatively assessing or quantitatively measuring the presence or amount of the functional activity of a target entity.

The NAHLN addresses the need for a comprehensive and fully coordinated surveillance and monitoring system for animal disease, as well as a nationwide laboratory network that integrates and interconnects Federal and State laboratory resources and uses standardized diagnostic protocols and procedures. This network coordinates diagnostic testing at Federal and State-sponsored laboratories, while NVSL remains the confirmatory laboratory. The NAHLN consists of 58 State and university laboratories in 41 States as well as 2 laboratories from NVSL. In addition, there are two laboratories from other Federal agencies whose primary mission is not domestic animal disease diagnostic work within the United States. These laboratories are the Food Analysis and Diagnostic Laboratory within the Department of Defense, and the U.S. Geological Survey National Wildlife Health Center within the Department of the Interior. The NAHLN collaborates with these diagnostic laboratories that serve other Federal agencies to provide additional testing capacity during an animal health event. These laboratories meet the same standards and receive the same training and proficiency testing as the veterinary diagnostic laboratories in the network in order to be prepared to offer surge capacity, if necessary. Further, the program provides training to Federal and State personnel. In FY 2013, APHIS helped train approximately 140 FAD diagnosticians, and provided training on multiple animal diseases at NVSL facilities.

To improve its standards and consistency, the NAHLN worked with the American Association of Veterinary Laboratory Diagnosticians to expand and improve their Quality Management System Training Programs. The curriculum included training on quality system requirements, the accreditation process, document control, internal auditing, and root cause analysis. APHIS provided this training to representatives from the NAHLN and other U.S. laboratories as well as representatives from Cambodia, Egypt, Iraq, Kazakhstan, Kenya, Korea, Laos, Mexico, Morocco, the Philippines, Russia, South Africa, Taiwan, Tanzania, Thailand, Vietnam, the West Indies, and Yemen.

#### 10. Zoonotic Disease Management

The Zoonotic Disease Management (ZDM) program enhances State, national, and international collaborative efforts to promote healthy animals, people, and ecosystems. This integrated approach is commonly referred to as "One Health". Zoonoses, diseases that transfer from animals to people, are responsible for 60 percent of emerging infectious disease events in humans; 72 percent of these zoonoses originated in wildlife. These statistics support the value of a One Health approach. APHIS provides national leadership and expertise in addressing the animal health component of One Health by contributing animal health expertise, infrastructure, networks, and systems. By providing these capabilities, the Agency improves the collective response to One Health issues. APHIS

collaboratively develops strategies, policies and training to help animal health stakeholders effectively engage with public health counterparts, provide guidance, facilitate information exchange and enhance responses to One Health issues. By enhancing APHIS' efforts to address the animal health component of One Health, the ZDM program protects public health and directly benefits animal health and marketability.

#### Zoonotic Disease Engagement

In FY 2013, APHIS integrated One Health concepts into training courses and the Agency's framework for epidemiologic response. Additionally, APHIS continued coordinating with USDA's Agricultural Research Service (ARS), the Centers for Disease Control and Prevention (CDC), and State partners and industry to address influenza A H3N2v and other variant influenza infections. These coordinated surveillance, preparedness, and response activities resulted in the joint development of national measures to minimize influenza transmission at swine exhibitions. APHIS also collaborated with CDC, State partners, and industry to prevent human *Salmonella* infections associated with contact with live poultry from mail order hatcheries.

#### Antimicrobial Resistance

Also in FY 2013, the Food and Drug Administration (FDA), with support from APHIS, sponsored a series of public meetings to discuss challenges that may be encountered by livestock producers and veterinarians as FDA phases in proposed guidance on the use of medically important antimicrobials for growth promotion. In addition, APHIS performed antimicrobial resistance testing in organisms of public health importance (potential pathogens and commensals) from swine operations nationwide. Initial results from these operations should be available in early FY 2014. Also in FY 2013, APHIS continued to participate on a multi-agency USDA team to revise the USDA Plan to Address Antimicrobial Resistance.

#### Preharvest Food Safety (PHFS)

In a 2011 study, the Centers for Disease Control and Prevention estimated that foodborne diseases cause 48 million illnesses, 128,000 hospitalizations, and 3,000 deaths per year in the United States. PHFS includes on-farm interventions that can reduce the risk of foodborne diseases. APHIS works with stakeholders in a non-regulatory manner to identify risk factors and effective on-farm practices to enhance PHFS. APHIS' National Animal Health Monitoring System collects data about select potential foodborne pathogens and uses this data to provide benchmarks and identify trends. APHIS also works with FSIS to provide voluntary, on-farm consultation on PHFS.

#### Pandemic and Animal Disease Preparedness

Recent human outbreaks of avian influenza and Middle East Respiratory Syndrome caused by a coronavirus (MERS-CoV) highlight the challenges in the global response to emerging animal diseases with human pandemic potential. APHIS promotes an all-hazards approach to strengthening pandemic and animal disease preparedness, surveillance, and response. By using this approach rather than focusing on a specific disease, APHIS can be prepared for a variety of diseases, including emerging diseases. In the spring of 2013, APHIS coordinated the USDA response to an Influenza A(H7N9) outbreak in China among poultry and people. The Agency worked with CDC and the U.S. Agency for International Development, as well as our international partners at the World Organization for Animal Health, the Food and Agriculture Organization, and the World Health Organization to provide advice and support to reduce spread and protect U.S. interests. APHIS continues to support and coordinate with CDC to address influenza outbreaks, e.g., H5N1 and A(H7N9), as well as MERS-CoV. APHIS also provides leadership in the North American Plan for Animal and Pandemic Influenza, strengthening trilateral preparedness and response capabilities for human and animal health in Mexico, Canada and the United States. Key areas identified for collaboration and action include establishing cross sector working groups to develop guidelines and processes for epidemiologic and laboratory data sharing; and emergency and risk communications and joint exercises and training.

## Selected Examples of Recent Progress - Plant Health:

### 1. Agricultural Quarantine Inspection

Through the Agricultural Quarantine Inspection (AQI) program, APHIS and the Department of Homeland Security's (DHS) Bureau of Customs and Border Protection (CBP) safeguard U.S. agricultural and natural resources from the introduction of invasive pests and diseases. To exclude foreign pests and diseases, APHIS assesses the risks associated with international trade and specific imported agricultural products and develops regulatory import policies to protect agricultural health. In addition, the Agency conducts off-shore risk reduction activities including pre-departure inspections of passenger baggage destined for the continental United States from Hawaii and Puerto Rico and foreign commodity pre-clearance programs; trains agricultural inspectors and detector dog teams to work at U.S. ports of entry; fumigates arriving containers and cargo; inspects and quarantines imported plant propagative materials; conducts trade compliance activities to prevent smuggling; and provides the scientific support necessary to carry out these activities and those carried out by CBP.

APHIS receives appropriated funding for pre-departure inspections of passengers and cargo traveling from Hawaii and Puerto Rico to the continental United States to prevent the introduction of non-native agricultural pests and diseases into the continental United States while maintaining the highest level of agricultural security. Because of the high volume of travelers from these islands to the continental United States, along with the risks associated with numerous fruits, vegetables, and animal products associated with these areas, APHIS inspects all baggage of passengers leaving these islands. When inspectors identify an item that poses a specific risk, they take immediate action to prevent the entry of materials that could harbor the pest or disease in question. This action could prevent significant damage to the country's agricultural industry and negate the need for costly control and eradication programs. APHIS also partners with industry groups and State and Commonwealth counterparts to facilitate the safe movement of cargo. In Hawaii, the State Department of Agriculture conducts nursery inspections and certifies nursery stock for shipment to the continental United States. In addition to the appropriated funding, APHIS collects AQI User Fees under the authority of the Food, Agriculture, Conservation, and Trade Act of 1990 to recover costs for services provided by APHIS and CBP associated with preclearance or the port-of-entry arrival of commercial vessels, trucks, loaded railroad cars, aircraft, and passengers entering the United States from a foreign destination.

### Cooperative Program Management

APHIS works with CBP to protect America's agricultural resources and food supply by inspecting international passenger baggage, cargo, and conveyances. During FY 2013, APHIS and CBP's Joint Task Force worked to develop a strategic plan for AQI activities. Based on recommendations from a General Accountability Office audit, the draft strategic plan (still in review as of 11/4/2013) focuses on key priorities such as enhancing detection, identification, and interdiction capabilities at ports of entry; enhancing targeting and analysis of incoming shipments for agricultural purposes; and enhancing communication between the two Agencies. Toward these goals, APHIS has created a new position for an APHIS analyst at CBP's Commercial Targeting and Analysis Center. This collaboration will help the two Agencies track and close pathways for pest and disease introductions. To ensure the effectiveness of inspection policies, APHIS and CBP continue to conduct a quality assurance program, which includes port reviews. In FY 2013, APHIS and CBP conducted quality assurance reviews at six ports of entry and one follow-up review in Laredo, Texas. The program conducts follow-up reviews at ports of entry that have been selected from the previous year's reviews to verify the completion and implementation of tasks and recommendations issued to the port. In FY 2013, APHIS held 3 academies for CBP agriculture specialists, training 96 new officers. APHIS also held 14 sessions of basic agricultural threat training for first-line CBP officers, training 672 officers, and 3 sessions of agriculture fundamentals training for CBP import specialists, training 72 officers. APHIS and CBP are also beginning a new outreach effort to express carriers, and an analysis project to improve inspection and handling of express packages from foreign locations. The goal of the initiative is to reduce administrative requirements on express carriers while continuing to inspect high-risk packages and reduce the threat of invasive pest introductions. As part of the effort, APHIS and CBP toured several express courier hubs throughout the United States to evaluate current practices and identify potential changes.

### Pre-Departure Inspections

APHIS inspected the baggage of approximately 13.2 million passengers before they left Hawaii and Puerto Rico and intercepted 262,821 prohibited items and 5,247 reportable pests (quarantine-significant pests that must be reported to Federal or State authorities) in FY 2013. APHIS evaluates the effectiveness of its pre-departure program by measuring the percentage of passengers destined for the continental United States from Hawaii and Puerto Rico that comply with agriculture quarantine regulations. In FY 2013, more than 98 percent of passengers were in compliance (calculated by determining how many passengers are carrying prohibited items through random sampling and comparing it to the actual number of prohibited items intercepted through inspections). To facilitate interstate trade between Hawaii and Puerto Rico and the continental United States, APHIS conducts commodity certification and inspection programs. In FY 2013, the program conducted 142,642 inspections of regulated agricultural commodities shipped from Hawaii and 10,408 inspections of regulated agricultural commodities shipped from Puerto Rico. In addition, the program oversaw or conducted 3,026 cargo treatments in Hawaii and 4,704 cargo treatments in Puerto Rico. APHIS continues to conduct methods development activities that expand the treatments available to allow additional fruits and vegetables to be shipped from these islands to the continental United States.

### Port-of-Entry Inspections and Pest Interceptions

In FY 2013, more than 155 million passengers and pedestrians entered the United States by air, bus, ship, train, or on foot. CBP agriculture specialists inspected the baggage of approximately 23 million (nearly 15 percent) of these travelers, through manual inspection, x-ray technology, or detector dogs. Also in FY 2013, the program inspected 695,540 of the 91 million passenger vehicles entering the United States from Canada and Mexico. Inspectors also cleared approximately 38,000 ships and 1.38 million cargo, mail, and express carrier shipments, intercepting more than 111,000 pests. Of the travelers inspected, approximately 96.7 percent of international air passengers, 97.4 percent of southern border vehicles, and 92.1 percent of northern border vehicles were found to be in compliance with agriculture quarantine regulations.

### Plant Germplasm Quarantine

APHIS' Plant Germplasm Quarantine Program (PGQP) is the largest plant quarantine program in the United States. This program provides quarantine services for importing plant cultivars and germplasm safely, to prevent foreign pathogens from entering our environment and agricultural production areas. In FY 2013, the PGQP released from quarantine 84 bamboo clones, 81 grass clones, 72 pome fruits, 82 potato clones, 12 potato true seed lots, 76 rice seed accessions, 1 gooseberry, 30 stone fruit clones, 332 stone fruit seedlings, 36 sugarcanes, 14 sweet potatoes, and 9 woody ornamentals. New crops imported in FY 2013 include cassava and kiwis. These high-risk crops are prohibited entry into the United States in commercial quantities, but importers can bring in small quantities through an APHIS-approved plant quarantine program, like the one at the PGQP. The PGQP implemented new detection procedures for several pathogens, including Asian Prunus virus, plum bark necrosis stem pitting virus, *Xanthomonas albilineans* in sugarcane, potato leafroll virus, and sweet potato chlorotic stunt virus – East African strain. Evaluations are underway to use multiplex polymerase chain reaction testing for detection of potato potyviruses, sweet potato DNA viruses, and viruses and viroids of pome fruits. Multiplex testing allows scientists to test for multiple diseases at once, rather than running separate tests for each disease of concern. The PGQP's outreach efforts included a presentation to Agricultural Research Service (ARS) scientists at the National Arboretum, reports to various Crop Germplasm Committees, and tours of the program for foreign visitors from Bosnia, China, Israel, and South Africa, as well as for U.S. visitors from Ball Ornamentals, a retailer/distributor, and the Department of State. The program also discovered new pathogens during testing of bamboo, *Miscanthus*, potato, stone fruits, and sweet potatoes. When the program finds a new pathogen, APHIS collaborates with other scientists in ARS or universities to characterize it and publish information about it. These collaborations may result in improvements in the PGQP's testing protocols to enhance our ability to detect new pathogens.

### Pre-Clearance Inspections

APHIS conducts commodity pre-clearance programs in 29 countries to minimize pest and disease risks outside the United States and allow perishable products to reach markets promptly. This number includes one new country, Italy, where exporters initiated a pre-clearance program for apples and pears.

APHIS works with the U.S. Department of Defense and the DHS to inspect military passenger baggage and equipment before it returns from overseas. This work is necessary to prevent the entry into the United States of foreign plant and animal pests and diseases in returning military cargo, equipment, and vehicles. In FY 2013, APHIS fulfilled this role by training and providing technical assistance visits to military personnel serving worldwide in 20 countries. Designated APHIS personnel delivered agricultural preclearance training and certification to military personnel, stateside and in forward deploy locations in the Middle East, Central Asia, Europe, and Africa. In FY 2013, APHIS trained more 2,400 personnel in the United States alone. During technical assistance visits of up to 30 days, APHIS agriculture advisors evaluated passenger and cargo preclearance operations to ensure compliance with APHIS requirements. These activities enabled the expansion of the military preclearance capacity needed to support the increasing number of returning military personnel, cargo, and equipment, resulting from the current military drawdown in Afghanistan.

#### Smuggling Interdiction and Trade Compliance (SITC)

Through the SITC program, APHIS officials analyze and identify potential smuggling pathways, conduct product traces, and coordinate with investigative organizations to increase compliance with APHIS' regulatory requirements. APHIS also notifies CBP about potential agricultural risks at the ports of entry. In FY 2013, APHIS made 2,473 seizures of prohibited agricultural items in commercial locations, such as food/grocery/ethnic markets, swap meets, and other retail outlets. Those seizures totaled 132,790 pounds of prohibited and/or restricted plants and plant products and meat and meat products valued at approximately \$771,929. Of these products, 2,626 pounds, worth \$93,294, were directly linked to 18 Agency recalls. Items seized through these recalls included animal and plant products such as decorative items containing noxious weed seeds and prohibited poultry products from countries where highly pathogenic avian influenza is present. In conjunction with CBP, APHIS conducted 16 port-of-entry Special Operations and found additional prohibited plants and plant products as well as various high-risk animal products. For example, at the Miami International Post Office, APHIS and CBP inspected 72 packages and found that 63 contained prohibited agricultural items, such as seeds and other high-risk material. Through other special operations, APHIS and CBP found prohibited chicken gizzards from China labeled as turmeric root, mislabeled sliced deer antlers, and beef products from France. These items are all capable of transmitted high-risk animal diseases or are protected by international conservation treaties. APHIS is continuing to enhance its ability to prevent smuggling and is working to refine the best use of SITC resources to target the highest-risk items.

#### Asian Gypsy Moth

APHIS supports the exclusion of Asian gypsy moth (AGM) through negotiations and support of offshore AGM ship inspection and certification from Far East Russia, Japan, Korea, and China. Due to an increase in AGM egg masses that CBP agriculture specialists intercepted on ships in 2012, APHIS, CBP, and the Canada Food Inspection Service conducted increased outreach to the maritime shipping trade throughout 2013. APHIS coordinated joint U.S./Canada technical visits to Japan, Korea, and China in early 2013 to address the risk to forest resources from shipping. As a result, although AGM ship inspections were still high in 2013, they were reduced by 25 percent from 2012 levels. APHIS, CBP, and the Canadian Food Inspection Agency are continuing discussions on strategies to enhance the exclusion effort in 2014.

#### Plant Inspection Stations

Importations of nursery stock and other propagative plant materials can serve as significant pathways for invasive pests and diseases. To reduce the risks associated with such imports, APHIS requires that certain imported plant materials enter the United States through plant inspection stations, which are located at ports of entry throughout the country at major international airports and seaports and at major crossings along the U.S.-Mexican border. Specialists at these stations inspect shipments to ensure that imported plants do not contain pests and diseases of regulatory significance. In addition, they enforce the regulations that apply to the import and export of plant species protected by the Endangered Species Act and the Convention on International Trade in Endangered Species of Wild Fauna and Flora. In 2013, inspectors cleared more than 22,000 imported shipments containing 1.3 billion plant units (cuttings, whole plants, or other propagative materials) and approximately 1,777,000 kilograms of seeds. Through these inspections, they intercepted more than 5,000 reportable pests. In addition, the stations conducted more than

900 treatments remediating more than 8 million plant units and almost 38,000 kilograms of seed. During FY 2013, APHIS also worked to develop a risk-based sampling method to improve inspection of imported plant material. The new protocol will maximize the effectiveness of inspections by incorporating statistically sound sampling for shipments based on the level of risk posed by the type and origin of the plant material. To help inspectors implement the new method, APHIS developed an on-line sampling tool that calculates the number of samples to inspect for each shipment. APHIS started using the new sampling method at four locations on October 1, 2013, and will review the data from these locations in FY 2014.

#### Risk Analysis and Scientific Support

APHIS' Plant Epidemiology and Risk Analysis Laboratory (PERAL) develops pest risk analyses and epidemiological approaches to pest exclusion. In 2013, PERAL personnel completed 211 risk analyses associated with imports, exports, invasive pest threats, and programmatic requirements. This work included 30 analyses to open, expand, or maintain export markets for U.S. producers. It also included evaluations of 53 new pests for potential risk to U.S. agriculture and 28 risk analyses for import requests from foreign countries. APHIS National Identification Services processed and identified 174,676 pests in FY 2013 (with 85,384 being reportable pests.)

#### Phytosanitary Export Certification

APHIS facilitates the export of agricultural shipments by tracking plant health import requirements for more than 200 countries, and provides certifications to U.S. exporters to help ensure that U.S. products meet other countries' requirements. More than 2,300 Authorized Certification Officials at the Federal, State, and county levels can access countries' certification requirements on-line and conduct inspections to issue phytosanitary certificates. These certificates facilitate the entry of commodities into foreign markets and represent approximately \$25 billion in trade annually. This program employs a web-based Phytosanitary Export Database, known as PExD. This database, which is free to exporters, enables them to research requirements and better prepare for shipping. In addition, this program uses a Phytosanitary Certificate Issuance and Tracking (PCIT) database, which allows exporters to apply for certificates, schedule inspections, and pay certification fees. PCIT also collects State and county cooperator fees in addition to the USDA fees for phytosanitary certificates. Participating States/Counties save up to 160 staff hours each month by allowing APHIS to handle the collection and remittance of the fees for certificates issued by the States/Counties on APHIS' behalf. Currently, 31 States and 22 counties use this feature. PCIT also enables APHIS to capture export application information, document inspection and certification information, print an original phytosanitary certificate on secure paper, and generate export reports. The Agency is continuing its effort with international counterparts to begin exchanging phytosanitary certificates electronically. The United States began accepting electronic phytosanitary certificates for some seed shipments in FY 2013. Pilot exchanges with Australia and New Zealand will begin in FY 2014. In FY 2013, APHIS, State, and county officials issued more than 605,000 Federal export certificates for agricultural shipments.

## 2. Cotton Pests

The Cotton Pests program works with States, the cotton industry, and Mexico to eradicate the boll weevil (BW) and pink bollworm (PBW) from all cotton-producing areas of the United States and northern Mexico. The BW has cost cotton growers approximately \$13 billion since it entered the United States in the late 19<sup>th</sup> century. APHIS began a BW eradication program in 1983. The PBW may be the most destructive pest of cotton worldwide. In the United States, although the volume of acreage planted with cotton varies from year to year, the PBW commonly causes cotton losses of 20 percent or more in affected areas. The PBW eradication program began in 1967. The Cotton Pests program also maintains preparedness capabilities to address other cotton pests that could enter the United States. APHIS provides national coordination, operational oversight, and technology development (such as sterile moth production for PBW eradication), while program partners have provided more than two-thirds of the funding for the BW eradication effort and most of the operational funds for PBW eradication. APHIS also provides technical advice on trapping and treatment protocols to its partners in Mexico for their eradication efforts.

The BW eradication effort involves mapping cotton fields, using pheromone traps to evaluate weevil presence, and applying pesticides. PBW eradication uses PBW-resistant cotton, mating disruption, and sterile moth releases. Once these pests are eradicated, the programs will conduct long-term surveillance to guard against re-infestation and to

take action if re-infestation occurs. After the BW and PBW are eradicated from an area, cotton growers rely far less on insecticides, thus reducing their production costs. Over the course of the eradication effort, the program has increased these growers' global competitiveness, primarily through reduced production costs and increasing yields. In the 2013 season, the industry produced approximately 13 million 480-pound bales worth approximately \$6 billion (National Agricultural Statistics Service).

To date, APHIS and cooperators have eradicated BW from 99.5 percent of the 16 million acres of U.S. cotton. Of the three remaining zones in the Texas BW program, the two zones outside of the Lower Rio Grande Valley (LRGV) were negative for BW in 2013. To target the last remaining zone (along the border with Mexico) where eradication efforts have been impacted by both security concerns that hamper operations and high winds that move BW populations around, APHIS partnered with an international technical committee to develop strategies to eradicate BW from the LRGV zone and neighboring Tamaulipas, Mexico. In the fall of 2012, producers in Tamaulipas increased late-season treatments and reduced late-season weevil populations. These treatments resulted in a significant reduction of boll weevil detections in the spring of 2013. While there was reduced cotton acreage planted in Tamaulipas in 2013, detections of boll weevil decreased by 92 percent. The LRGV also had a reduction in weevil catches of approximately 28 percent. APHIS and its State, industry, and international partners are continuing these intensive activities to target this last remaining BW zone in FY 2014.

The Cotton Pests program has eradicated the PBW from California, New Mexico, large areas of Arizona, and the El Paso region of Texas, representing 99.9 percent of infested cotton acreage. In addition, APHIS rears and distributes sterile insects to reduce PBW populations in Arizona and Mexico. The last native moths detected in the United States (and Mexicali and San Luis, Mexico) were detected in 2012. No native moths were reported in 2013 and the program is entering its first year of eradication confirmation in 2014. By eradicating these two devastating cotton pests, APHIS protects continued export opportunities for U.S. cotton growers and significantly lowers production costs. Through these activities, the program protects \$66 worth of cotton production per appropriated dollar spent.

### 3. Field Crop & Rangeland Ecosystems Pests

The Field Crop and Rangeland Ecosystem Pests (FCREP) program protects U.S. agricultural crops and rangelands from the establishment or spread of invasive or economically significant pests, facilitates safe international trade and domestic commerce, preserves economic opportunities for U.S. farmers, and fosters healthy ecosystems in rangelands and natural lands. To accomplish these goals, APHIS provides national coordination, threat assessment, and strategies to prevent pests and diseases such as Karnal bunt (KB) and witchweed from spreading and impacting export markets for U.S. farmers. The program also works to keep the imported fire ant (IFA) from spreading through interstate commerce and helps Western rangeland managers respond to cyclical outbreaks of grasshoppers and Mormon crickets. These programs help protect resources that small, rural communities depend on for income.

Through the FCREP program, APHIS cooperates with Federal, State, Tribal, and local agencies, organizations, and institutions to conduct survey and suppression activities in western States to reduce damage caused by grasshopper and Mormon cricket (GMC) outbreaks, protecting resources valued at more than \$8.7 billion (according to a 2012 Economic Analysis prepared by University of Wyoming through a cooperative agreement with APHIS).

Uncontrolled GMC infestations could cause significant economic losses for U.S. livestock producers by reducing animal food supply in rangeland and therefore forcing producers to buy supplemental feed or sell their livestock at reduced prices. Besides feeding on grass, they can also devastate cultivated crops such as alfalfa, wheat, barley, and corn. Infestations often cover vast acreage and landowners may need Federal support to control them. In FY 2013, APHIS conducted surveys in 16 States, and treated approximately 3,643 acres of rangeland, which protected rangeland forage and wildlife habitat on approximately 7,200 acres. APHIS treated the largest Mormon cricket outbreaks in Washington State, the largest grasshopper outbreaks in Arizona, and smaller outbreaks of grasshopper treated in Oregon and South Dakota. In Washington and Oregon, the program applied treatments on Federal and State lands. In South Dakota and Arizona, the program applied treatments on Tribal lands. Also in FY 2013, APHIS continued to implement predictive models to increase the efficiency of treatments. APHIS is continuing to refine the model by incorporating information on climatic conditions that favor or discourage outbreaks. These models allow for early-season treatments that use lower rates of insecticides to reduce immature pest populations instead of more expensive and stronger pesticides when the pests mature. The program also began using a new chemical treatment (Prevathon) that has reduced impacts on non-target species. In addition, the program helps land

managers by providing population information, helping to predict where GMC populations could develop into outbreaks and providing technical assistance to land managers about options for dealing with problem-level populations. By providing ongoing information and advice to land managers and conducting control treatments where necessary and possible, this program helps protect 664 million acres of rangeland across the western United States.

FCREP activities also prevented an estimated 10 additional States from becoming infested with IFA. This pest is a public nuisance and causes approximately \$6.3 billion in annual damage to homeowners, industry, and agricultural commodities such as corn and soybean (according to a 2006 Texas A&M University study). IFA infests more than 366 million acres in Puerto Rico and 14 States: Alabama, Arkansas, California, Florida, Georgia, Louisiana, Mississippi, New Mexico, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, and Virginia. Each of these States/territories is under Federal quarantine. The program provides treatments for land managers to help them remove IFA from their products and prevent the human-assisted spread of IFA on regulated articles. To do so, the program evaluates the efficacy of regulatory treatments for preventing IFA spread and works with States, industry, and other Federal agencies to develop insecticides and biological control agents. APHIS also provides technical assistance to States in preventing IFA detections in new areas from becoming established. For example, APHIS is working with Missouri officials to eradicate an isolated infestation in the town of Joplin. APHIS continues to look at new pathways through which IFA could spread and ways to mitigate the risks. Demand for hay, for example, continues to be strong around the country, and APHIS worked with the National Institute of Food and Agriculture to publicize ways to prevent the shipping of IFA infested hay. APHIS met the program's performance target of no IFA infestations outside of regulated areas that could be attributed to the movement of regulated articles infested with fire ants. APHIS expects to maintain this level of performance.

APHIS and cooperators also continued a biological control project using several species of phorid flies to target the ants. Since the spring of 2002, the program has conducted more than 140 releases involving four species of phorid flies, with several releases in each of the States/territory under Federal quarantine. The four fly species are established in the southeastern States, and two have spread throughout more than 65 percent of the regulated area. The program is continuing releases of one species for several years to supplement its current population. Reducing IFA populations will allow native ants to compete for resources, thus helping to restore ecological balance.

The FCREP program also addresses KB a fungal disease of wheat, first detected in the United States in 1996. Many U.S. trading partners will not accept U.S. wheat unless it is certified to originate from areas where KB is not known to occur. The KB program prevents the disease from entering the grain market system, spreading beyond the areas of Arizona where it is currently found, and directly impacting most other States. By keeping KB contained to a small area, the program indirectly protects more than 56 million acres of wheat production across the United States. USDA's Economic Research Service estimated in 2010 that, without the program's KB efforts, there would be a cumulative reduction of national net farm income of \$8 billion over the next eight years. In 2013, 37 wheat-producing States participated in the Karnal bunt national survey. More than 1,300 samples were submitted to the National Karnal Bunt Laboratory for processing, with no positive samples reported as of October 29, 2013. Based on this national survey, the program certifies wheat exports to be free of KB, assuring trading partners about the safety of U.S. wheat exports, retaining export markets, and facilitating wheat movement into domestic and international markets. Without the program, approximately \$7.5 billion worth of trade each year could be disrupted.

Another concern for the FCREP program is witchweed, a parasitic plant that can significantly damage corn, sorghum, and sugarcane. If witchweed were to spread throughout the Corn Belt, crop yields for corn and sorghum could decrease by 10 percent and trade in commodities from these areas could be negatively impacted. Since program activities began in 1957, APHIS and cooperators have successfully eradicated witchweed from 99 percent of the infested areas in North and South Carolina. These activities consist of treating infested acres, conducting post-eradication surveys, and addressing any new infestations. The program projects that 1,394 acres will be infested at the end of the 2013 growing season, a decrease of approximately 550 acres from FY 2012. In FY 2013, APHIS and cooperators conducted surveys on more than 70,000 acres and treated 3,354 acres. While the overall area infested with witchweed has decreased in North Carolina, APHIS detected five new fields in South Carolina, likely related to favorable weather conditions for the weed. APHIS will regulate these fields to prevent the spread of the pest and treat them with herbicides for several years. Once all visible signs of witchweed are removed, the program places the field in a "release category" for ten years because witchweed seeds can remain in the soil long after the plant has

been removed. If no additional witchweed plants are found in that field within those ten years, that field will be removed (or released) from the program. APHIS and cooperators in North Carolina are currently preparing to release more than 2,000 acres that have been monitored for 10 years with no witchweed detected. Efforts to contain and eradicate witchweed directly protect approximately 2,100 acres of corn worth \$1.47 million in the area immediately impacted (Purdue, 2012). But by preventing the spread of this damaging weed, the program indirectly protects more than 97 million acres of corn valued at \$77 billion each year (National Agricultural Statistics Service, 2012).

#### 4. Pest Detection

The goal of the Pest Detection Program is to document the distribution of plant pests and diseases of Federal regulatory significance in the United States. This documented information serves as the basis of APHIS' regulatory efforts and pest management programs that preserve economic opportunities for farmers (i.e., interstate commerce and international trade) and safeguard United States agricultural and natural resources. The program works with Federal agencies, State departments of agriculture, Tribes, academic institutions, and industry partners in all 50 States and several U.S. Territories to conduct these program activities.

APHIS and its State cooperators carry out plant pest surveys through the Cooperative Agricultural Pest Survey (CAPS) Program. APHIS provides national coordination for the program and develops policies and procedures for commodity-based and resource-based surveys. These surveys enable APHIS and cooperators to target high-risk hosts and commodities, gather data about pests specific to a commodity, and provide accurate assessments of pest distribution, including pest-free areas. Early pest detection is important to avert economic and environmental damage; once a pest becomes established or spreads significantly, the mitigation costs can reach millions of dollars, in addition to lost farm revenues and damage to ecosystems. Additionally, while many entities are involved in protecting crops and resources, APHIS verifies that U.S. products do not pose risks to other countries. Pest surveys conducted through the program demonstrate absence of a pest, and are used in some cases to help address importing countries' phytosanitary requirements and retain access to many foreign markets.

In FY 2013, APHIS and cooperators conducted a total of 251 commodity- and taxon-based surveys in 50 States and 2 territories (with 119 surveys conducted by States and 132 by APHIS). The program targeted 95 high-risk pests of national concern for survey in corn, oak, pine, small grains, soybean, and nursery crop commodities, as well as exotic wood boring bark beetles and cyst nematodes, among others, representing 81 percent of the target pests suggested for survey in the 2013 CAPS Survey Guidelines. Including pests of State priority, the Program targeted 266 unique pests for survey in FY 2013, surpassing its performance target of 200. Surveys consisted of multiple pests for efficiency and economy of survey, with an average of six to seven pests per survey and four to five surveys per State. Along with surveys conducted through the Farm Bill Plant Pest and Disease Management and Disaster Prevention program, APHIS and cooperators added 151 additional commodity surveys and targeted 334 unique pests overall.

A total of 20 new species in the United States were detected and confirmed through Pest Detection surveys or otherwise reported to APHIS through entry in the National Agricultural Pest Information System database as new or re-introduced to the United States. Three of these species were not plant pests, resulting in 17 new plant pests confirmed nationally in FY 2013. All 17 new plant pests were significant and listed as reportable/actionable and as quarantine pests where action would be taken if detected on conveyance at a port of entry. Examples include *Xanthomonas citri* pv. *mangiferaeindicae* (causal pathogen of bacterial black spot of mango) in Hawaii, *Trichoderus campestris* (Velvet longhorned beetle) in Utah, *Candidatus Liberibacter americanus* (a second species causing Citrus greening) in Texas, Cucumber green mottle mosaic virus in California, *Halotydeus bakerae* (Redlegged mite) in Florida, and *Chrysopogon aciculatus* (a Federal noxious weed) in Florida. The program's target for FY 2013 was to detect 80 percent of the significant pest introductions before they spread from the area of original colonization and caused significant economic or environmental damage, and the program actually detected 90 percent. However, none of these were high-risk pests of national concern specifically targeted for survey through the two programs; in effect, demonstrating freedom from these high-risk pests nationally.

## 5. Plant Protection Methods Development

The goal of the Plant Protection Methods Development (PPMD) Program is to develop scientifically viable and practical tools for exotic plant pest exclusion, detection, and management. These tools preserve economic opportunities for farmers and industries that engage in interstate commerce and international trade, and safeguard U.S. agricultural and natural resources from invasive plant pests. The program plays an essential role in APHIS' efforts to protect agriculture and natural resources from invasive plant pests and to support trade by developing tools to enable or improve the detection of exotic pests in survey programs; developing molecular diagnostic tests and identification tools for pest identification in support of domestic programs and imports of plants for planting; developing integrated pest management methods, including biological control, to eradicate or manage invasive pests; conducting pest risk analysis to address phytosanitary requirements for imports, and support for exports of U.S. agricultural products; and developing phytosanitary commodity treatments to support interstate and international trade. The program also develops and implements biological control technologies that allow natural enemies to be used alone or in combination with other control tactics to effectively mitigate the impacts of introduced, invasive insect pests, weeds, and plant pathogens, while minimizing impacts to the environment.

The PPMD program aims to develop new, or improve existing, tools each year to enhance APHIS' safeguarding capabilities. The program reached its FY 2013 annual performance target by developing or improving at least four quarantine treatments for commodities of trade. These treatments included validating ionized radiation (radio and microwave frequencies) treatment in logs—an alternative to the use of methyl bromide—for addressing insects, termites, rodents, weeds, nematodes, and soil-borne disease. The program also validated or developed cold treatment or fumigation schedules for pests such as peach fruit fly, oriental fruit fly in peppers, Mediterranean fruit fly in dates, thousand canker and ambrosia beetles in walnut wood, and flat mite, which facilitated domestic and international trade. APHIS also continued to establish new and support existing irradiation treatment programs, including programs in Spain and Mexico.

The PPMD program continues to design, develop, and deliver digital, media-rich, identification tools for APHIS to support trade and domestic, port, and offshore pest identification responsibilities. These tools are internet-accessible and provide users with matrix-based keys, image galleries, fact sheet collections, and other support aids valuable for identifying pests, diseases, and weeds of interest to APHIS and its partners. In FY 2013, the program released three tools: 1) *Antkey: Identification tool for invasive ants*; 2) *Hispines of the World* (a group of insects that includes economically significant pests as well as species that have been used as biological control agents); and 3) *Diabrotica ID: Identification of Diabrotica species* (another group of insects that includes serious pests of agricultural crops). The program also updated several other resources, including a guide to mites and screening tools for citrus pests and diseases. The program added more than 9,000 images to an application that allows APHIS to share its digital imagery with partners and enhanced its web-based interface for the creation and delivery of pest datasheets and commodity manuals. The web-based site will significantly enhance and improve APHIS' diagnostic capabilities and maximize the use of high-resolution, vetted digital image resources generated within APHIS as well as by scientific experts from other institutions.

The PPMD program harnesses risk mapping to create pest risk maps that enable them to make informed decisions on management of exotic plant pests. In FY 2013, the risk mapping program utilized the cooperative North Carolina State University/APHIS Plant Pest Forecasting System (NAPPFASST) and Geographic Information System (GIS) software to update and create new pest risk maps for 12 target pests in the Cooperative Agricultural Pest Survey program and other stakeholders. NAPPFASST is a web-based system that uses biological models and geo-referenced weather data to create maps, while GIS software allows the user to combine, display, and analyze many types of spatial data such as host data and the NAPPFASST maps. North Carolina State University is developing and validating a new model, the Generic Pest Forecast System, that is expected to improve on the existing models available in NAPPFASST by incorporating population growth.

APHIS also maintains its own quarantine and/or rearing facilities for biological control agents in Arizona, California, Colorado, Massachusetts, Michigan, Texas and Guatemala. In FY 2013, APHIS partnered with State departments of agriculture, USDA's Agricultural Research Service, the U.S. Fish and Wildlife Service, universities in 28 States and territories, and two Native American Tribes to evaluate and establish biological control agents for invasive plants, pests and diseases. Some key program targets included Asian citrus psyllid, brown marmorated

stink bug, emerald ash borer, cactus moth, Megacopta kudzu bug, hemlock woolly adelgid, olive fruit fly, mile-a-minute-weed, Dalmatian toadflax and Russian knapweed.

In FY 2013, the program met its performance measure target of 76 for the cumulative number of biological control projects that are developed, implemented, or transferred to States and other stakeholders. The program also met its performance measure target of 23 for the cumulative number of released biological control agents that have become established and sustainable, with the addition of the parasitoid *Psytallia lounsburyi* for olive fruit fly in California. Selected 2013 projects are highlighted below:

#### Olive Fruit Fly

The olive fruit fly is a major pest of olives and is established in agricultural production areas of California. In FY 2013, APHIS initiated a collaborative effort with the California Department of Food and Agriculture and the European Biological Control Laboratory to mass rear *Psytallia lounsburyi*, a parasitoid of olive fruit fly, and ship to California. The effort includes field release of this parasitoid at new locations in California and monitoring to determine establishment and impact on olive fly populations.

#### Air Potato

In FY 2013, APHIS continued collaborative efforts with Florida to mass-rear and release biological control agents (*Lilioceris cheni*) against the invasive plant air potato (*Dioscorea bulbifera*). Air potato is altering plant communities by displacing native species, changing community structures/functions, and crossbreeding with related native plants. Both larvae and adults of *L. cheni* are voracious feeders of the air potato plant consuming both leaf tissue and bulbils. Consumption of bulbils, known as "air potatoes," is important because it is the primary means of spread by *D. bulbifera*. The program has released 6,480 beetles at 14 sites in 10 counties in Florida. Sites that received beetles in 2012 have seen the greatest impact achieving up to 100 percent control in the immediate beetle release area. By the end of May 2013, beetles had dispersed up to several hundred meters from their initial release site, while still maintaining high populations within the release area.

### 6. Specialty Crop Pests

The goal of the Specialty Crop Pests (SCP) Program is to protect U.S. fruits and vegetables, tree nuts, horticulture, and nursery crops from adverse impacts associated with invasive pests, such as crop damage or threats to international trade and interstate commerce. APHIS works with State, Tribal, university, and industry partners to develop and implement practices, policies, and regulations that prevent or mitigate impacts for invasive pests of Federal regulatory significance. These activities include verifying pest distribution, identifying and mitigating risk pathways to prevent long distance spread of the pests, developing and implementing diagnostic tools and pest mitigation strategies, and communicating with the public to gain support for program strategies. These efforts promote the ability of U.S. farmers to export their products, prevent damage to specialty crop production (helping to ensure the availability of fresh fruits and vegetables), and protect natural resources, including forests and residential landscapes. Among the pests and diseases the program currently addresses are the glassy-winged sharpshooter (GWSS), pale cyst nematode, a variety of citrus diseases, exotic fruit flies, the light brown apple moth (LBAM) and the European grapevine moth (EGVM). Overall, the program directly protects nearly 1.6 million acres of specialty crop production worth approximately \$11.5 billion each year by containing and controlling pests and diseases of concern. The program indirectly protects an additional 2.7 million acres of specialty crop production worth \$15 billion by preventing the spread of these damaging pests and diseases to new areas. Without the (SCP) program, U.S. trading partners might not accept a variety of U.S. fruits and vegetables. The value of trade in specialty crops that could potentially be disrupted each year is \$7.2 billion (according to an internal APHIS report using National Agricultural Statistics Service (NASS) data). For every dollar spent on the SCP program, APHIS protects production worth \$187.

#### Grapes

The SCP program targets several devastating pests and diseases that could affect grape production and impact export markets, including GWSS and EGVM. Thirteen States produce grapes commercially, with California accounting

for more than 80 percent of the total acres in production (960,200 in FY 2011 according to NASS). In FY 2013, APHIS and the California Department of Food and Agriculture (CDFA), along with industry partners, continued the successful effort to eradicate EGVM. As a result of no new EGVM detections during 2 years of surveillance, APHIS removed four counties from the quarantined area, leaving only Napa County and portions of Solano and Sonoma counties (in proximity to EGVM finds in Napa) under quarantine. The removal of these counties (Nevada, Santa Clara, Santa Cruz, and most of Sonoma) from the quarantined area lifted export restrictions on both table grapes and stone fruit produced in the area and saves producers an estimated \$10 million each year in quarantine-related expenses. APHIS and program partners detected only 40 moths in FY 2013, compared to 78 the previous year (and down from more than 10,000 in 2009, the first year after EGVM was first detected). In FY 2014, APHIS and CDFA will continue intensive survey and control activities in Napa and survey activities in previously affected areas to ensure that EGVM is not present. APHIS also continued the successful, cooperative GWSS program designed to suppress populations of this pest in grapes, citrus, and nursery stock. GWSS is a vector for Pierce's disease (a serious threat to grapevines), and the program's suppression and regulatory activities prevent the spread of the disease from citrus and nursery stock production areas to vineyards. In FY 2013, the program conducted surveys for the pest in 49 California counties and continued area-wide suppression activities in affected agricultural production areas of five California counties. With citrus growers' voluntary suppression treatments, the program covered more than 19,000 acres. Of the 42,994 shipments of nursery stock from infested areas, only five were rejected due to GWSS. Together, the EGVM and GWSS programs directly protect grape production worth \$2.5 billion each year in the impacted areas and protect another \$1.78 billion worth of grape production through preventing the spread of the pests to new areas (figures derived from internal APHIS report using NASS data).

### Citrus

Citrus fruits are high-value specialty crops and a nutritious food for consumers across the world. In FY 2012, the United States was the world's third largest producer of citrus and among the top five citrus exporters (Global Trade Atlas Database). APHIS supports the continued ability of the citrus industry to produce, harvest, process, and ship citrus fruits and nursery stock despite the presence of diseases such as citrus canker, citrus greening, and citrus blackspot. Working closely with the citrus industry and State departments of agriculture in FY 2013, APHIS developed flexible regulatory protocols for areas impacted by citrus greening in Texas and areas impacted by Asian citrus psyllid (ACP), the vector of citrus greening, in California. These changes, such as allowing citrus to move to packing houses outside of quarantined areas if certain conditions are met, have resulted in reduced regulatory burdens on citrus producers impacted by citrus greening and ACP while continuing to minimize the risk of pest and disease spread. In FY 2013, APHIS also began piloting a biological control program targeting ACP. This program, which employs a predatory wasp against ACP, will augment current management methods, especially in residential areas in California, Arizona, and Texas, where use of chemical pesticides is not desirable. APHIS also continued to support area-wide management of the ACP in Florida by providing survey data every 3 weeks to the growers participating in Citrus Health Management Areas (CHMAs). Citrus growers participating in CHMAs (managed by Florida Department of Agriculture and Consumer Services) coordinate the applications of pesticides to suppress ACP populations in commercial citrus groves. To date, growers have formed 48 CHMAs in Florida, representing 486,000 acres or nearly 93 percent of the State's 524,426 total citrus acres in production. ACP counts are significantly lower when ACP management is coordinated. APHIS and cooperators are initiating the same approach to ACP management in California and Texas. APHIS and the CDFA are continuing to evaluate survey results related to the detection of sweet orange scab in California. Although the disease has been confirmed in three California counties so far, APHIS packing house protocols will allow the shipping of asymptomatic fruit (which is not a pathway for the disease) from these areas. These citrus health activities directly protect citrus production on more than 800,000 acres in the United States worth \$3.4 billion. Without APHIS' activities, approximately \$1 billion of citrus exports could be at risk each year (NASS 2012 Citrus Fruit Summary).

### Tree Fruit and Nursery Stock

APHIS protects a wide variety of specialty crops (especially tree fruit and citrus) through maintaining a barrier against the spread of the Mediterranean fruit fly (Medfly) northward from Central America. Medfly is one of the most destructive agricultural pests in the world, attacking more than 300 cultivated and wild fruits. APHIS and cooperators produced 1.1 billion sterile Medflies per week in FY 2013 to maintain the barrier in Mexico and Guatemala and to release on a preventive basis in high-risk areas of California and Florida. APHIS and cooperators

also worked to eradicate a Mexican fruit fly (Mexfly) outbreak in the Lower Rio Grande Valley, along both sides of the U.S.-Mexico border. APHIS increased sterile Mexfly production from 130 million flies per week in FY 2012 to more than 140 million flies per week in FY 2013. Eradicating Mexfly from this area protects citrus, mango, and avocado production and exports. Additionally, in FY 2013, APHIS and CDFA eradicated a Medfly outbreak in San Bernardino County, allowing for continued harvest and shipment of agricultural products out of the county.

In FY 2013, APHIS and cooperators in New York confirmed that plum pox virus (PPV), a disease that affects stone fruit, has been eradicated from two of three affected counties in the State. Based on 3 years of negative survey results, APHIS lifted quarantine regulations on Orleans and Wayne Counties. More than 24,000 acres will now be reopened to the production of stone fruit in the two counties. APHIS and the New York State Department of Agriculture and Markets will continue surveys in Niagara County, where the last PPV detection occurred in 2011. APHIS continually reviews its program protocols to reduce regulatory requirements where possible while continuing to mitigate pest and disease risks. In FY 2013, APHIS, in partnership with the State of California and industry, evaluated and exempted 15 fruit and vegetable commodities such as strawberries and apples from interstate shipping requirements related to the light brown apple moth. APHIS is also streamlining the regulatory framework for hosts (particularly nursery stock) of *Phytophthora ramorum*, which causes sudden oak death and can affect a variety of forest trees. APHIS and State efforts have kept the disease from impacting natural resources, outside of small areas in Oregon. In FY 2013, APHIS de-regulated more than 1,500 nurseries in California, Oregon, and Washington based on a reassessment of how the disease is most likely to be transmitted. These lower-risk nurseries will now be able to ship products more easily, and APHIS and State inspectors will focus on the highest-risk nurseries to prevent the disease from spreading through nursery stock shipments and sales.

Through all of these activities, APHIS directly protects nursery stock production worth approximately \$4.3 billion (2007 Census of Agriculture) and tree fruit worth \$1.1 billion (NASS 2011 Summary of Non-Citrus Tree Fruits). Through keeping pests and diseases like PPV and light brown apple moth from spreading to new areas, the program indirectly protects more than \$9 billion in fruit and nursery stock production (combined figures from 2007 Census of Agriculture and NASS 2011 Summary of Non-Citrus Tree Fruits).

### Potatoes

APHIS addresses two major potato pests, the pale cyst nematode (PCN) in Idaho and the golden nematode in New York. APHIS and cooperators have confined each to a relatively small area, and continued survey and regulatory efforts protect export markets for U.S. potatoes from 36 States. In FY 2013, APHIS tested more than 65,000 soil samples in Idaho for the PCN eradication effort and approximately 5,000 for the nationwide detection survey. PCN has not been detected outside of Idaho, but APHIS detected four new infested fields in Idaho in FY 2013, bringing the total number of infested fields to 21. Fumigations of infested fields in Idaho have reduced PCN populations by 99 percent since the pest was first detected in 2006. Eight fields have completed the treatment cycle, and multiple laboratory tests indicate that the treatment protocol is successful at eliminating PCN from the soil. Producers will now be able to plant potatoes in these fields, and APHIS and cooperators will continue monitoring them for several additional years to ensure PCN is not present. APHIS and New York cooperators also surveyed 1,262 acres for golden nematode and conducted 881 regulatory treatments to ensure that equipment moving out of the affected area does not pose a risk for spreading the nematode. Together, these efforts directly protect potato production worth \$204 million in and around impacted areas and allow 222 businesses to keep operating through compliance agreements that minimize the risk of pest spread. These programs indirectly protect one million acres of potato production nationwide worth \$3.74 billion (Economic Research Service, Vegetable and Pulse Outlook 2012). Without these programs in place, trading partners might not accept U.S. potatoes and approximately \$139 million in trade (U.S. Potato Board, 2010) could be disrupted each year.

## 7. Tree & Wood Pests

The Tree and Wood Pests (TWP) program protects forests, private working lands, and natural resources from the Asian longhorned beetle (ALB), emerald ash borer (EAB), and gypsy moth (GM). Numerous native hardwood tree species that are common throughout the United States are vulnerable to these pests. APHIS cooperates with Federal, State, Tribal, and local agencies, organizations, and institutions to conduct survey, regulatory, control, and outreach activities in 48 States to manage and, in some cases, eradicate these pests. Conserving forests enhances the

economic vitality of rural communities by supporting forest-related industries, recreation and tourism, and the overall livability of communities. The value of forest products and ecosystem services protected by APHIS per program dollar spent is approximately \$21,000. In addition, trees in residential areas lower cooling bills, filter pollutants from the air, decrease runoff, and improve residents' quality of life. Annually, forest pests could cost local governments up to \$1.7 billion due to tree damage and removal, and \$830 million in lost residential property values according to a 2011 study conducted through the National Center for Ecological Analysis and Synthesis Working Group. Without Federal funding, forest pests would spread more rapidly throughout the United States, and responding to newly introduced pests would become increasingly difficult.

The ALB threatens forest resources nationwide, as roughly 30 percent of U.S. trees are potential ALB hosts. The program's ALB eradication activities prevent multi-billion dollar losses to the maple syrup, timber, tree nursery, trade, and tourism industries. The annual contribution of forest-based manufacturing and forest-related tourism and recreation to the economies of Ohio, New York, and New England is approximately \$35 billion. ALB was first detected in Brooklyn, New York, in August 1996, and was later found in other areas of New York, Illinois, New Jersey, Massachusetts, and Ohio. The program has successfully eradicated ALB from Chicago, Illinois; Islip, New York; and Jersey City, New Jersey. In FY 2013, APHIS successfully eradicated ALB from the counties of Middlesex and Union in New Jersey and Staten Island and Manhattan in New York. The program continues to conduct final surveys in Eastern Queens and Long Island, New York, and in Norfolk and Suffolk counties in and around Boston, Massachusetts. APHIS and cooperators are continuing to delimit the infestations and remove host trees in infested areas in Ohio; Worcester, Massachusetts; and a recently discovered infestation in Long Island, New York. APHIS provides ongoing support to evaluate new methods and protocols to combat regulated pests and tailors project responses to site-specific conditions, resulting in a more efficient program. In FY 2013, the program worked to examine new detection technologies (such as traps and detector dogs), the impact of beetle biology and the time elapsed between surveys on survey effectiveness, and the impact of extending the timeframe for the application of preventive treatments. The program expects the infestation in and around Worcester, Massachusetts, to be delimited by FY 2015. APHIS aims to declare ALB eradicated from Norfolk and Suffolk Counties in and around Boston, Massachusetts by the middle of FY 2014.

APHIS measures performance by tracking progress toward eradication. The program met its targets for FY 2013 and has completed 100 percent of the New Jersey program, 74 percent of the New York program, 8 percent of the Massachusetts program, and 1 percent of the Ohio program. Because of required treatment cycles, programs only show improvement in this indicator after an area has been treated for approximately three years. The Ohio program is still in the early stages and will not likely show notable progress with this measure until 2014.

Another forest pest of concern for the program is the EAB, which was first detected in Michigan in 2002 and has since spread into 21 additional States, an increase of 4 since the end of FY 2012. Even though the pest was detected in these four States in FY 2013, it had likely been introduced into those States years earlier. The detections resulted from the program's use of a new risk-based model to determine the best places to focus their survey and trapping efforts. APHIS works with Federal, State, and local agencies and stakeholder groups to mitigate the human-assisted and natural spread of the pest and is continuing development of a biological control initiative designed to effectively manage EAB populations. In addition, APHIS will continue with regulatory enforcement at the leading edge of the infested region, outreach activities and national coordination with impacted States.

The biological control initiative provides a promising strategy using three parasitic wasps for long-term EAB management. In FY 2013, the program conducted trial releases of the wasps in 17 states: Connecticut, Illinois, Indiana, Kentucky, Maryland, Massachusetts, Michigan, Minnesota, Missouri, New York, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia and Wisconsin. Current trial releases are focused on assessing the impacts of the wasps on EAB populations and tree health at and near release sites. An initial assessment of these impacts is expected to take several more years. In FY 2014, APHIS plans to release the biological control agents in all States that request them. The program released a total of 498,000 parasitic wasps in 2013.

The newly adopted regulatory framework, which focuses on the leading edge of the infestation and contiguous quarantine areas, maximizes the efficient use of resources, while minimizing impacts on regulated businesses in quarantined areas. Based on the detection of infestations in unregulated areas of previously affected States, APHIS expanded the quarantine area to approximately 374,000 square miles. To prevent further artificial spread, the

program regulates EAB host materials such as logs, firewood, and nursery stock. In 2013, APHIS maintained approximately 1,000 compliance agreements with businesses that handle EAB host materials. These agreements enable the program to regulate the treatment and movement of these host materials from quarantined areas.

In 2012, the EAB generally infested area grew by 9 percent, exceeding the projected growth estimated at 5 percent. In addition, more detections outside of regulated areas were recorded in 2013 than 2012; there were a total of 32 detections in 2013, up from 19 in 2012. These results were likely due to improvements in the survey component of the program, including availability of improved detection tools, a sophisticated risk assessment-based method of developing each year's survey design in collaboration with the U.S. Forest Service (FS) and increased public awareness of EAB symptoms and reporting procedures for suspect trees. In addition, APHIS and the FS have developed a computer based survey design tool based on the same risk assessment that State and local agencies can use to implement EAB surveys. This tool will allow local surveys to integrate with APHIS survey work to provide a better indication of where EAB is established.

European gypsy moth (EGM) is a destructive pest to some of North America's most beautiful and popular deciduous trees, including maples, oaks, and elms. This pest is established in all or parts of 19 northeastern, mid-Atlantic, and Midwestern States, as well as the District of Columbia. APHIS and State cooperators conduct regulatory activities in the quarantine area to prevent the human-assisted spread of the pest and the establishment of gypsy moth populations in non-quarantine areas. These efforts include inspection, treatment, and certification of regulated articles for movement from quarantine to non-quarantine (non-infested) areas. Compliance agreements are issued and public outreach is conducted to ensure that businesses and residents in infested areas comply with regulations to prevent long-distance spread of the pest. The EGM also spreads naturally into areas bordering the quarantined zone. APHIS monitors the transition zone along the 1,200 mile-long border of the quarantine area to ensure that newly infested areas are added to the quarantined zone and regulated effectively. Working with the FS and the EGM Slow-the-Spread Foundation, APHIS and cooperators have greatly slowed the spread of EGM and eradicated isolated populations, keeping this pest from becoming a larger issue. In 2013, APHIS and State cooperators continued to conduct EGM surveys to detect, delimit, and eradicate any isolated populations. During the year, the program added six new counties to the quarantine area (McDowell, Mercer, Raleigh, Summers, and Wyoming Counties in West Virginia and Tazewell County in Virginia).

Asian Gypsy Moth (AGM) is an invasive threat to North American urban and natural forests because of its broad host range, demonstrated damage potential, and its ability to compromise an effective management system that has taken nearly 100 years of research to assemble against EGM. In September 2013, a single AGM was found in Oklahoma. APHIS aims to eradicate any developing AGM population at the first opportunity, which, based on the moth's biology, normally begins the following season. A review of the trapping data and the area surrounding the find is underway to determine the appropriate response.

#### Selected Examples of Recent Progress – Wildlife Services:

##### 1. Wildlife Damage Management

APHIS Wildlife Services (WS) provides the only dedicated Federal leadership to protect agriculture, human health and safety, property, and natural resources from disease and damage caused by wildlife. Cooperator participation and support is critical to the program's success. To accomplish these goals, APHIS works with Federal and State agencies, Tribes, county and municipal governments, private homeowners, farmers, ranchers, and other property owners.

##### Agriculture

According to the National Agricultural Statistics Service surveys published in 2010 and 2011, predators kill more than \$137 million worth of livestock each year. APHIS prevents and reduces livestock predation through education, technical assistance to producers, and operational management programs. The majority of wildlife damage management (WDM) predation management programs are supported by a combination of appropriated and cooperator-provided funds.

In FY 2013, APHIS personnel assisted more than 14,000 livestock producers in the western United States. APHIS helped protect approximately 4 million sheep and lambs, 9.1 million cattle and calves, and 502,000 goats from predation. The Agency estimates the value of predation losses prevented by APHIS to be \$150 million. In New Mexico, APHIS protected more than 370,000 head of cattle, sheep, and goats valued at more than \$296 million. APHIS conducted more than 50 outreach and educational programs to instruct and inform citizens on livestock protection issues and damage management techniques. APHIS estimates its efforts, through WDM, helped save more than \$1 million worth of livestock from predation in New Mexico during FY 2013. In FY 2013, APHIS protected more than \$21 million worth of livestock from predation by coyotes, red fox, and black vultures in West Virginia alone.

In FY 2013, APHIS personnel worked with State wildlife agencies, the U.S. Fish and Wildlife Service, and tribes to conduct wolf damage management programs and to capture and mark wolves for research and population monitoring purposes. In Michigan, Minnesota, and Wisconsin, the program responded to 338 complaints regarding wolves and verified 165 incidents of wolf damage to property, livestock, pets, and humans. In FY 2013, APHIS responded to 129 reported wolf depredations on livestock incidents in Montana. APHIS conducted detailed investigations and determined that wolves were responsible for livestock deaths in approximately 50 percent of the cases reported to include 5 adult cattle, 61 calves, 23 adult sheep, 12 lambs, 1 adult goat, and 2 guard dogs. In response to these depredations, APHIS removed 78 wolves. APHIS also assisted Montana Fish, Wildlife and Parks in monitoring the wolf population by placing radio collars on 9 wolves. In FY 2013, APHIS initiated research on the use of specific breeds of livestock protection dogs from Europe to evaluate their effectiveness in reducing predation from wolves and grizzlies.

APHIS wildlife disease biologists provided technical assistance, conducted surveillance, and maintained control of more than 60 wildlife diseases, pathogens, and syndromes. Internationally, the National Wildlife Disease Program serves as an associate on the Food and Agriculture Organization's Scientific Task Force on Wildlife Diseases, worked with a U.S. Army, Medical Research Unit in Kenya on zoonotic diseases, assisted the Defense Threats Reduction Agency on emerging diseases including African swine fever in Ukraine, implemented a WS Memorandum of Understanding with the Chinese Academy of Sciences on wildlife disease surveillance, and collaborated with the USDA Foreign Agriculture Service, Swedish University of Agricultural Sciences, and Colorado State University on emerging One Health issues in Africa, Europe, Indonesia, and Southeast Asia.

### Human Health and Safety

APHIS is the lead Federal agency for conducting oral rabies vaccination (ORV) campaigns to protect public health by working to eliminate and prevent the spread of rabies in wildlife. In FY 2013, APHIS and cooperators distributed more than 6.8 million ORV baits in 15 States as a continuation of the strategic distribution of more than 130 million baits since the program began in 1997. These programs have led to the elimination of canine rabies in coyotes, resulting in the United States being declared canine rabies free in 2007; the near elimination of gray fox rabies from Texas; and containment of raccoon rabies in the eastern United States. During FY 2011-FY 2013, WS' National Rabies Management program successfully conducted three oral rabies vaccine (ONRAB) field trials (one trial each in West Virginia and Ohio, and a single trial in contiguous areas of New York, Vermont and New Hampshire) to increase the rabies immunity of the raccoon population in five States. Promising results from 2011-2012 showed a positive response to ORV including at least a 2-fold increase in rabies immunity in post ONRAB raccoon samples compared to pre-ONRAB samples in New Hampshire, Vermont, and New York. In FY 2013, the program expanded the field trials in New York to include an area along the Saint Lawrence River. The program is currently conducting post-bait sampling and data analysis for FY 2013 and expects results by early 2014.

APHIS' Aviation Training and Operations Center (ATOC) provides high-quality training, standardization, and, most importantly, guidance for safety. On average, APHIS trains approximately 34 Agency pilots and 10 to 15 contractor pilots per year. During the last 2 to 3 years, the ATOC has made improvements involving employee safety related to aircraft maintenance oversight, aviation safety communication, aircraft avionics, aircraft tracking, and personal protection equipment (i.e. winter weather clothing, aircraft helmets). Safety oversight and training requirements are expected to increase in FY 2014 and in future years.

Wildlife strikes cost commercial aviation more than \$900 million annually in the United States, and approximately \$1.2 billion worldwide. Since 1988, when APHIS started collecting data, bird and other wildlife strikes have destroyed 94 civil and military aircraft in the United States, killing 55 people. In FY 2013, APHIS provided assistance to nearly 800 airports and airbases nationwide to mitigate wildlife hazards pursuant to funded agreements with program recipients. This effort involves management programs at more than 100 domestic and international Department of Defense airbases that reduced wildlife strikes to military aircraft. APHIS cooperators fund these efforts.

#### Property

In FY 2013, APHIS conducted beaver damage management activities in 39 States, including four State/region-wide programs supported by cooperator-provided funds. In North Carolina, the Agency conducted more than 1,200 projects, reducing damage by an estimated \$9.9 million, and saving nearly \$6 for every dollar spent on the program. In Mississippi, every dollar spent on APHIS' beaver management program saved between \$1 and \$38 in reduced timber damage. In South Carolina, the Agency conducted beaver management projects on 1,158 properties, reducing damage by an estimated \$2.8 million. In Wisconsin, APHIS worked with the State, tribes, and the U.S. Forest Service to protect and restore more than 1,500 miles of trout streams and economically and culturally important wild rice beds, and to protect roads, bridges, impoundments, and railroads. Beaver damage management in Tennessee protected more than \$12.5 million in resources including; timber, roads and bridges, crops and pastures, drainage control structures and utilities. APHIS conducts statewide cooperatively-funded management programs in several other States across the United States.

#### Natural Resources

Non-native, invasive animals can devastate ecosystems. The APHIS WDM program focuses on eliminating damage from brown treesnakes (BTS), feral swine, nutria, and other invasive species.

BTS have eliminated most species of native birds, lizards, and bats in Guam, and cause economic losses and public safety problems due to power outages. In FY 2013, APHIS continued leading a multi-agency partnership to prevent BTS movement from Guam to other Pacific Islands, Hawaii, and the continental United States pursuant to funded agreements with other Federal departments and the Guam Department of Agriculture. The Agency intercepted approximately 18,000 BTS in Guam. In FY 2013, APHIS and partners from the Departments of Defense and Interior, and the Guam Department of Agriculture began an evaluation of aerial broadcasts of acetaminophen-treated mice baits in reducing BTS populations in densely forested habitats. APHIS and partners in September 2013 conducted two bait drops. The successful delivery of this toxic bait is a critical next step towards developing a method for large area control of BTS in remote and inaccessible areas of Guam. Intensive monitoring of BTS activity after the bait drops has provided preliminary data that indicates a reduction in BTS activity and no evidence of impact to non-target species. This demonstration project is expected to continue for another 12 months and will contribute important information for APHIS to evaluate the method and potentially improve operational control of BTS on Guam.

Feral swine are a harmful and destructive invasive species, and they inflict significant damage to property, agricultural animal health and crops, natural resources, public health and native ecosystems. Currently, the total aggregate cost of damage caused by feral swine in the United States is estimated to be \$1.5 billion annually, with more than half of that amount due to direct damage to agriculture. In FY 2013, the program removed approximately 31,105 feral swine in 27 States. Further, APHIS completed 1,630 technical assistance projects to alleviate feral swine problems, such as providing educational materials and technical advice and recommendations to State and local cooperators. In January 2013, APHIS initiated a demonstration feral swine eradication project in New Mexico, using approximately \$1 million from contingency funding. New Mexico has a strong local base of support including multiple state and federal agencies, the Mescalero Apache Tribe, and livestock organizations committed to provide financial and logistical support as well as in-kind services to assist the project. During FY 2013, the program removed 640 feral swine from more than 4.8 million acres; this represents an important step in the 5-year goal of eradication of feral swine from New Mexico.

Nutria damages wetlands, agricultural crops, and structural foundations such as dikes and roads. APHIS is leading the first large-scale North American effort to eradicate a mainland nutria population in the Chesapeake Bay through funded agreements with the U.S. Fish and Wildlife Service and other cooperators. Since 2002, in cooperation with Federal and State agencies and private landowners, APHIS has removed nutria from more than 216,000 acres of coastal marshland that is monitored continuously to detect and remove nutria. APHIS has prevented the re-infestation of this area, and marsh grasses and native muskrat populations are quickly recovering. In FY 2013, the program removed nutria from 23,500 acres and surveyed an additional 50,000 acres in Virginia and found them to be nutria free.

## 2. Wildlife Services Methods Development

The Wildlife Services Methods Development (WSMD) program develops effective and socially responsible methods and information for managing conflicts between people and wildlife to protect agriculture, natural resources, human health and safety, and property. This program includes basic research in support of the Agency's animal health programs, discovery of new science and technology, information analysis and context development, product development, and technology transfer. APHIS' National Wildlife Research Center (NWRC) provides the only dedicated Federal leadership in developing methods to manage wildlife-related damage problems. More than 80 percent of NWRC research protocols involve partnerships with entities such as State and Federal agencies, non-governmental organizations, universities, tribal governments, and private sector businesses. In FY 2013, NWRC conducted 303 studies and published 157 scientific studies in 56 different professional scientific journals.

### Agriculture

The WSMD program protects agriculture by safeguarding livestock from predators; and managing invasive species, beaver damage, wildlife species, wildlife rabies, and wildlife diseases. The following represent a few examples of research or methods used to protect American agriculture.

Bird and rodent damage cost California's agricultural producers an estimated \$168 million to \$504 million annually (APHIS, 2009, available at [http://joomla.wildlife.org/documents/Bird\\_Rodent\\_Damage\\_Crops.pdf](http://joomla.wildlife.org/documents/Bird_Rodent_Damage_Crops.pdf)). Voles cause serious damage in orchards, nurseries, and field crops in California and in other States. Anticoagulant rodenticides have been used to manage rodent populations, but they may be losing their efficacy due in part to the development of resistance in vole populations. In FY 2013, NWRC researchers examined the metabolic activity of voles trapped from both high anticoagulant-use areas and non-use areas in California. These studies show that alterations in metabolic function play a role in anticoagulant resistance and will aid in the research in the development of new rodenticides.

Deer foraging on stored livestock feed increases both feed costs and risks of disease transmission between deer and cattle. In FY 2013, NWRC researchers evaluated a novel 4-foot-tall electric fence consisting of four strands of bipolar tape for excluding deer from feed piles. The fence was more than 80 percent effective at reducing deer at feed piles. The fence could provide temporary protection of stored feed in winter before a more permanent woven-wire fence could be installed. The bipolar tape fence may also be effective for reducing deer depredation in gardens, small orchards, or other seasonal resources.

In 2013, NWRC scientists continued to collaborate with Texas Parks and Wildlife and Australian scientists to develop sodium nitrite as a feral swine toxicant. Efforts are focusing on a final formulation that can be presented to the U.S. Environmental Protection Agency for the registration of a feral swine toxicant. Toxic bait will prove to be a valuable ancillary tool for the control of feral swine populations.

*Escherichia coli* O157:H7 is a food-borne bacterial pathogen that causes public health problems throughout North America. Infections can lead to gastroenteritis and hemolytic uremic syndrome, which can be fatal. In FY 2013, NWRC researchers demonstrated that European starlings are a significant risk factor for the dissemination of *E. coli* O157:H7 among dairy farms. This information is useful for developing efficient targeted biosecurity management plans at dairies and feedlots to improve herd health and lower risk of infection to humans consuming dairy and beef products.

NWRC scientists continued their partnership with TKO Enterprises to develop a nonlethal Canada goose hazing system. The Goose Guardian™ uses real-time artificial intelligence image-recognition software to identify geese and activate integrated scaring devices. In FY 2013, NWRC evaluations showed that the device could successfully detect geese at distances of 3 to 9 meters with 93 to 96 percent accuracy. The device was successful in repelling geese from 42 to 86 percent of the areas where deployed. Next steps include cost comparisons of prototypes relative to existing management methods under different use scenarios. For example, automated devices are not constrained by employee work schedules.

### Natural Resources

The WSMD develops methods that protect natural resources from the impacts of invasive species, while minimizing or eliminating the use of toxicants that could damage the environment or contaminate food sources for non-target animals. In FY 2013, APHIS researched new methods to control the spread of nutria, Burmese pythons, brown treesnakes, and cormorants.

Populations of double-crested cormorants, a fish-eating waterbird whose populations in some areas of North America have doubled every 5 years for the past 3 decades, negatively impact commercial aquaculture, recreational fisheries, sensitive vegetation, and other colonial-nesting birds. NWRC scientists previously identified a biomarker in the skin called pentosidine. In FY 2013, researchers developed and evaluated eight models for using pentosidine to estimate ages of double-crested cormorants. The results will help resource managers predict whether populations are growing, static, or declining; this information is useful in setting harvest and take quotas to protect aquaculture stock from bird predation.

The Burmese python is a semi-aquatic, invasive reptile species in Florida, where its elusive nature and cryptic coloration make its detection difficult. In FY 2013, NWRC scientists developed methods to detect python DNA from environmental water samples. This method presents a promising new monitoring tool that could be used to enhance Burmese python control. This detection method eliminates the need for direct observations or handling of snakes and could make monitoring and control efforts more efficient.

Numerous local and Federal agencies are involved in efforts to reduce the invasive brown treesnake population on Guam and prevent the species' spread to other islands in the Pacific. Much of these efforts are spent at Guam's sea and airports to ensure outbound cargo is free of snakes. In FY 2013, NWRC researchers evaluated the effectiveness of five chemical aerosols to flush snakes from hiding places. The researchers identified chloroform and trichloroethylene as effectively aerosols that caused snakes to move. This test is a critical first step in determining whether this technology can be made operational.

The nutria is an invasive, semi-aquatic rodent that harms riparian and wetland habitats. In FY 2013, NWRC researchers evaluated the effectiveness of standard Vexar® plastic mesh tubes in reducing nutria foraging damage to newly planted woody vegetation. Survival over the 3-month initial establishment period was 100 percent for woody vegetation protected by Vexar® tubes, versus only 17 percent of unprotected plantings. Results indicate that Vexar® plastic mesh tubing can be an effective short-term mitigation tool when habitat use by nutria is low.

### Human Health and Safety

The WSMD program protects human health and safety by developing methods to prevent or minimize bird-aircraft collisions, prevent the spread of rabies in various animals, and minimize conflicts between people and wildlife.

Several airports in the United States recently have installed large photovoltaic (PV) arrays near operational areas to offset energy demands. Bird use of solar installations should be examined to determine whether such changes in land use could increase wildlife strikes. In FY 2013, NWRC researchers evaluated bird use of five pairs of PV arrays and nearby airport grasslands in Arizona, Colorado, and Ohio. The researchers concluded that PV arrays do not conflict with safety regulations concerning wildlife at airports, and that PV arrays potentially could play a major role in efforts to design and operate "greener" airports.

Human–coyote conflicts are a growing problem in many North American cities. In FY 2013, NWRC scientists collaborated with researchers at Colorado State University to analyze more than 4,000 reports within the Denver Metropolitan Area. The study documented a strong seasonal pattern in conflicts, and revealed that conflicts were disproportionately greater in open space areas, commercial development sites, and suburban housing areas. These findings will help target management efforts, particularly those involving education and outreach.

### Property

The WSMD program protects personal property from damage caused by animals and rodents. In FY 2013, NWRC continued to assist the U.S. Air Force by evaluating the field efficacy of a rodent barrier at a deactivated intercontinental ballistic missile launch facility at Malmstrom Air Force Base in Montana.

### Selected Examples of Recent Progress – Regulatory Enforcement:

#### 1. Animal and Plant Health Regulatory Enforcement

The Animal and Plant Health Regulatory Enforcement (APHRE) provides investigative and enforcement support to the Agency's four regulatory programs, and Agricultural Quarantine Inspection (AQI) activities carried out through the Department of Homeland Security, Custom and Border Protection. APHRE investigates alleged violations of Federal laws under its jurisdiction and pursues appropriate enforcement actions through administrative, civil, or criminal procedures.

In 2013, the program issued nearly 1,800 Official Warnings, 2630 pre-litigation settlements that resulted in the collection of \$1,831,005 in stipulated penalties, and obtained administrative orders assessing an additional \$943,307 in civil penalties. Highlights from each program are described below.

In support of animal health, APHRE initiated 152 cases, issued 53 Official Warnings, issued 14 pre-litigation settlements resulting in the collection of \$11,439 in stipulated penalties, and obtained administrative orders assessing an additional \$17,375 in civil penalties against persons for violations of laws aimed at protecting animal health and American agriculture.

In support of plant health, APHRE initiated 116 cases, issued 34 Official Warnings, and issued 38 pre-litigation settlements resulting in the collection of \$68,850 in stipulated penalties for alleged violations of laws aimed at protecting domestic plant health and American agriculture.

In support of biotechnology, APHRE investigated several high priority matters, including one involving the detection of genetically engineered wheat volunteers (occasional weedy annual grasses in crops that follow commercial wheat in crop rotations) in an Oregon wheat field. APHRE's quick response and ability to publicly share conclusive findings during early stages of the investigation successfully supported USDA's efforts to preserve the United States' \$6 billion wheat market and reopen wheat tenders with key Asian markets.

APHRE also supported animal welfare and horse protection. With respect to alleged violations of the Animal Welfare Act, APHRE initiated 325 cases, issued 295 Official Warnings, issued 55 pre-litigation settlements resulting in the collection of \$407,865 in stipulated penalties, and obtained administrative orders assessing an additional \$921,732 in civil penalties. With respect to alleged violations of the Horse Protection Act (HPA), APHRE initiated 476 cases, issued 1,255 Official Warnings, and obtained 19 administrative orders assessing \$4,200 in civil penalties and disqualifying 10 individuals from participating in activities regulated under the HPA.

In support of AQI activities, APHRE initiated more than 3,100 cases, issued 145 Official Warnings, and issued 2,523 pre-litigation settlements that resulted in the collection of \$1,342,851 in stipulated penalties for alleged violations of animal and plant health laws identified at U.S. ports of entry.

In FY 2013, APHRE continued to streamline its business processes and focus its resources on the highest priority investigations for APHIS's animal and plant health programs. In doing so, the program reduced its inventory of open investigations by 37 percent and improved its average time to complete an investigation and resulting enforcement action by 29 percent. In addition, APHRE increased the percentage of cases that resulted in positive enforcement action (or referral to the Office of the General Counsel for administrative enforcement) from 62 percent in FY 2012 to 80 percent in FY 2013, and reduced the number of investigations that were closed with no action from 38 percent in FY 2012 to 20 percent in FY 2013.

## 2. Biotechnology Regulatory Services

APHIS' science-based regulatory system protects against risks to U.S. plant health by providing, among other things, for the safe importation, interstate movement, and field testing of certain genetically engineered (GE) organisms. Developers seeking to conduct field tests, move interstate, or import GE organisms must first submit detailed information to APHIS for review and receive regulatory approval. During its review, APHIS assesses the information for potential plant health risks before the introduction can be approved. Depending on the characteristics of the GE organism, a developer either files a notification application or applies for a permit. GE plants that meet specific criteria are eligible to use the notification process, an administratively streamlined alternative to the permit process. Plants that do not meet the criteria for notification must follow the permitting process. This process involves a more comprehensive review than notification because of the need to ensure mitigation of potential plant pest risk through containment mechanisms and the need to ensure that the organisms being tested do not persist after completion of the field test.

APHIS officials verify compliance to the regulations through field test site inspections tailored to the specific requirements of the notification or permit. APHIS provides continuous education and outreach to the regulated community to facilitate compliance and improve awareness of regulatory responsibilities. In FY 2013, APHIS authorized 2,054 new permits and notifications at 10,698 locations in the United States, and issued 735 site inspections. Of those site inspections, 608 of the 735 site inspections completed a thorough review process, and represent more than 98 percent compliance with the regulations.

During FY 2013, the Agency continued implementation of the Biotechnology Quality Management System (BQMS) program, which is a nonregulatory solution that provides tools that facilitate compliance while raising awareness and compliance of regulatory responsibilities. Currently, there are 21 entities including both large and small organizations that have voluntarily established a BQMS to manage their domestic research and development of GE organisms. In FY 2013, APHIS recognized six new entities that completed the program and successfully implemented a BQMS. BQMS participants account for 97.7 percent of the acreage of GE field test sites overseen by APHIS. APHIS also held six education workshops at universities, non-profit consortiums, and professional conferences to further strengthen compliance. BQMS and education and outreach efforts contribute to the Agency's high compliance with its regulations.

If developers demonstrate that a GE organism is not a plant pest, they can submit a petition/request to APHIS for a determination of nonregulated status, which means that the GE organism is no longer subject to APHIS regulatory oversight. APHIS' determination of nonregulated status of GE organisms is an important factor in the acceptance of U.S. biotechnology crops, in both domestic and international markets. The petitioner must provide data, gathered through confined field tests regulated by APHIS, to help inform the Agency's decision. In its consideration of a petition for nonregulated status, APHIS conducts an extensive plant pest risk assessment to evaluate and determine potential risk to plant health. In addition, APHIS evaluates the potential environmental impacts of a determination of nonregulated status by preparing an environmental review as required by the National Environmental Policy Act. In FY 2013, APHIS surpassed its goal of six determinations, and made nine determinations of nonregulated status, a 50 percent increase from FY 2012. These determinations of nonregulated status include herbicide tolerant/insect resistant cotton and soybean, five varieties of corn, and two varieties of herbicide tolerant canola. As of FY 2013, APHIS has made a total of 102 determinations consisting of 165 plant lines

Since the petition process was added to APHIS biotechnology regulations in 1992, the timeline to reach a final decision had grown from six months to an average of 2.8 years. APHIS used business process improvement techniques and identified innovative ways to improve the biotechnology petition process to significantly decrease the length and variability of the review process to 13 to 16 months, without compromising the quality of decision-making. Improvements included: process streamlining, timeline standardization, implementation of new management and tracking tools, and more opportunity for public input. By taking these steps, APHIS delivers a more predictable petition process without compromising the quality of the analysis to support our decision making. The first petition to reach a determination of nonregulated status start to finish in the improved process did so in 376 days sooner than the average time under the previous process. This fact demonstrates that the improved process can and will result in more timely availability of agricultural products to producers and growers.

In May 2013, APHIS confirmed the presence of a GE herbicide resistant wheat plant in Oregon, and immediately opened a formal investigation since there are no GE wheat varieties approved for sale or in commercial production in the United States or elsewhere at this time. APHIS worked collaboratively with State and Federal officials, including the Food and Drug Administration (FDA), to understand the situation and to understand possible implications for each agency's regulatory and trade stance. FDA informed the public that this GE wheat variety had undergone a review by FDA for food and feed safety, and that it had been deemed safe. APHIS then quickly and efficiently collected information and evidence, interviewed nearly 270 farmers for observations of GE wheat plants in their fields, and undertook review and analysis of historical GE wheat plant permits. All of the evidence collected thus far indicates that the extent of the presence of this GE wheat remains the single detection of the GE wheat plants in one field of one farm in Oregon. USDA overseas officers met with and reassured government officials in key markets, and continue to work with our trading partners to ensure continued market access for U.S. wheat. APHIS is committed to taking appropriate future action as our priority is to protect American agriculture and give U.S. trading partners the tools they need to make science-based trade decisions.

The APHIS biotechnology regulatory program continued its efforts in Tribal relations in FY 2013 by conducting outreach activities to build awareness and enhance relationships in the oversight of GE organisms. Biotechnology Regulatory Services also continued to partner with the States to conduct inspections. The partnership between the Agency, States, and Tribes is critical to the successful implementation of regulations for certain GE organisms that may pose a risk to plant health.

APHIS works with international partners to enhance coordination of regulatory approaches and to provide capacity building assistance to developing countries for the regulation of GE crops. These activities promote U.S. exports of GE products by ensuring that trading partners understand and accept the U.S. system for regulating GE crops. For example, in FY 2013, APHIS worked closely with Mexico and Canada towards harmonization of regulatory policies and procedures, including a project to examine the impacts of transgene insertion on plant genomes and the resulting implications for risk assessment. With colleagues in Environmental Protection Agency, FDA and USDA's Foreign Agricultural Service, APHIS participated in bilateral discussions and regulatory workshops with Chinese biotechnology regulators and developers. APHIS staff also provided training and information about USDA's policies and regulations to officials from 20 countries, including the European Union, Brazil, China, India, and Japan, among others through a variety of venues last year.

Throughout FY 2013, APHIS contributed to the United States participation in global discussions on potential trade issues resulting from the low level presence of GE events approved by the country of export, but not by the importing country. APHIS was also instrumental in shaping the Organization of Economic Co-operation and Development discussion on low level presence in seed. And finally, APHIS made significant contributions to USDA's ongoing effort to advance comprehensive import policies for GE animals and plants.

#### Selected Examples of Recent Progress – Emergency Management:

##### 1. Emergency Preparedness & Response

The Emergency Preparedness and Response program improves APHIS' capability to prevent, prepare, respond to, and recover from animal emergencies. These emergencies range from small-scale incidents to catastrophic events caused by various hazards, including foreign animal diseases (FADs) or pests. In natural or man-made disasters, APHIS provides technical support to the Federal Emergency Management Agency (FEMA) for the care of household pets as required by the *Pets Evacuation and Transportation Standards Act*. The program also implements and oversees compliance with the *Public Health Security and Bioterrorism Preparedness Response Act of 2002*, which authorizes APHIS to regulate agents or toxins that threaten animals, plants, or animal and plant products (known as select agents and toxins). These actions safeguard the health and value of U.S. agriculture.

##### *Preparedness, Partnerships & Planning*

In FY 2013, APHIS continued to develop public-private academic partnerships to advance foot-and-mouth disease (FMD) response strategies and capabilities, including the use of an FMD vaccine to control and eradicate an

outbreak. APHIS also continued to develop and integrate response planning and capabilities, as well as identifying resources needed for FMD preparedness and response. In addition, APHIS continued to develop public-private academic partnerships (FAD Preparedness and Response Plan, Secure Food Supply Projects) and produced 20 new preparedness products in the form of response plans, National Animal Health Emergency Management System guidelines, ready reference guides, industry manuals, and standard operating procedures. These materials help stakeholders improve their planning and response capabilities regarding animal health and FAD incidents.

### Preparedness Exercises

In FY 2013, APHIS Emergency Management staff, Area Emergency Coordinators, laboratory personnel, and other personnel engaged State agencies, Tribal nations, local governments, and industries to refine emergency response plans by participating in exercises. APHIS participated in approximately 100 animal health or all-hazards exercises to test capabilities and identify areas for improvement. Of note, the National Veterinary Stockpile program conducted a North American FMD Vaccine Bank logistics exercise with Canadian and Mexican officials to simulate the transportation of frozen vaccine concentrate antigen from Plum Island, New York, to a foreign manufacturer with return to the United States, Canada, and Mexico. Through this exercise, the program was able to successfully review and validate the roles and responsibilities for moving FMD vaccine antigen concentrate to the manufacturer and delivering the finished FMD vaccine to the United States, Canada, and Mexico through the National Veterinary Stockpile. APHIS will use the findings to finalize the deployment plan that coordinates the delivery of finished FMD vaccine.

Additionally, APHIS supported exercises to enhance multi-jurisdictional coordination capabilities. APHIS coordinated a regional exercise with State members of the Southern Agriculture and Animal Disaster Response Alliance to test the States' capabilities to request animal response resources from other States in the event of a natural disaster. The exercise included State departments of agriculture and emergency management agencies, Federal agencies, and the National Animal Rescue and Sheltering Coalition. APHIS coordinated a second regional exercise with States, local jurisdictions, and members of the Association of Zoos and Aquariums to test the capabilities of zoos to coordinate a response to a foreign animal disease outbreak. Both exercises enabled Federal, State, and non-governmental organizations to practice their emergency response procedures, improve communication among participating organizations, and coordinate response efforts.

### Response Efforts

Emergency Support Function 11: Agriculture and Natural Resources (ESF #11) supports State, Tribal, and local authorities and other Federal agency efforts to: 1) provide nutrition assistance; 2) respond to animal and agricultural health issues; 3) provide technical expertise in support of animal and agricultural emergency management; 4) ensure the safety and defense of the Nation's supply of meat, poultry and processed egg products; and, 5) protect Natural, Cultural, and Historical resources. APHIS is designated as the overall Coordinator for all five ESF #11 functions, and is the primary agency for two of the functions. Building upon APHIS' extensive animal and plant health networks to deal with pest and disease emergencies, the Agency supports State, Tribal and local governments as they assist individuals in emergency situations with household pets and service animals. In FY 2013, APHIS responders were activated by FEMA to support response to Hurricane Sandy, Winter Storm Nemo, tornados in Oklahoma City, and winter storms in Alaska. During the response to Hurricane Sandy, APHIS ESF #11 staff worked with FEMA, USDA's Food and Nutrition Service, USDA's Food Safety and Inspection Service, the Department of the Interior, and non-governmental organization (NGO) partners to distribute USDA foods to shelters for human consumption, distribute pet food, and assist with protection of natural and cultural resources. For example, in New York, where there were significant fuel shortages in the immediate aftermath of Sandy, the pet food was delivered to the American Red Cross for distribution to pet owners through Red Cross' emergency response vehicles and bulk distribution locations. In such cases, animal commodities were distributed using existing human supply chains, achieving efficiencies in response and, more importantly, "one-stop shopping" for the disaster survivors. APHIS, as part of its animal health mission, regulates entities covered under the Animal Welfare Act. This includes commercial pet breeders, research facilities, animal exhibitors, and animal transporters. After Hurricane Katrina in 2005, FEMA's authorizing legislation was amended to incorporate emergency planning and response for pet owners and their pets to safeguard the public during emergencies. In 2008, the responsibility for coordinating pet preparedness and response was included in ESF 11 and tasked to APHIS. In this capacity, APHIS

works with FEMA, other Federal agencies, States, and non-governmental partners to build a shared national strategy and take appropriate planning, preparedness, and response actions to ensure the safety and well-being of pet owners and their pets affected by disaster. In addition, APHIS worked with Federal, State, and NGO partners to develop best practices documentation on various topics including Animal Decontamination, Animal Search and Technical Rescue, Animal Sheltering, Community Preparedness and Outreach, Disaster Veterinary Care, Evacuation and Transport, Planning and Resource Management, and Zoo Best Practices.

#### Foreign Animal Disease Investigations

In FY 2013, APHIS and State animal health officials investigated suspect cases presenting with vesicular type lesions. For FY 2013, there were 371 investigations, with 267 of those for vesicular conditions. The species with the most investigations for vesicular conditions were equine (110), bovine (94), and caprine (31). All investigations were negative for detection of FMD or other FAD.

#### Safeguarding of Select Agents

The *Public Health Security and Bioterrorism Preparedness Response Act of 2002* requires individuals or entities possessing, using, or transferring select agents or toxins affecting animals and plants to register them with the Centers for Disease Control and Prevention (CDC) or USDA. APHIS remains the USDA agency with the expertise and authority to review the biosafety and biocontainment restrictions of these materials. APHIS monitors their movement by identifying and registering the entities or facilities that use them.

At the end of FY 2013, the Select Agents Program included 43 registered entities, and 7 applications for registration certificates were pending. APHIS received 121 requests for amendments and changes to certificates made through CDC, and processed 75 percent of them. In addition, the Agency received 276 requests for amendments from entities registered directly with APHIS regarding registrations, amendments, and renewals, and processed 80 percent of these requests. The Agency issued 393 select agent import permits and processed 98 transfer forms in FY 2013.

In FY 2013, APHIS and the CDC revised the regulatory process for processing permits and transfers of shipments, providing a better means for documenting and tracking individual shipments. The CDC held a workshop via webinar in November 2012 to provide additional details and guidance on the new select agent regulatory requirements to the regulated community. APHIS and CDC also published multiple guidance documents to assist in the implementation of the new regulations. In April 2013, APHIS and CDC provided training for interagency select agent inspectors on the new regulatory requirements, as well as training for select agent inspectors via webinar several times throughout the year.

APHIS also worked with CDC to conduct 27 renewal inspections, 19 unannounced compliance inspections, 17 joint inspections, and 4 inspections involving amendments. APHIS conducted one inspection for a new applicant and one inspection related to an investigation of potential wrongdoing. To address noncompliance, APHIS issued corrective letters for minor violations and for more serious noncompliance issues.

#### Capacity Building

The National Animal Health Emergency Response Corps (NAHERC) provides a reserve of veterinary professionals to help Federal and State responders during an animal health emergency. NAHERC volunteers become temporary Federal employees when activated. As of September 2013, 4,184 qualified members were enrolled (971 veterinarians, and 3,213 animal health technicians). Recruitment efforts included online advertising, direct mail campaigns, veterinary conferences/seminars, and networking with animal health professionals.

In May 2013, APHIS published an update to the National Response Framework that includes a more complete consideration of animals and animal emergency management issues, and will facilitate better integration of animal issues in emergency management at all levels of government. Because most animal disaster response capabilities exist in the non-governmental sector, recognizing and including non-governmental response is vital to building national resiliency. APHIS meets on a quarterly basis with its ESF #11 animal response partners, the National Alliance of State Animal and Agricultural Emergency Programs and the National Animal Rescue and Sheltering

Coalition, and Federal partners (the Department of Homeland Security, the Office of Health Affairs, FEMA, and the Department of Health and Human Services) to plan, prepare, train, and practice to provide coordinated “surge” animal response capabilities and capacity to States.

### Biosecurity

APHIS’s newly created exotic plant pest information system, PestLens, provides the Agency with current biological information about exotic pests such as distribution, host range, history of spread, and susceptibility control measures. PestLens is the result of the merger of the Exotic Pest Information Collection and Analysis and the Offshore Pest Information System. Newly emerging pest information is summarized and reported through a weekly e-mail notification. The articles are then stored in the PestLens database, providing a conceptual framework for subject matter experts to make safeguarding decisions. APHIS personnel will have access to the database in January 2014. During FY 2013, PestLens generated 51 weekly e-mail notifications that contained 164 unique pest articles.

## SAFE TRADE AND INTERNATIONAL TECHNICAL ASSISTANCE

Current Activities: APHIS monitors plant and animal health throughout the world and uses the information to set effective agricultural import policies to prevent the introduction of foreign plant and animal pests and diseases. APHIS and the Department of Homeland Security cooperate to ensure that these policies are enforced at U.S. ports of entry. APHIS also develops and conducts pre-clearance programs to ensure that foreign agricultural products destined for the United States do not present a risk to U.S. agriculture. The Agency engages in cooperative programs to control pests of imminent concern to the United States and to strengthen foreign plant protection and quarantine organizations. APHIS assists U.S. exporters and the Foreign Agricultural Service in revising foreign plant and animal import regulations to encourage and increase U.S. agricultural exports. The Agency also manages and resolves sanitary (animal) and phytosanitary (plant) trade barriers.

APHIS’ role is to negotiate animal and plant health certification requirements, assist U.S. exporters in meeting foreign regulatory requirements, ensure requirements are proportional to risk without being excessively restrictive, and provide any necessary technical information to support the safety of U.S. agricultural products destined for foreign markets.

### Selected Examples of Recent Progress in Safe Trade:

#### 1. Agriculture Import/Export

APHIS works with other Federal agencies, States, foreign governments, industry, and academia to protect U.S. agriculture while facilitating the safe trade of animals and animal products. APHIS animal health experts ensure that U.S. import requirements safeguard U.S. livestock health and negotiate requirements for the export of U.S. animals and animal products worldwide. These requirements and negotiations are based on compliance with international standards, sound scientific principles, and fair trading practices for animals and animal products. Moreover, APHIS sets quarantine, testing, and other requirements under which animals and animal products can be imported or exported. These requirements help ensure that global markets can be accessed, expanded, or maintained with little or no risk to U.S. animal production and human health.

APHIS also conducts activities related to the 2008 Farm Bill amendments to the Lacey Act, which prohibit the importation of any plant, with limited exceptions, that are taken or traded in violation of domestic or international laws. The Act requires a declaration for imported shipments of most plants or plant products. APHIS’ role is to issue regulations, provide guidance to importers regarding the declaration, perform compliance checks, provide enforcement agencies with declaration information to assist their investigations, and house documents.

### Imports

To facilitate imports, APHIS evaluates the animal health status of regions that wish to export animals and/or animal products to the United States. This process minimizes the risk of introducing animal diseases through imports. In

FY 2013, APHIS completed several evaluations that were published in the *Federal Register*. These evaluations involved classifying Hungary, Slovakia, Slovenia, and Estonia as low risk for classical swine fever, and recognizing 25 Member States of the European Union (EU) as free of highly pathogenic avian influenza (HPAI) and Newcastle Disease. In addition, APHIS added six regions of Italy to the list of regions recognized as free of swine vesicular disease. The new classifications further facilitated trade between the U.S. and the other countries. APHIS also addressed import issues related to live animals and animal products arising at the ports, especially with regard to facilitating cattle imports from Mexico. In FY 2013, APHIS issued 9,235 import permit applications for live animals, animal products, organisms and vectors, and select agents. This was roughly the same number of permits issued in FY 2012. In addition, the Agency ensures that import regulations are effective and science-based. In FY 2013, APHIS revised import requirements for ruminant germplasm imported from the EU to mitigate concerns about Schmallenberg Syndrome, an emerging disease found in Europe. The Agency revised import requirements for birds and poultry exported from Australia and Mexico due to reports of HPAI in those countries. In addition, APHIS audited EU veterinary oversight of ruminant germplasm and live swine exported to the United States to ensure that import requirements were being properly implemented overseas.

### Exports

APHIS estimated the value of new or maintained export markets for live animals, germplasm, and animal products to be approximately \$2 billion for FY 2012. To open, re-open and maintain U.S. access to worldwide export markets, APHIS negotiates science based conditions with trading partners for various commodities that protect their country while also facilitating trade. In FY 2013, APHIS negotiated, or re-negotiated 74 export protocols for animal products (16 new markets, 19 expanded markets, and 39 retained markets), and 158 export protocols for live animals (33 new markets, 78 expanded markets, and 47 retained markets). Also, in FY 2013, APHIS reopened the market for live cattle to Kazakhstan, opened new markets for cattle to Iraq and Jordan, and swine to the EU. The Agency also opened the market for day-old chicks to the Customs Union (Russia, Kazakhstan, and Belarus). In addition, APHIS eliminated BSE-related restrictions on U.S. exports of beef or other commodities to Bahrain, Mexico, Indonesia, Panama, Peru, Trinidad and Tobago, and Turkey. APHIS reopened poultry exports from several States to Japan, China, Cuba, Ecuador, Hong Kong, Iraq, Kazakhstan, Russia, Singapore and Taiwan. APHIS conducted voluntary inspections of more than 500 U.S. manufacturing facilities to maintain, expand, or open export markets in many countries, including the EU, Australia, Mexico, China and others. APHIS participated in industry stakeholder meetings, provided technical support for World Trade Organization cases, and attended bilateral trade meetings with Mexico, EU, Japan, Brazil, and Taiwan. APHIS also developed 24 information packages and questionnaire responses from various countries to maintain, expand, or open export markets. In addition, APHIS provided information to the World Organization for Animal Health which resulted in the recognition of the United States as a country having negligible risk for bovine spongiform encephalopathy.

APHIS has launched a new application for electronically issuing export health certificates, which currently allows for certificates to be issued for 9 commodities to 2 countries. The Agency is expanding the capabilities of the system and the numbers of certificates issued by this system, which has received extremely positive feedback from industry stakeholders.

### Lacey Act

In FY 2013, APHIS continued to assemble a dedicated staff, evaluate options for storing paper declarations, provide outreach to industries and importers, and develop a web-based system for collecting declarations. Currently, importers submit declarations either by mailing paper forms to APHIS or electronically through a licensed customs broker and a database operated by the U.S. Customs and Border Protection (CBP) agency. Approximately 10 percent of the declarations are submitted on paper forms that require significant resources to analyze and store securely. The web-based system that APHIS is developing will provide an easier, more efficient alternative for filing declarations and allow the Agency to analyze and monitor a larger portion of the declarations for compliance. APHIS is testing the system before full implementation scheduled for 2014. APHIS is also working with CBP to further streamline the process for filing declarations in CBP's database. In addition, APHIS has two initiatives underway to save importers time and potentially money in filing Lacey Act declarations: implementing Special Use Designations (SUDs) and proposing a rule to develop *de minimis* exemptions. SUDs are short-hand designations for some commodities that can be used in place of listing potentially dozens of plant species contained in the product to

help importers expedite their reporting, and the *de minimis* exemptions would eliminate the need to declare products comprised of minimal plant material, with the exception of plants under protected status (such as those covered by the Convention on International Trade in Endangered Species of Fauna and Flora). On July 9, 2013, APHIS published an interim final rule to establish definitions for “common cultivar” and “common food crop,” which are excluded from the Act. The definitions in this rule are designed to exclude most commercially grown food and fiber items from the Lacey Act requirements.

## 2. Overseas Technical & Trade Operations

Maintaining animal and plant health expertise around the world ensures the smooth flow of American agriculture into the international marketplace. The Overseas Technical and Trade Operations (OTTO) program prevents foreign agricultural pests and disease threats to the United States, facilitates U.S. agricultural trade through the resolution of technical trade barriers, and supports the development of science-based regulatory systems around the world. Specifically, the program opens, expands, and retains foreign markets for U.S. agriculture; monitors trading partners’ sanitary and phytosanitary (SPS) import conditions for U.S. agricultural products; ensures the smooth and safe movement of agricultural commodities to and from the United States; resolves technical issues affecting shipments of U.S. exports at foreign ports of entry by placing technical experts overseas; and monitors emerging pest and disease situations to prevent the introduction of exotic animals, plant pests, and diseases to the United States, among other responsibilities.

Additionally, APHIS effectively engages with other Federal agencies, foreign governments, and international organizations to respond to trade issues. The relationships with foreign regulators allow our animal and plant health technical experts to directly intervene on behalf of U.S. exporters. All together, these actions directly protect U.S. agriculture, expand international markets for U.S. exporters, and support the President’s National Export Initiative (NEI) to double exports by the end of 2014. These exports also support more than one million jobs in communities around the country. In FY 2013, APHIS successfully intervened in 280 releases of U.S. cargo held up at foreign ports-of-entry, which prevented the rejection of shipments worth more than \$34.8 million. In FY 2013, APHIS also successfully negotiated and resolved 200 SPS trade-related issues involving U.S. agricultural exports, with an estimated market value of \$2.9 billion.

APHIS maintained and opened international markets for American agricultural products. The Agency negotiated a new health certificate for animal feed exports to Mexico. In conjunction with U.S. Government-wide efforts, APHIS expanded the beef export market in Japan (worth approximately \$1 billion) and gained access to the Australian market for California and Pacific Northwest peaches and nectarines (valued at around \$4.2 million) and after years of negotiation, successfully exported the first shipment of pears from California, Oregon, and Washington to China, which was worth approximately \$1.5 million.. APHIS negotiated a new cold treatment schedule for apples to Israel, allowing a market valued at \$7.3 million to continue. APHIS experts also restored poultry exports from Arkansas to Russia worth \$20 million, and reopened the market for live pigs to the European Union worth \$5 million. Retaining markets provides assurance about the safety of U.S. products and involves intense efforts, constant communication, and hosting delegations from trading partners around the world. All values referenced in this and the preceding paragraph are from the Global Agricultural Trade System Online, maintained by USDA’s Foreign Agricultural Service.

Relationships and communication with regulatory counterparts who make market decisions are critical to new market access for U.S. agricultural exports. APHIS officials strengthen these relationships with bilateral discussions, foreign regulator visits, and plant and animal health awareness training. APHIS officials informed 385 foreign officials about the U.S. regulatory process by hosting them during 74 separate visits. Providing our foreign counterparts with the skills and information to improve their regulatory systems helps safeguard American agriculture and promote safe trade.

APHIS actively participates in the World Organization for Animal Health (OIE) and the International Plant Protection Convention (IPPC) that promote international standards for veterinary services, plant protection, and trade. Science-based standards set by the OIE and the IPPC are an important foundation for making global agricultural trade safe, predictable, and fair. The World Trade Organization (WTO) formally recognizes the OIE and the IPPC as the international organizations responsible for setting the animal and plant health standards that

guide agricultural trade. Because of our regulatory expertise, APHIS leads negotiations of international standards on animal and plant health developed by the OIE and IPPC. APHIS also provides input to the WTO notification process, where foreign trading partners may comment on changes to regulations affecting trade. APHIS notified the WTO on 33 proposed and final animal and plant health regulations and commented on 31 notifications from foreign governments on regulations that could affect U.S. exporters. In addition, APHIS is participating in negotiations with the European Union on a Trans-Atlantic Trade and Investment Partnership, announced by President Obama on February 12, 2013. APHIS is also an active participant in negotiations for a Trans-Pacific Partnership that would include Asian and North and South American countries as trading partners.

APHIS officials assist in modeling plant and animal health systems, train, and exchange information with future trading partners who currently cannot meet international standards for safe agricultural trade. Interests for capacity building include risk analysis, import and quarantine protocols, and plant and animal surveillance including laboratory diagnostics. In FY 2013, APHIS partnered with other Federal agencies to review 138 requests for subject matter expertise and training. Of that total, the Agency approved and completed 122 requests that support critical Agency mission areas and goals of international collaboration. For example, working with USDA's Foreign Agricultural Service and the United States Agency for International Development, APHIS was able to complete four distance learning training modules for plant health in Pakistan. In collaboration with the U.S. Department of Defense and U.S. Department of State, veterinarians from more than 20 countries were taught courses in veterinary epidemiology of trans-border animal diseases as well as risk-based analysis of the importation of animals and animal products.

Agricultural trade is essential for the U.S. export market, and may be subject to costly disruptions from animal and plant health barriers. Regulatory, technical trade and capacity building activities support food security and export opportunities to U.S. producers. The activities provide safe, nutritious products such as fruits, vegetables, and animal protein sources to international markets. APHIS is monitoring shifts in global trade trends and is aligning the assignment of overseas officials with critical areas undergoing change. Overall, the OTTO program protects U.S. agricultural resources from costly foreign pests and diseases.

## ANIMAL WELFARE

Current Activities: The Agency conducts regulatory activities to ensure the humane care and treatment of certain animals and horses as required by the Animal Welfare Act of 1966 as amended (7 U.S.C. 2131-2159), and the Horse Protection Act (HPA) of 1970 as amended (15 U.S.C. 1821-1831). These activities include inspection of certain establishments that handle animals intended for research, exhibition, wholesale pet trade, or transported in commerce. APHIS places primary emphasis on inspection of facilities, records, investigation of complaints, inspection of problem facilities, and training of inspectors. APHIS also administers the HPA, as amended, which prohibits the showing, sale, auction, exhibition, or transport of sore horses. Program personnel attend and monitor certain horse shows to prevent this cruel act of soring, from occurring.

### Selected Examples of Recent Progress in Animal Welfare:

#### 1. Animal Welfare

APHIS' Animal Welfare program has the unique Federal role of ensuring the humane care and treatment of animals covered by the Animal Welfare Act (AWA) through inspection, education, compliance, and enforcement efforts. APHIS regulates and protects more than two million animals used in research, exhibition, and the pet trade as well as those transported in commerce. The AWA requires all facilities that use animals regulated under the Act to maintain a license or registration with APHIS.

#### Licensing Activities

APHIS conducts pre-licensing activities, including education and inspection of facilities, to ensure that applicants comply with AWA regulations and standards prior to the issuance of a license. The program oversees more than

7,400 licensees and registrants associated with more than 15,710 facilities. In FY 2013, APHIS inspectors conducted 1,027 inspections associated with pre-licensing activities. After issuing a license, inspectors perform unannounced inspections to verify continued compliance. In all, APHIS inspectors conducted approximately 9,412 inspections to determine the welfare of animals, placing an emphasis on the inspection of licensed facilities with documented non-compliance.

APHIS developed information modules to assist commercial dog dealers with complying with the AWA. The modules are available online and APHIS inspectors use these during the first pre-license inspection. To measure the impact of this service, APHIS will begin evaluating the compliance of facilities within a year of receiving their license.

APHIS continued its efforts to improve the quality and accuracy of inspections. Such activities used to support this effort included the delivery of 14-recorded training sessions to inspectors, two webinars educating stakeholders about the new regulatory impacts, such as the contingency rule, and revisions to guidance documents. APHIS continued to focus on conducting quality inspections and collecting thorough documentation and evidence during inspections.

#### Enforcement Activities

If APHIS inspectors discover a violation during a compliance inspection, they take additional actions that include an increased frequency of unannounced inspections to check if the facility made the necessary modifications to comply. Continued noncompliance may result in monetary penalties, and possible suspension or revocation of the facility's license. Overall, substantial compliance with the AWA remained at 93 percent, with only 3 percent of licensees having significant repeat violations of the AWA.

In FY 2013, APHIS provided 222 warning letters regarding licensee and registrant's compliance with the AWA. This approach allows APHIS to address infractions in a timely manner, and facilities to improve their overall compliance before further action is necessary.

Among other notable enforcement actions, the Judicial Officer issued a decision and order to an exhibitor assessing a \$14,600 civil penalty for AWA violations including failure to protect the young and immature animals from excessive public handling that would be detrimental to their well-being. The Judicial Officer also terminated an exhibitor's license for AWA violations including failure to permit inspection of his animals, premises, and records by APHIS on multiple occasions, and making false statements to government officials.

When able, APHIS may work with licensees to move their animals to another facility when that licensee is unable to meet the animal welfare standards or can no longer care for their animals. For example, in FY 2013, APHIS issued 22 non-monetary pre-litigation agreements that placed more than 2,948 animals in new homes. By doing so, APHIS improved animal welfare conditions while minimizing the financial liability of the former licensees. In one notable action, APHIS worked cooperatively with the U.S. Fish and Wildlife Service, and other agencies and non-governmental organizations, to care for and relocate more than 300 animals that were suffering from neglect at the Las Vegas Zoo. APHIS and cooperators successfully placed nonhuman primates, large exotic cats, reptiles, fish, birds, and other wild/exotic mammals in facilities in Nevada, California, Arizona, Florida and Kentucky.

To improve compliance in established facilities, APHIS implemented a pilot program to help licensees improve the welfare of their animals by promoting a more cooperative relationship with attending veterinarians. The effort also enhances licensees' understanding of animal husbandry and development of effective veterinary care programs. The pilot program operates outside of the inspection process and gives facilities that express a commitment to improve the welfare of their animals the opportunity to do so before APHIS pursues further enforcement actions.

#### Outreach/Stakeholder Activities

APHIS' Center for Animal Welfare supports compliance efforts through non-regulatory methods such as education, training, and outreach to stakeholders to convey critical and current animal welfare information. To ensure it can reach the right stakeholders, the Center leverages its partnership with universities, industry, and animal interest

groups, as well as technology to communicate information. Furthermore, the Center serves as a national resource for policy analysis, and science and technology in support of the AWA. Examples of these efforts include:

- The Center provided AWA guidance to facility operators at dog dealer industry meetings, such as educational tools to improve kennel temperature control options. The Center also hosted a meeting with leaders in the dog dealer industry to exchange ideas on improvements to emergency planning and the inspection process, review the impacts of policy and rules on the industry, and answer specific concerns of licensees. The meetings have increased communications between APHIS and the regulated industry.
- APHIS modified web-based training modules and developed new modules for the pre-licensing program, marketed these modules to industry leaders and other stakeholders, and released the modules to the public via the Iowa State University and APHIS websites. This approach provides additional avenues for stakeholders to receive information. The new modules cover various aspects of the animal welfare regulations with the two-pronged goal of helping licensees understand the regulations as they pertain to them and improving compliance.
- APHIS provided outreach and educational materials to State-level pet breeder associations in eight states (Illinois, Iowa, Kansas, Missouri, Ohio, Oklahoma, South Dakota, and Texas). The Center held canine care workshops and offered continuing education seminars for veterinarians during the workshops. For the first time, the Center included access to the workshop via webinar. The Center developed and distributed to kennel operators a fact sheet on the socialization of dogs to improve the well-being of dogs.
- The Agency coordinated inspections for marine mammals protected under the AWA and the Marine Mammal Protection Act with the National Marine Fisheries Service and the Marine Mammal Commission. APHIS personnel also provided extensive outreach with industry members and partners to improve the housing and husbandry of marine mammals for example, to reduce eye damage to captive sea lions.
- In collaboration with Kansas University, APHIS developed an interactive educational training module for airline industry personnel. The “Pets on a Plane” module is designed to teach airline employees how to assess the adequacy of an animal’s transport enclosure.
- APHIS presented recommendations to the American Association of Zoo Veterinarians to reduce the number of giraffe deaths due to low environmental temperatures.
- In addition, APHIS created an electronic version of the research facility annual report form to expedite the reporting of animals used in research.

### Regulatory Changes

In FY 2013, APHIS published a final rule to revise the definition of “retail pet store” in the AWA regulations to close a loophole that, in some cases, has threatened the health of pets sold sight unseen over the Internet and via phone- and mail-based businesses. The rule will help to ensure that breeders who sell dogs, cats, and other pet animals at retail (where there currently is no public oversight) provide their animals with humane care and treatment in accordance with AWA standards. APHIS is phasing in implementation of the rule, which will result in approximately 3,000 to 5,000 additional pet animal breeders applying for a USDA license. Before publication of the final rule, APHIS hosted a series of conference calls with industry groups and webinars for the public. APHIS will continue to develop and distribute information on the new rule to hobby breeders, professional and industry organizations and associations, industry leaders, and the public.

## 2. Horse Protection

APHIS enforces the Horse Protection Act (HPA) of 1970, a federal law that prohibits horses from subjection to “soring.” Soring is the application of a chemical or mechanical irritant to a horse’s forelegs to cause a pain-induced high-stepping gait. This accentuated gait provides a competitive edge during certain show events.

### Inspection Activities

APHIS inspectors, along with designated qualified person (DQP) inspectors, inspect all horse entries at HPA-events. A DQP inspector is a person who is delegated authority by the management of a horse event to inspect horses for soring according to the HPA. A Horse Industry Organization (HIO), certified by the USDA, licenses DQP inspectors. As part of the HPA compliance program, in FY 2013, APHIS provided 10 training sessions to Horse Industry Organizations as refresher training to existing DQP inspectors as well as initial training for those interested in becoming DQP inspectors.

In FY 2013, 288 HPA-events were held across the United States. APHIS and DQP inspectors examined all 38,724-horse entries, with APHIS inspectors conducting 25 percent of the inspections and DQP conducting 75 percent of the inspections. Although APHIS inspectors conducted fewer inspections than DQP inspectors, APHIS inspectors detected 80 percent of the violations. At the horse events APHIS attended, horse owners/trainers withdrew 1,198 entries prior to inspection. In FY 2014, APHIS plans to adjust the regulations to minimize both the violation discrepancy and the withdrawal of horses in competition events by having APHIS license and train DQPs directly.

APHIS uses gas chromatography/mass spectrometry to provide confirmation of suspected foreign substances applied to the legs when evidence of a mechanical irritant is absent. APHIS analyzed approximately 450 samples, of which 235 tested positive. APHIS added drug testing via blood collection and tested 83 horses, of which eight tested positive for foreign substances used in soring activities. APHIS inspectors would not have detected these substances using the conventional chromatography/spectrometry. APHIS also implemented iris-scanning technology to identify horses with a history of soring. Agency inspectors scanned the irises of 1,500 horses and plans to use this information to focus future testing efforts.

APHIS initiated a business process improvement for its Horse Protection program to seek more transparency and consistency in its inspection process and to remove vulnerabilities that could impede efforts to protect horses from soring. The study identified four actions to improve APHIS processes in implementing the HPA: 1) Develop standard operating procedures (SOPs) to improve consistency in show selection and inspection processes; 2) Design and launch an electronic information repository to provide access to SOPs and other documents to APHIS employees; 3) Develop a risk-based decision model to support the selection of shows to be inspected; and 4) Develop performance elements for APHIS employees implementing the HPA. APHIS has completed the development and implementation of the SOPs and the electronic information repository. The rest of the action items will be completed in FY 2014.

### Enforcement Activities

APHIS pursued enforcement action against many alleged violators of the HPA. APHIS' Investigative and Enforcement Services issued 1,255 official warnings and, in collaboration with the USDA's Office of General Counsel, pursued administrative enforcement actions against 36 alleged violators of the HPA. Beyond this, APHIS obtained 19 decisions and orders to resolve alleged violations of the HPA, which resulted in orders assessing \$4,200 in civil penalties and disqualifying 10 individuals from participating in HPA-regulated activities.

### Outreach/Stakeholder Activities

APHIS presented an outreach exhibit display of the Horse Protection Program in December 2012 at the American Association of Equine Practitioners (AAEP) Annual Convention in Anaheim, California, as well as provided presentations on current inspection rates and technology updates. In addition, APHIS presented the Horse Protection Program in July 2013 at the American Veterinary Medical Association (AVMA) Annual Convention in Chicago, Illinois, in conjunction with the AAEP representatives.

### Regulatory Changes

In June 2012, APHIS published a final rule in the *Federal Register* to revise the current HPA regulations, adding a mandated penalty protocol for all APHIS-certified HIO's for the consistent enforcement of the HPA. This final rule requires all HIO's, who have already been administering penalties as part of their role in enforcing the HPA, to

make their penalties equal to or exceed minimum levels. The penalties in this final rule increase in severity for repeat offenders to provide an additional deterrent for people who have already shown a willingness to violate the HPA. Three of the 12 HIO's did not comply with this new portion of the regulation. APHIS is currently pursuing decertification of these organizations through Administrative Law Judge procedures due to their non-compliance.

APHIS is responsible for implementing regulations to ensure the welfare of Tennessee Walking and Racking Horses and analyzing the potential impact of regulatory changes on affected entities. However, information is limited regarding the size, scale, and economic impact of the industry. Thus, to help address the current gaps in available information, APHIS conducted the Expert Elicitation in Support of the Economic Analysis of the Tennessee Walking and Racking Horse Industry. This study showed that further regulatory changes would not have an adverse economic impact the industry. This report can be viewed at the following website:

[http://www.aphis.usda.gov/animal\\_welfare/hp/downloads/reports/APHIS%20TN%20Walking%20and%20Racking%20Horse%20EE%20final%20report.pdf](http://www.aphis.usda.gov/animal_welfare/hp/downloads/reports/APHIS%20TN%20Walking%20and%20Racking%20Horse%20EE%20final%20report.pdf)

## AGENCY MANAGEMENT

Current Activities: The Agency Management programs support the daily operations of APHIS and provide for a safe and secure work environment. These programs provide funding for the information technology and telecommunications infrastructure that gives Agency employees the tools they need to carry out their responsibilities. These programs also provide funding to oversee and implement precautionary security measures to ensure continued mission operations while ensuring the safety of APHIS people and facilities. In addition, these programs supports APHIS' contribution to the U.S. Department of State's continuing implementation of the Capital Security Cost Sharing program, which provides safe and secure workplaces for all U.S. government employees located overseas.

### Selected Examples of Recent Progress in Agency Management:

#### 1. APHIS Information Technology and Infrastructure

The APHIS Information Technology Infrastructure (AITI) program is comprised of the hardware, software, and telecommunications infrastructure that provides Agency employees with office automation tools, Internet access, and access to mission-critical programs and administrative applications. It also provides a robust, stable, and secure information infrastructure for those mission-critical applications and the day-to-day business of APHIS.

APHIS maintains, enhances, and operates the information technology infrastructure to support Agency business, conduct research and analysis, carry out administrative processes, record program activities and deliver program services. The AITI program objectives and priorities are to continually improve sharing of information across the Agency; improve coordination and accessibility of information, processes, and resources available to assist programs in emergencies; and, improve APHIS' cyber-security. The AITI program maintains annual software license and hardware agreements, as well as provides funding for Enterprise Infrastructure life-cycle replacement cost for enterprise hardware.

The FY 2013 accomplishments listed below support these objectives:

- License Renewal - APHIS supported a total number of 8,120 users with license renewals so that they can access and legally use the enterprise software in conducting business.
- Availability – APHIS supported internal and external stakeholders by providing optimal levels of service and improving customer service response times. The Agency continued to maintain 99.97 percent availability for its key computing systems.
- Security – APHIS completed the Assessment and Authorization for the Enterprise Infrastructure. This project authorized the risk management for the core computing resources for all APHIS employees and cooperators.

#### 2. Physical Operational Security

APHIS oversees and implements precautionary measures to ensure continued, efficient mission operations, and protection from disruption, degradation, or destruction of its facilities through the Physical and Operational Security

(POS) program. The POS program provides year-round security measures, such as physical security upgrades, alarms, badging and identification systems, guard services, security assessments, safety and risk assessments, workplace violence training and investigations of both internal and external threats. These measures protect employees, visitors, and stakeholders from internal and external harm, acts of terrorism, and violence. In addition, this program supports APHIS' contribution to the U.S. Department of State's continuing implementation of the Capital Security Cost Sharing program, which provides safe and secure workplaces for all U.S. government employees located overseas.

The POS program provides numerous security trainings to Agency employees. During FY 2013, the program conducted 10 trainings for the Agency including self-defense seminars, safety briefings and refreshers, operations in high threat foreign environments/foreign travel briefings, and personally identifiable information trainings. The program developed and delivered security refresher trainings and weapons training, and used technology to provide required security training to more than 600 APHIS employees. Furthermore, the program ensures all Agency personnel are annually trained as required by Executive Order 13526, Classified National Security Information.

This program investigates, assesses, and mitigates all threats directed at Agency facilities, programs, and personnel. These threats include death threats, bomb threats, terrorist threats, and assaults among others. In FY 2013, the program's personnel investigated 70 workplace violence allegations, 40 external threats to APHIS employees, and upgraded 400 Agency facilities with controlled access to use Federal Smart Cards for building access. Additionally, APHIS security specialists consistently investigate threats, and respond to requests for protection throughout the country for APHIS veterinarians who enforce the Animal Welfare Act (AWA) and the Horse Protection Act (HPA) at horse shows. In FY 2013, the program provided security for APHIS employees enforcing regulation at 50 horse shows in 13 States and 20 inspections related to the AWA including two confiscations. The program has ensured the safety of APHIS employees and successfully enforced the HPA. As added protection for activities near the Mexican border, all employees working in Mexico received Global Positioning System emergency trackers to ensure their safety while working at or near the Mexican border.

APHIS works internally with other USDA agencies and with Federal partners such as the Department of Justice, the Department of Homeland Security, the Department of State, and local law enforcement agencies to ensure that the appropriate organization takes the lead, shares costs, and integrates security where co-location of employees exist. APHIS maintains a presence overseas to facilitate agricultural trade and monitor pest and disease threats, and the Agency is required by the Secure Embassy Construction Counterterrorism Act's Capital Cost Sharing Program to help fund the construction of New Embassy Compounds based on the number of authorized positions. In FY 2013, APHIS had 266 full time employees based in countries around the world. This program provides new, safe, and secure diplomatic facilities for APHIS' overseas presence. If the program were not funded, these measures would have to be implemented at the expense of other program operations necessary to maintain a safe work environment.

## CONTINGENCY FUNDS

### 1. Feral Swine

In FY 2013, APHIS obligated approximately \$1 million in contingency funds for the pilot program to eliminate feral swine from the state of New Mexico, as well as to test several swine management techniques before implementing them on a national level. APHIS selected New Mexico for the pilot project because feral swine populations are generally low and the herds are geographically isolated, conditions that make elimination of swine possible and State and local entities have offered financial support of the project.

Feral swine inflict significant damage to property, agricultural crops, natural resources, and native ecosystems. They also represent a risk to domestic animal health and human health. Currently, the total aggregate cost of damage caused by feral swine in the United States is around \$1.5 billion annually, with more than half of that amount due to direct damage to agriculture. Cost and difficulty of damage management increase as populations increase and geographic range expands.

Feral swine are prolific animals and populations can grow rapidly. The number of feral swine is estimated to double to more than 10 million by 2017 nation-wide. In addition to expanding in population size, feral swine are expanding in geographic range. Feral swine populations in the United States, between 2004 and 2010, have expanded from 28 states to 36 states. New Mexico has seen an expansion of feral swine populations in just seven years. In 2005, feral swine were present in only two counties in New Mexico, but by 2012, feral swine were present in 17 counties.

In FY 2013, APHIS, in collaboration with Federal, State, and Tribal agencies, livestock producers, and local high school vocational agriculture students, removed 640 feral swine on properties totaling approximately 4.8 million acres in New Mexico. Rough estimates indicate that APHIS has conservatively reduced the number of offspring from these litters by an additional 1,800 piglets. This reduces the damage to property, agricultural crops, and natural resources as well as the threat to human health and animal health. At an average of \$200 per pig in property damage per year, the pilot program has already saved almost a half a million dollars in property damage for New Mexico residents. APHIS projects with continued efforts in New Mexico, APHIS and its partners could eliminate feral swine in the State within three to four years, saving millions of dollars in property damage and protecting human health, native wildlife, pets, domestic livestock and the environment.

Giant African Land Snail

In FY 2013, APHIS spent approximately \$723,000 in contingency funds to continue the Giant African Snail (GAS) eradication effort in Miami- Dade County, Florida. GAS can consume at least 500 types of plants including fruits and vegetables as well as ornamental plants. It can also cause structural damage to buildings by eating plaster and stucco to find the calcium required to grow its large shell. APHIS and the Florida Department of Agriculture and Consumer Services (FDACS) added 5 quarantine zones to the GAS regulated area in 2013, which brings the total number of quarantine zones to 18. Public outreach has been an important component of this program because each of the five quarantine zones added in 2013 resulted from reports to the GAS Helpline. APHIS detector dogs aided survey efforts in outlying areas in August 2013. APHIS also provided additional training for detector dogs managed by FDACS. Program officials have treated 605 properties within the quarantined zones and exterminated 134,907 snails. Because of its potential as a pest of nursery stock, APHIS and FDACS have surveyed 1,342 nurseries in the impacted areas. One nursery was positive for the snail and is cooperating with FDACS to ensure that the population is eliminated and not transmitted through nursery stock sales.

APHIS continues to coordinate with the Centers for Disease Control and Prevention (CDC) regarding GAS and its potential public health risk. GAS can carry the ratlung worm parasite, which can cause meningitis in humans. Meningitis in humans caused by GAS is rare, but CDC is analyzing samples to better understand the number of GAS in the Miami-Dade area that could possibly be a vector for transmitting the rat lungworm nematode.

SUMMARY OF FY 2013 CONTINGENCY FUND RELEASES

	Emergency/Activity	Releases from Contingency Fund in FY 2013	Total Obligations in FY 2013
1	Feral Swine	\$1,000,000	\$920,851
2	Giant African Land Snail	726,774 a/	722,977
	Total	\$1,726,774	\$1,643,828

a/ Amount was deobligated and available for obligation in FY 2013

EMERGENCY ACTIVITIES FUNDED BY TRANSFERS  
FROM COMMODITY CREDIT CORPORATION (CCC)

1. Asian Longhorned Beetle

In FY 2013, APHIS spent approximately \$4.3 million in CCC funds to continue eradication activities targeting an Asian longhorned beetle infestation in Clermont County, Ohio. APHIS provided funds to the Ohio Department of Agriculture (ODA) through a cooperative agreement to continue delimiting the infestation and supporting contracts for tree removal and treatment of exposed trees in certain areas. APHIS projects to complete delimitation of the infested area by FY 2016. Completing delimiting surveys is essential to ensuring that all infested trees are found and removed and that the treatment and regulated areas are accurately defined. As of November 2013, approximately 54 square miles contain infested trees and APHIS is regulating approximately 61 square miles. In addition, the program has inspected 854,727 trees and removed 10,320 infested trees. In FY 2014, the ODA will continue delimitation activities. The program will continue removing infested trees and replanting trees, as well as applying preventative treatments to healthy trees in Monroe Township and Stonelick Townships. Ohio forests are a critical component of the State's natural resources and span nearly 8 million acres, or 30 percent of the State. More than 48 percent of Clermont County is covered by forest.

2. Bovine Tuberculosis

In 2013, APHIS spent approximately \$352,000 in CCC funding to support the bovine tuberculosis (TB) program in California and Michigan. In California, APHIS continued responding to the September 2011 detection of a large, TB-affected dairy herd by deploying a task force to assist with testing and epidemiologic investigations. In addition, the Agency indemnified owners for TB-exposed and TB-suspect cattle that were identified. In Michigan, APHIS continued to respond to the 2012 detection of two TB-affected herds in northeastern Michigan by indemnifying 28 owners for 90 head of TB-exposed and TB-suspect cattle. These animals were identified through testing associated with ongoing management plans for TB-affected herds and through epidemiologic investigations.

3. European Grapevine Moth

The European Grapevine Moth (EGVM) is a significant pest of grapes and other specialty crops. APHIS has worked collaboratively with the California Department of Food and Agriculture (CDFA), grape growers, counties, and others to eradicate this pest. In FY 2013, APHIS used \$529,857 in CCC funds on this pest via a cooperative agreement with CDFA. CDFA used the funds to support trapping for the pest, regulatory inspections, and residential vineyard treatments. This successful program has reduced the EGVM population by more than 99.99 percent since it was first detected. Of the 10 counties quarantined for the pest, APHIS and cooperators have released nine from regulation after two years of surveillance with no moth detections. Intensive survey and regulatory activities will continue in the remaining county (Napa).

4. Farm Bill

Through this program (established by the Food, Conservation, and Energy Act of 2008), APHIS makes available CCC funds for early plant pest detection and surveillance, identification and mitigation of plant pests and diseases, and technical assistance in the development and implementation of audit-based certification systems and nursery plant pest risk management systems. Since 2009, APHIS has funded more than 1,000 projects in 50 States and 2 U.S. territories, strengthening the Agency's and cooperators' abilities to protect U.S. agriculture and natural resources from foreign pest threats.

APHIS and cooperators have identified six major strategies to implement Section 10201: 1) enhancing plant pest/disease survey and analysis; 2) targeting domestic inspection activities at vulnerable points; 3) enhancing pest identification tools and technology; 4) developing programs to safeguard nursery production; 5) enhancing outreach and education; and 6) enhancing mitigation capabilities. The following are examples of activities funded in 2013.

APHIS funded 394 projects in the six goal areas through Section 10201 in FY 2013. Of the total \$47.4 million available in FY 2013, the Agency provided \$27.9 million to 50 State departments of agriculture and 2 territories for 218 projects, \$8.3 million to academia for 78 projects, \$0.8 million to Tribes for 9 projects, and \$2.1 million for non-profits and private entities for 17 projects. The remaining funding supported projects in either APHIS or other Federal agencies that have a multi-State or national impact. These included training and deployment of canine teams to cooperators, developing survey methodology, procuring traps and lures that APHIS distributed nationwide to cooperators in many pest programs, outreach efforts to inform the public and make them aware of invasive plant pests, and supported development of an improved data management system for use by States and territories, other cooperators, and APHIS, as examples.

Under the enhancing pest/disease survey and analysis goal, APHIS funded 151 commodity- and taxon-based surveys in 46 States and territories. The program targeted 69 high-risk pests of national concern in specialty-crop surveys in apple, citrus, grape, orchard crops, palm, solanaceous crops, and stone fruits, in addition to Asian Defoliators, Honey Bee pests, Mollusk, and Khapra beetle surveys, among others. All survey results were negative for these high-risk pests, which demonstrates the United States is free of these pests and allows international trade to continue. The program also continued cooperative projects to analyze relative risk of invasive species at the county level and patterns of introduction of commodities into the country that put specialty crops at risk to exotic invasive pests and developed risk and economic assessment tools to help determine survey priorities. The program provided more than \$18 million to 174 projects in this goal area.

The second goal involves efforts to target domestic inspection activities at vulnerable points that result from the movement of commodities potentially carrying pests of regulatory significance. Under this goal, APHIS provided funds to train and place canine teams for domestic surveys in California and Florida. These teams are used for the enhancement of the States' efforts to mitigate pests that escape undetected through ports of entry and, in some cases, as a consequence of unauthorized movement of regulated and illegal goods. For example, the program supported 13 canine teams in California and 4 teams in Florida to enhance detection efforts at parcel facilities (such as FedEx). Between July 2012 and June 2013, the dogs alerted on 37,977 total marked and unmarked parcels containing agricultural items such as leis, prohibited fruit, and prohibited aquatic plants like hydrilla (an invasive species that can clog waterways). These inspections resulted in the detection of 132 actionable pests, including Asian citrus psyllid on curry leaves, scale insects, mealybugs, economically significant nematodes and others. These detector dogs also assisted in surveys for the Giant African snail in the Miami-Dade county area in 2013. Other projects in 2013 provided funds to monitor critical entry points in Texas and Florida and other biosecurity initiatives, such as surveys around warehouses and other sites where invasive pests are likely to be present. The program provided approximately \$6.2 million for 13 projects in this goal area.

Under the pest identification tools and technology goal, one key project is the National Survey Supply Program that oversees timely procurement and delivery of quality survey supplies, such as traps and lures, to APHIS and State cooperators. In FY 2013, the Survey Supply Program procured and is in the process of distributing 451,835 traps and lures that target exotic pests to all 50 States and a few territories. Other projects include the continued enhancement of taxonomic and molecular diagnostic capacity, including diagnostic training in high risk states, and a variety of projects aimed at providing more precise and faster detection and identification tools for citrus pests and diseases and other high risk pests. APHIS provided more than \$5 million for 69 projects in support of this goal.

Under the nursery safeguarding goal, APHIS focused on developing science-based best management practices and risk mitigation practices to exclude, contain, and control regulated pests from the nursery production chain, and developed and harmonized audit-based nursery certification programs. Primary areas of focus include ongoing work on control and management practices for *Phytophthora ramorum* at the National Ornamentals Research Site at the Dominican University of California. The project managers have identified some of the critical control points in nursery settings at which good management techniques might be applied to manage or control *P. ramorum* as well as improved methods in areas such as soil treatments, water treatments, and the use of fungicides to increase confidence in a systems approach to pest management. Other projects include continuing broad-based initiatives that support the development of audit-based systems for safeguarding nursery production, and State initiatives to develop and pilot harmonized nursery stock certification programs for economically important and high-risk specialty crops, such as fruit trees, blueberries, and strawberries. These projects are resulting in a better understanding of existing standards for pest mitigation in nursery settings, proposed draft standards that might be

used by cooperators to improve their existing processes or for those interested in developing such standards for their use, and collaboration among the specialty crop groups looking at similarities of process among them that could be applied to multiple-crop systems. The program provided approximately \$2 million for 22 projects in this goal area.

Under the outreach and education goal, projects include the continued development and deployment of several eLearning modules to increase pest screening and diagnostic capacity of first detectors, continued development and enhancement of a Sentinel Plant Network with public gardens, and, enhancement of a national public information campaign to increase awareness among the general public of invasive pest issues. For example, APHIS continues to support an initiative to enlist the public in detecting exotic forest pests as part of a Forest Pest Outreach and Survey Program and continues to promote the “Don’t Move Firewood” message to help prevent the spread of the emerald ash borer and other invasive forest pests. The number of States participating in the Forest Pest Outreach and Survey program has expanded from 9 to 26 since 2009 and the number of tribal partners has grown as well. To better support future forest pest outreach projects, the program supported a behavioral science study to determine the effectiveness of firewood messaging. The program supports a variety of other activities to educate the public, Tribal, and industry partners, including training on what to look for and how to report suspicious sightings of pests, conducting emergency exercises or outreach in Tribal areas, and engaging youth in invasive species detection. Overall, APHIS provided approximately \$3.6 million for 46 projects in this goal area.

Under the goal of enhancing mitigation capabilities, APHIS provides technical assistance prior to, during, and immediately following a plant pest outbreak through the development of New Pest Response Guidelines and through immediate mitigation efforts. Some of these efforts include brown marmorated stink bug and cactus moth mitigation, gypsy moth control, mollusk mitigation, and European grapevine moth in California, Mexican Fruit Fly eradication in Texas, citrus greening in Texas, and citrus canker response in Louisiana. The Agency also supported projects to develop strategies for mitigation and/or control of high risk pests. APHIS provided \$11.9 million for 70 projects in this goal area.

SUMMARY OF KEY FY 2013 CCC FUNDED EMERGENCY ACTIVITIES

	Emergency/Activity	Total Available in FY 2013 a/	Total Obligations in FY 2013
1	Asian Longhorned Beetle	\$5,283,540	\$4,283,236
2	Bovine Tuberculosis	2,485,957	351,961
3	European Grapevine Moth	2,659,872	529,857
4	Farm Bill	47,894,995	47,007,721
	Total	\$58,324,364	\$52,172,775

a/ Total Available includes account recoveries, where applicable.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

The estimates include proposed changes in the language of this item as follows: (new language is underscored; deleted matter is enclosed in brackets):

Buildings and Facilities:

For plans, construction, repair, preventive maintenance, environmental support, improvement, extension, alteration, and purchase of fixed equipment or facilities, as authorized by 7 U.S.C. 2250, and acquisition of land as authorized by 7 U.S.C. 428a, \$3,175,000, to remain available until expended.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Buildings and Facilities  
Lead-off Tabular Statement

Budget Estimate, 2015.....	\$3,175,000
2014 Enacted.....	3,175,000
Change in Appropriation.....	<u>0</u>

Summary of Increases and Decreases  
(Dollars in thousands)

Program	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2015</u>
	<u>Actual</u>	<u>Change</u>	<u>Change</u>	<u>Change</u>	<u>Estimate</u>
Discretionary Appropriations:					
Basic buildings and facilities repair, alterations, and preventive maintenance.....	\$3,200	-\$272	+\$247	0	\$3,175
Total Appropriation or Change.....	<u>3,200</u>	<u>-272</u>	<u>+247</u>	<u>0</u>	<u>3,175</u>

Project Statement  
Appropriations Detail and Staff Years (SYs)  
(On basis of appropriation)  
(Dollars in thousands)

Program	<u>2012 Actual</u>	<u>2013 Actual</u>	<u>2014 Estimate</u>	<u>2015 Estimate</u>
	Amount	SYs	Amount	SYs
Discretionary Appropriations:				
Buildings and Facilities.....	\$3,200	-	\$3,175	-
Rescission P.L. 113-6.....	-	-	-86	-
Sequester P.L. 113-6.....	-	-	-161	-
Total Appropriations.....	<u>3,200</u>	<u>-</u>	<u>2,928</u>	<u>-</u>
Balance available, SOY .....	1,469	-	1,046	-
Recoveries.....	10	-	12	-
Total Available.....	<u>4,679</u>	<u>-</u>	<u>3,986</u>	<u>-</u>
Balance available, EOY.....	-1,046	-	-2,852	-
Total Obligations.....	<u>3,633</u>	<u>-</u>	<u>1,135</u>	<u>-</u>

Project Statement  
Obligations Detail and Staff Years (SYs)  
(Dollars in thousands)

Program	<u>2012 Actual</u>	<u>2013 Actual</u>	<u>2014 Estimate</u>	<u>2015 Estimate</u>
	Amount	SYs	Amount	SYs
Discretionary Obligations:				
Buildings and Facilities.....	\$3,633	-	\$1,135	-
Recoveries.....	-10	-	-12	-
Balance available, EOY.....	1,046	-	2,852	-
Total Available.....	<u>4,669</u>	<u>-</u>	<u>3,974</u>	<u>-</u>
Balance available, SOY.....	-1,469	-	-1,046	-
Rescission P.L. 112-10 .....	-	-	86	-
Sequester P.L. 113-6.....	-	-	161	-
Total Appropriations.....	<u>3,200</u>	<u>-</u>	<u>3,175</u>	<u>-</u>

## ANIMAL AND PLANT HEALTH INSPECTION SERVICE

### Justification of Increases and Decreases Buildings and Facilities

\$3,175,000 requested for the Buildings and Facilities program (\$3,175,000 available in 2014).

The Buildings and Facilities (B&F) program addresses APHIS' facility needs to support the Agency's mission of protecting the health and value of agriculture and natural resources nationwide. The program's goal is to systematically address the Agency's needs for maintaining and repairing existing facilities, as well as constructing new facilities. Projects are driven by APHIS' Facility Condition Index (FCI), which is the sum of the costs of needed repairs divided by the replacement value of the facility. APHIS strives to maintain an FCI for facilities assessed of less than 0.20, meaning that the cost to make repairs is less than 20 percent of the estimated replacement value for the facilities.

This program serves a vital role in maintaining APHIS' facilities so that employees can continue to carry out their responsibilities in a safe and efficient manner. The commitment to maintain the condition and functionality of facilities is an ongoing process that demands significant management of capital resources. This program creates private sector jobs through the construction projects it carries out. If the B&F program was not funded, APHIS would be unable to centrally coordinate and prioritize these types of projects. As a result, necessary maintenance and repairs to facilities would not occur unless funded at the expense of an Agency operational activity. This could create program delays, possible environmental consequences, and noncompliance with State and local laws and codes. In addition, it would accelerate the pace of the deferred maintenance backlog and associated cost, which currently exceeds \$150 million. Many of APHIS' facilities have specialized functions that support various Federal, State, and local government programs; stakeholders; and customers. B&F projects ensure that APHIS' programs can be conducted at safe, secure, sound, sustainable and high-performance facilities that support APHIS' mission. The Agency's goal for its facilities is the implementation of scheduled improvements, security, construction, and maintenance. Contractors perform inspections and tests to substantiate that the supplies or services furnished under the contract conform to contract requirements. In addition, a design firm validates that the work aligns with approved plans and specifications. APHIS typically identifies on-site certified personnel to perform the contracting services. The Agency's engineering staff attends on-site construction progress meetings, and APHIS collects performance data through contractor reports and on-site verification.

In recent years, the program has used available funds more efficiently through comprehensive construction projects. For example, the program achieved significant cost savings by using the same contractor for two separate construction projects—one targeting safety improvements and other an expansion of space—at a laboratory in Massachusetts. APHIS completed both projects four months ahead of schedule for \$700,000 less than the contractor's initial proposal. FY 2015 priorities include continuing to address an underutilized building at the National Centers for Animal Health in Ames, Iowa. APHIS recently separated the building's wiring from surrounding buildings that were still in use and is considering the best use for the facility. In addition, APHIS will continue to address health and safety needs at the National Wildlife Research Center field station in Gainesville, Florida. This includes updating exhaust and fire alarm systems, removing hazardous materials, and implementing improvements to comply with Americans with Disabilities Act requirements. The Agency will also use FY 2015 funds to conduct facility condition assessments at 8 APHIS facilities.

As of January 2014, there are 52 active B&F projects for APHIS facilities. In FY 2013, APHIS awarded 13 design/construction projects at a cost of approximately \$1.1 million and completed 30 construction projects repairs. Approximately half of these repairs were major renovations and half were minor repairs.

Approximately 99 percent of the program funding supports indefinite delivery indefinite quantity contracts and construction contracts. These contracts, which provide for an indefinite quantity of supplies or services during a fixed time period, help streamline the contract process and expedite service delivery. The remaining funds support operating costs.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Buildings and Facilities

Geographic Breakdown of Obligations and Staff Years (SYs)  
(Dollars in thousands)

State/Territory	<u>2012 Actual</u>		<u>2013 Actual</u>		<u>2014 Estimate</u>		<u>2015 Estimate</u>	
	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs
<u>United States:</u>								
Arizona.....	\$39	-	-	-	-	-	-	-
California.....	-	-	-	-	\$46	-	\$46	-
Colorado.....	-	-	\$158	-	-	-	-	-
Florida.....	25	-	351	-	350	-	350	-
Hawaii.....	47	-	23	-	-	-	-	-
Iowa.....	-	-	135	-	260	-	260	-
Maryland.....	-	-	-	-	46	-	46	-
Massachusetts.....	46	-	170	-	-	-	-	-
Michigan.....	-	-	30	-	-	-	-	-
Mississippi.....	-	-	-	-	46	-	46	-
Nevada.....	100	-	-	-	-	-	-	-
New York.....	3,095	-	47	-	-	-	-	-
North Carolina.....	58	-	-	-	-	-	-	-
Texas.....	140	-	150	-	637	-	637	-
Wyoming.....	18	-	-	-	-	-	-	-
Puerto Rico.....	-	-	-	-	46	-	46	-
Mexico.....	16	-	71	-	695	-	695	-
<u>Central America:</u>								
Panama.....	12	-	-	-	453	-	453	-
Guatemala.....	-	-	-	-	171	-	171	-
<u>Asia/Pacific:</u>								
Korea.....	37	-	-	-	-	-	-	-
<b>Total direct obligations</b>	<b>\$3,633</b>	<b>-</b>	<b>\$1,135</b>	<b>-</b>	<b>\$2,750</b>	<b>-</b>	<b>\$2,750</b>	<b>-</b>

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Buildings and Facilities

Classification by Objects

(Dollars in thousands)

		2012	2013	2014	2015
		<u>Actual</u>	<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>
Other Objects:					
25	Other Services.....	\$3,533	\$1,135	\$2,750	\$2,750
32	Land & structure.....	100	-	-	-
	Total, other objects.....	<u>3,633</u>	<u>1,135</u>	<u>2,750</u>	<u>2,750</u>
	Total direct obligations.....	<u>\$3,633</u>	<u>\$1,135</u>	<u>\$2,750</u>	<u>\$2,750</u>

This Page Intentionally Left Blank

## ANIMAL AND PLANT HEALTH INSPECTION SERVICE

### BUILDINGS AND FACILITIES

#### STATUS OF MAJOR CONSTRUCTION PROJECTS

The Buildings and Facilities (B&F) appropriation funds major, nonrecurring construction projects in support of program activities, and recurring construction, alterations, and repairs of existing facilities, allowing other programs and employees to focus on the Agency's mission of protecting the health and value of agriculture and natural resources nationwide. The program's goal is to systematically address the Agency's needs for maintaining and repairing existing facilities, as well as constructing new facilities. Projects are driven by APHIS' Facility Condition Index (FCI), which is the sum of the costs of needed repairs divided by the replacement value of the facility. Each asset is assigned an FCI. APHIS strives to maintain an FCI for facilities assessed of less than 0.10, meaning that the cost to make repairs is less than 10 percent of the estimated replacement value for the facilities.

This program serves a vital role in maintaining APHIS' facilities so that employees can continue to carry out their responsibilities in a safe and efficient manner. Maintaining the condition and functionality of these facilities is an ongoing process that demands significant management of capital resources. This program creates private sector jobs through the construction projects it carries out. If the B&F program was not funded, APHIS would be unable to centrally coordinate and prioritize these projects. As a result, necessary maintenance and repairs to facilities would have to be funded at the expense of an Agency operational activity. This could create program delays, possible environmental consequences, and potentially jeopardize human health and safety. In addition, it would accelerate the pace of the deferred maintenance backlog and associated cost, which currently exceeds \$120 million. Many of APHIS' facilities have specialized functions that support various Federal, State and local government programs, stakeholders and customers. B&F projects ensure that APHIS' programs can be conducted at safe, secure, sound, sustainable and high-performance facilities that support the Agency's mission.

This program works to increase efficiency through more comprehensive construction projects. Approximately 99 percent of the program funding supports indefinite delivery, indefinite quantity contracts, and construction contracts. These contracts, which provide for an indefinite quantity of supplies or services during a fixed time period, help streamline the contract process and speed service delivery. The remaining funds support information technology projects.

The following provides a status of ongoing major construction projects as of September 2013.

#### Summary of Current Projects

The Agency's performance goal for our facilities is to implement the scheduled improvements, security, construction, and maintenance. Contractors perform inspections and tests to substantiate that the supplies or services furnished under the contract conform to contract requirements. In addition, a design firm validates that the work aligns with approved plans and specifications. APHIS typically identifies on-site certified personnel to perform the contracting services. The Agency's engineering staff attends on-site construction progress meetings, and APHIS collects performance data through contractor reports and on-site verification. As of October 2013, there are 52 active projects. In FY 2013, APHIS awarded 13 design/construction projects at a cost of approximately \$1.1 million and completed 30 construction projects repairs. Approximately half of these repairs were major renovations and half were minor repairs.

#### Facilities Condition Assessment

In 2000, APHIS embarked upon a comprehensive Facilities Condition Assessment program to: better understand the condition of facilities, strategically maintain them by identifying deficiencies and funding needs, stabilize the facilities repair backlog, predict maintenance needs, and implement financial management and capital asset improvement efforts. The consulting firm tasked with assessing APHIS' facilities has automated a standard process for assessing the relative condition of assets, and facilitating comparisons both within and among facilities. The consulting firm calculates an FCI for each facility by program and agency. At the end of FY 2013, the FCI for the 47 facilities assessed was 0.19; the cost to correct currently identified and anticipated deficiencies is 19 percent of

the estimated replacement value for the 47 facilities. Of these 47 facilities, 31 scored above a 0.10 and 16 scored below a 0.10. The Agency strives to maintain an FCI below 0.10.

*National Wildlife Research Center Field Station & Wildlife Services State Director's Office - Modernization, Gainesville, FL*

The 2011 APHIS National Wildlife Research Center (NWRC) Research Needs Assessment found that Federal, State, and private respondents each ranked feral swine as their top priority research need. The current laboratory at the Florida Field Station addressing feral swine and other wildlife diseases is inadequate and lacking in terms of space, infrastructure, and capacity to support activities there. Specifically, significant renovations are needed to address the identified life and safety deficiencies (e.g., asbestos containing materials, laboratory exhaust systems, fire alarm and suppression), bring the facility into compliance with the ADA, address other urgent facility requirements included in the Facility Condition Reassessment & Green Building Assessment Final Report, and to modernize business practices within the facility. The facility's current FCI is 0.20. In FY 2013, APHIS tasked an architectural and engineering firm with developing a program of requirements with respect to this modernization project. APHIS anticipates awarding the Design-Build Construction contract during the beginning of FY 2014.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Summary of Budget and Performance  
Statement of Agency Goals and Objectives

The Secretary of Agriculture established the Animal and Plant Health Inspection Service (APHIS) on April 2, 1972, under the authority of Reorganization Plan No. 2 of 1953 and other authorities. The mission of the Agency is to protect the health and value of U.S. agricultural and other plant and animal resources, vulnerable to pests, diseases, predation, natural disasters, or inhumane treatment. In carrying out this mission, the role of APHIS is to collectively do what individuals and individual organizations cannot do; for example, responding to animal and plant pest and disease emergencies, dealing with widespread pests and diseases, and dealing with foreign governments to mitigate trade issues and barriers.

Together with its stakeholders, APHIS protects the health of livestock, poultry, and crops from pests and diseases. The Agency also helps to promote animal welfare, mitigates agricultural damage caused by wildlife, defends the environment from invasive species, regulates the movement and release of specific genetically engineered organisms, protects natural resources, and ensures public health and safety. The primary focus of protecting America’s agriculture stems from the underlying premise that health and profitable agriculture is good for America. It creates jobs, feeds the world, and it is good for the economy.

APHIS has six strategic goals and sixteen strategic objectives that contribute towards the Secretary’s priority goals.

**USDA Strategic Goals:** Assist Rural Communities to Create Prosperity So They Are Self-Sustaining, Repopulating, and Economically Thriving. Ensure That All of America’s Children Have Access to Safe, Nutritious, and Balanced Meals.

**USDA Strategic Objectives:** 1.1: Enhance rural prosperity, including leveraging capital markets to increase government’s investment in rural America. 4.4: Protect agricultural health by minimizing major diseases and pests to ensure access to safe, plentiful, and nutritious food.

Agency Strategic Goal	Agency Objectives	Programs that Contribute	Key Outcome
<p><u>Goal 1:</u> Prevent the entry and spread of agricultural pests and diseases.</p>	<p><u>Objective 1.1:</u> Work with foreign governments and partners to keep damaging pests and diseases from entering the United States. <u>Objective 1.2:</u> Work with foreign governments and partners to prevent the spread of damaging pests and diseases.</p>	<ul style="list-style-type: none"> <li>• Agriculture Quarantine Inspection</li> <li>• Cattle Health</li> <li>• Cotton Pests</li> <li>• Specialty Crop Pests</li> <li>• Veterinary Diagnostics</li> </ul>	<p>Reduce or mitigate the impact of agricultural pests and diseases by preventing the entry or spread of agricultural pests and diseases.</p>

**Key Outcome:** Reduce or mitigate the impact of agricultural pests and diseases by preventing the entry or spread of agricultural pests and diseases.

Key Performance Measures and Targets:

APHIS protects U.S. livestock, poultry, specialty crops, corn, cotton, and wheat industries worth more than \$167 billion. U.S. agriculture as a whole supports 1 in 12 jobs and provides U.S. consumers with 83 percent of the food we consume. APHIS’ pest and disease prevention efforts help ensure that U.S. farms and ranches remain healthy and productive by keeping devastating pests and diseases from entering the country. APHIS works with many partners, including the U.S. Department of Homeland Security’s Customs and Border Protection (CBP), foreign governments, State departments of agriculture, and a variety of other U.S. government agencies on these prevention programs that help ensure U.S. and international consumers have access to safe, nutritious food. For example, APHIS works jointly with CBP to provide for inspections of imported animal, plant, and other agricultural goods,

products, and other articles at U.S. ports of entry to prevent the introduction of harmful agricultural pests and diseases. APHIS also conducts inspections of passenger baggage and cargo leaving Hawaii and Puerto Rico for the continental United States.

APHIS cooperates with foreign governments to prevent the northward spread of two extremely destructive pests into the United States—screwworm from South America and the Mediterranean fruit fly (Medfly) from Central America. In 1976, a screwworm outbreak in Texas resulted in an estimated \$113 to \$150 million in losses. Nearly four decades later, screwworm damage has been contained because of the APHIS preventative program. This program continues to keep this serious pest away from U.S. livestock by maintaining a barrier against it in Panama through the use of sterile insect technology. Medfly has one of the widest host ranges of any fruit fly pest and is considered one of the most serious agricultural pests in the world. The pest especially threatens high-value specialty crops such as citrus and tree fruit. Maintaining barriers to prevent this pest from entering the United States is imperative, especially considering increasing U.S. consumer demand for imported fruits and vegetables in recent years. In FY 2015, APHIS will continue efforts to prevent the reestablishment of screwworm in the United States by working with Panama, Mexico, and Central American countries to maintain a screwworm-free barrier zone in the Darien Gap, a narrow 102-mile stretch of jungle along the border of Colombia and Panama. The Agency will also continue to work with foreign partners to prevent the spread of the Medfly into the United States. APHIS also cooperates with the Mexican government to eradicate two devastating cotton diseases (the boll weevil and pink bollworm) and prevent them spreading into areas in the United States adjacent to the border. Other activities include maintaining a quarantine buffer in Texas against the spread of cattle fever ticks and diseases such as bovine babesiosis and working with Mexico to control Mexican fruit fly outbreaks along the border that threaten Texas citrus production.

APHIS provides international leadership to mitigate the global spread of pests and diseases through a variety of partnerships and international organizations. For example, APHIS serves as the World Organization for Animal Health (OIE) reference laboratory for 13 diseases through the National Veterinary Services Laboratories (NVSL). NVSL’s services improve science-based decisions in animal disease detection and quarantine, which in turn result in minimizing impacts and disruptions to important domestic and international export markets. APHIS will use its expertise and show leadership through partnering with other reference laboratories around the world and work with other countries, such as Canada and Mexico, to harmonize diagnostic methods.

<b>Performance Measure</b>	<b>2010 Actual</b>	<b>2011 Actual</b>	<b>2012 Actual</b>	<b>2013 Actual</b>	<b>2014 Target</b>	<b>2015 Target</b>
Value of specialty crops directly protected by APHIS’ Specialty Crop Pests program	N/A	N/A	\$11.48 billion	\$11.48 billion	\$11.48 billion	\$11.48 billion
Damage prevented by the APHIS Screwworm program on an annual basis	N/A	N/A	\$53 million	\$53 million	\$53 million	\$53 million
Number of sterile Medfly pupae produced weekly	1 billion	1 billion	0.8 billion	1 billion	1 billion	1 billion

Selected Past Accomplishments Toward Achievement of the Key Outcome:

- Conducted 25,301 inspections of individual premises for cattle fever ticks, including 7,406 river trail patrols in FY 2013.
- Expanded the Medfly-free zone in Mexico and Guatemala from approximately 142,000 square kilometers to more than 145,000 square kilometers in FY 2013.
- Inspected more than 22,000 imported plant shipments containing 1.3 billion plant units (cuttings, whole plants, or other propagative materials) and approximately 1,777,000 kilograms of seeds at APHIS Plant Inspection Stations in FY 2013.

Selected Accomplishments Expected at the FY 2015 Proposed Resource Level:

- Continue to work with the Governments of Mexico and Guatemala to maintain a barrier against the northward spread of Medfly.
- Continue to address the last known boll weevil infested area (in Texas) in cooperation with Mexico on its side of the border while maintaining the eradication progress made to date.
- Continue to work with the U.S.-Panamanian Commission to maintain the screwworm barrier at the Darien gap of Panama.

**USDA Strategic Goal:** Assist Rural Communities to Create Prosperity So They Are Self-Sustaining, Repopulating, and Economically Thriving.

**USDA Strategic Objective:** 1.1: Enhance rural prosperity, including leveraging capital markets to increase government’s investment in rural America.

Agency Strategic Goal	Agency Objectives	Programs that Contribute	Key Outcome
Goal 2. Ensure the humane care and treatment of vulnerable animals.	<p><u>Objective 2.1:</u> Improve the welfare of animals covered under the Animal Welfare Act.</p> <p><u>Objective 2.2:</u> Reduce the detection of horse soring in the Tennessee walking horse industry.</p>	<ul style="list-style-type: none"> <li>• Animal Welfare</li> <li>• Horse Protection</li> </ul>	Provide modern and collaborative tools and services to protect the welfare of animals.

**Key Outcome:** Provide modern and collaborative tools and services to protect the welfare of animals.

Key Performance Measures and Targets:

The welfare of animals nationwide continues to attract significant media attention and passionate public engagement. Front and center in the dialogue has been APHIS, which plays the unique Federal role of ensuring the humane care and treatment of millions of animals covered by the Animal Welfare Act (AWA) and the Horse Protection Act. Twenty-seven States, the District of Columbia, and a number of municipalities have enacted laws establishing some form of humane welfare standards for animals. However, none of these laws address all categories of welfare required under the AWA, including veterinary care, food and water, proper sanitation, and housing. Consequently, Federal oversight is necessary to ensure that AWA regulations are consistently applied in all States.

APHIS oversees more than 7,400 licensees and registrants associated with more than 15,710 facilities regulated under the AWA. APHIS inspects facilities (with a focus on re-inspecting problem facilities), educates regulated entities, provides detailed training for inspectors, investigates complaints, and pursues civil penalties and other enforcement measures when necessary. Together, these efforts yielded impressive results: regulated entities maintained an average 95 percent compliance rate with the AWA in the past 5 years. APHIS’ goal is to maintain the high rate of AWA compliance in FY 2015. New AWA licensees and registrants present a unique opportunity for APHIS to have a lasting impact on the way they care for their animals and improve program efficiency. APHIS has increased the rigor of its pre-licensing program for dog dealers to ensure that prospective licensees fully understand the AWA’s requirements before obtaining a license, which reduces overall noncompliance over time. The program is tailored to the individual licensee based on an initial discussion, the condition of the facility during the first visit, and developing individualized materials and presentations that focus on specific aspects or issues at each facility. APHIS is implementing data collection mechanisms in FY 2014 to track the compliance of facilities within a year of receiving their license or registration.

Also of note are additional efforts APHIS has made to build trusting, collaborative relationships with new and old partners. For example, APHIS has been reaching out to the Amish and Mennonite communities (which are entering

the commercial dog breeder/dealer arena in greater numbers) to help them understand their obligations under the AWA, help identify unlicensed facilities, and more. This is part of a greater effort to improve collaborations with State and local pet breeder associations to leverage limited resources and network with potential licensees. These partnerships will continue to be essential in light of the publication of a final rule that revised the definition of “retail pet store” in the AWA regulations to close a loophole of pets sold sight unseen over the Internet and via phone- and mail-based businesses. In FY 2015, APHIS will continue to focus on conducting quality inspections and collecting thorough documentation and evidence during inspections.

A similar rationale applies to APHIS’ enforcement of the Horse Protection Act (HPA). The HPA prohibits the showing, sale, auction, exhibition, or transport of horses that have been “sored”—subjected to chemical or mechanical irritants that irritate or blister a horse’s forelegs, causing a high-stepping gait that provides a competitive edge. As with the AWA, APHIS enforces the HPA through a regimen of inspections and pursuit of appropriate measures to address noncompliances. APHIS inspectors, along with designated qualified person (DQP) inspectors, inspect all horse entries at HPA-events. A DQP inspector is a person who is delegated authority by the management of a horse event to inspect horses for soring according to the HPA. A Horse Industry Organization (HIO), certified by the USDA, licenses DQP inspectors. In FY 2013, APHIS and DQP inspectors examined more than 38,000 horses at 288 HPA-events across the United States. APHIS anticipates that with the introduction of greater program efficiencies we can conduct inspections at more shows and improve the show horse industry’s compliance with the HPA. APHIS will increase the percent reduction in detections of soring in horses protected by the HPA from 30 percent in FY 2013 to 50 percent in FY 2015.

<b>Performance Measure</b>	<b>2010 Actual</b>	<b>2011 Actual</b>	<b>2012 Actual</b>	<b>2013 Actual</b>	<b>2014 Target</b>	<b>2015 Target</b>
Percent of licensees inspected and registrants in substantial compliance of the Animal Welfare Act	95%	98%	95%	96%	97%	97%
Percent of facilities determined to be in substantial compliance at the first unannounced inspection after receiving a license (conducted 6-9 months later)	N/A	N/A	N/A	N/A	Baseline	TBD
Percent reduction in detections of soring in horses protected by the Horse Protection Act 1/	N/A	N/A	26%	30%	40%	50%

1/ As compliance increases due to APHIS’ enforcement efforts, the percentage of detections is expected to drop.

Selected Past Accomplishments Toward Achievement of the Key Outcome:

- Exceeded the Agency projected average compliance rate for regulated entities under the AWA.
- Updated regulations and revised the definition of “retail pet store” to respond to public concern about the lack of oversight of the health and humane treatment of dogs and other pests sold “sight unseen”.
- Updated regulations to require APHIS-certified HIO’s to adjust their penalties to be equal to or exceed minimum levels, increasing in severity for repeat offenders to provide an additional deterrent for people who have already shown a willingness to violate the HPA.

Selected Accomplishments Expected at the FY 2015 Proposed Resource Level:

- Maintain the high compliance rate of 95 percent for AWA regulated entities.
- Reduce the number of non-compliances identified during an animal welfare inspection.
- Expand the use of foreign substance testing and soring detection technologies during the HPA inspection process.

**USDA Strategic Goal:** Ensure that our National Forests and Private Working Lands Are Conserved, Restored, and Made More Resilient to Climate Change, While Enhancing Our Water Resources.

**USDA Strategic Objective:** 2.1 Improve the health of the nation's forests, grasslands, and working lands by managing our natural resources.

Agency Strategic Goal	Agency Objectives	Programs that Contribute	Key Outcome
<p><u>Goal 3.</u> Protect forests, urban landscapes, rangelands and other natural resources, as well as private working lands from harmful pests and diseases.</p>	<p><u>Objective 3.1:</u> Reduce damage to valuable natural and agricultural resources caused by plant pests and diseases. <u>Objective 3.2:</u> Reduce damage to valuable natural and agricultural resources caused by wildlife.</p>	<ul style="list-style-type: none"> <li>• Field Crop and Rangeland Ecosystems</li> <li>• Tree and Wood Pests</li> <li>• Wildlife Damage Management</li> <li>• Wildlife Service Methods Development</li> </ul>	<p>Provide tools and services to protect forests, urban landscapes, rangelands and other natural resources, as well as private working lands from harmful pests and diseases.</p>

**Key Outcome:** Provide tools and services to protect forests, urban landscapes, rangelands and other natural resources, as well as private working lands from harmful pests and diseases.

Key Performance Measures and Targets:

America’s forests, rangelands, and other working lands are valuable resources that provide jobs, support ranches, provide habitat for wildlife, and create recreation opportunities. U.S. forests alone provide economic opportunities and ecosystem services worth an estimated \$1.2 trillion. APHIS coordinates national programs that target damage caused by the Asian longhorned beetle (ALB), emerald ash borer, gypsy moth, grasshopper and Mormon cricket outbreaks, thousand cankers disease, depredation from migratory birds, and damage from other wildlife such as beavers and deer. Together, APHIS and key partners focus on preventing the spread of pests and diseases and mitigating damage they cause. Specific activities include: conducting pest surveys and inspections to more accurately delimit the infestation of specific pests and diseases and wildlife; developing and implementing control strategies; conducting eradication efforts where appropriate, such as removing or treating host trees or problem wildlife; conducting public outreach and education to enlist the public’s support for these efforts; developing predictive analytical tools and risk-based models to inform trapping and survey work; and establishing new regulatory frameworks to minimize negative impacts on regulated business in quarantine areas, while still protecting American forests and rangelands from the spread of these harmful events. The following are highlights of these cooperative efforts.

Trees provide environmental value as forest and natural canopy and economic value when used in production of wood products. Trees are also an integral part of urban and suburban neighborhoods. ALB threatens forest resources nationwide, as 30 percent of U.S. trees are potential ALB hosts. APHIS is working to eliminate ALB from the United States as a whole; longstanding strategies and collaborations have proven successful as APHIS and other Federal and State partners have eradicated ALB outbreaks from Chicago, Illinois; Islip, Staten Island and Manhattan in New York; and Jersey City and Union and Middlesex Counties, New Jersey. These successes prevented multi-billion dollar losses to urban and suburban communities and the maple syrup, timber, tree nursery, trade and tourism industries. APHIS is continuing to address outbreaks in New York, Massachusetts, and Ohio. Although the program has been successful, APHIS and its cooperators continue to improve program delivery and to create more efficient projects. For example, APHIS and cooperators modified both ALB survey and control protocols, resulting in more efficient use of resources required to eradicate the pest. The program is examining new detection technologies (such as traps and detector dogs), studying how beetle biology and the time elapsed between surveys impact survey effectiveness, and evaluating an extended timeframe for the application of preventive treatments (potentially saving funds by treating less frequently to achieve the same results). In FY 2015, APHIS plans to continue to reduce the damage caused by this devastating pest.

It is also critical to protect U.S. agricultural crops and rangelands against pest and disease damage. The value of rangeland forage across western States is estimated to average \$13 per acre; the comprehensive value of rangeland for use as wildlife habitat, to stabilize soils and filtering water, and for recreation and other uses is two to three times greater than that. Although grasshoppers and Mormon crickets are natural components of rangeland ecosystems, their populations can reach outbreak levels and cause serious damage, especially when accompanied by drought conditions. APHIS' grasshopper and Mormon cricket program monitors and protects 664 million acres of rangeland worth a total of nearly \$8.8 billion. Uncontrolled infestations could cause significant economic losses for U.S. livestock producers by reducing animal food supply in rangeland, therefore forcing producers to buy supplemental feed or sell their livestock at reduced prices. APHIS conducts surveys in western States that provide information to help landowners and managers manage outbreaks. To reduce damage caused by grasshoppers, APHIS applies predictive models that allow early-season treatments using lower levels of insecticides to reduce immature pest populations as an alternative to using more expensive and stronger pesticides required to address mature pests. APHIS will continue conducting surveys and treatments to manage these pests in FY 2015.

Wildlife damage can also pose threats to the U.S. economy and to public health and safety. For example, the damage caused by beavers in the southeastern United States alone is estimated to have exceeded \$3 billion over the last 40 years. To address and prevent costly beaver damage, APHIS removes beaver dams that clog waterways and flood roads and timber resources. In FY 2013, APHIS conducted beaver damage management activities in 39 States, including four State/region-wide programs supported by cooperator-provided funds. Other examples include activities to reduce depredation or nuisance issues caused by migratory birds protected by Federal laws (such as Canada geese); damage to forested areas by overabundant deer in national parks, forests, or suburban communities; and damage to landscapes or infrastructure from roosting birds such as vultures and large flocks of gulls. In FY 2015, APHIS will continue to reduce damage caused by wildlife.

<b>Performance Measure</b>	<b>2010 Actual</b>	<b>2011 Actual</b>	<b>2012 Actual</b>	<b>2013 Actual</b>	<b>2014 Target</b>	<b>2015 Target</b>
Acreage protected by the Tree & Wood Pest Programs (Area outside of quarantine)	N/A	N/A	596 million acres	596 million acres	596 million acres	596 million acres
Value of forest products and ecosystem services protected (based on acreage protected)	N/A	N/A	\$1.19 trillion	\$1.19 trillion	\$1.19 trillion	\$1.19 trillion
Rangeland acreage protected by APHIS' grasshopper program	N/A	N/A	664 million acres	664 million acres	664 million acres	664 million acres
Value of rangeland protected by APHIS' grasshopper program	N/A	N/A	\$8.78 billion	\$8.78 billion	\$8.78 billion	\$8.78 billion

Selected Past Accomplishments Toward Achievement of the Key Outcome:

- Eradicated ALB outbreaks from Chicago, Illinois; Islip, Staten Island and Manhattan in New York; and Jersey City and Union and Middlesex Counties, New Jersey.
- Monitored and protected 664 million acres of rangeland worth a total of nearly \$8.8 billion.
- Protected more than \$12.5 million in natural resources in Tennessee by reducing damage to timber, roads and bridges, crops and pastures, drainage control structures and utilities from beavers.

Selected Accomplishments Expected at the FY 2015 Proposed Resource Level:

- Eradicate ALB from Norfolk and Suffolk Counties, in and around Boston, Massachusetts.
- Continue conducting surveys and treatments to successfully manage grasshoppers and Mormon crickets.
- Collaborate with private industry on research to develop new technologies to reduce damage, such as a contraceptive for managing bird populations.

**USDA Strategic Goal:** Help America Promote Agricultural Production and Biotechnology Exports as America Works to Increase Food Security.

**USDA Strategic Objective:** 3.2: Enhance America's ability to develop and trade agricultural products derived from new and emerging technologies.

Agency Strategic Goal	Agency Objectives	Programs that Contribute	Key Outcome
Goal 4. Ensure the safety of genetically engineered organisms and veterinary biologics.	<p><u>Objective 4.1:</u> Ensure that certain genetically engineered crops that are “regulated articles” as defined in our regulations will not pose plant pest risks when released into the environment.</p> <p><u>Objective 4.2:</u> Ensure pure, safe, potent and effective veterinary biologics are available for diagnosis, prevention, and treatment of animals.</p>	<ul style="list-style-type: none"> <li>• Biotechnology Regulatory Services</li> <li>• Veterinary Biologics</li> </ul>	APHIS will scientifically demonstrate the safety of biotechnology and veterinary biologic products and facilitate their development to benefit producers and consumers.

**Key Outcome:** APHIS will scientifically demonstrate the safety of biotechnology and veterinary biologic products and facilitate their development to benefit producers and consumers.

Key Performance Measures and Targets:

The biotechnology industry—valued worldwide at \$246 billion—is constantly developing innovative products of modern biotechnology (including genetically engineered (GE) organisms) that can greatly benefit the public. On the plant health side, GE crops can increase yields or decrease crop losses due to pests and diseases. On the animal health side, veterinary biologics derived from modern technologies help to prevent, diagnose, and treat serious animal diseases. However, before any of these products can be brought to market, it is essential to demonstrate—through rigorous, scientific review—that they do not pose a risk to America’s agricultural and natural resources. APHIS provides the regulatory controls that ensure new GE crops will not pose plant health risks when released into the environment and that veterinary biologics are safe, pure, potent, and effective. In addition to protecting America’s agriculture, these controls instill confidence in the public and in our trading partners that GE products produced in America are of the highest quality.

APHIS regulates the importation, interstate movement, and field release—or “introduction”—of GE organisms that may pose a risk to plant health. As part of its science-based framework, APHIS requires developers to apply for a permit or notification before introducing these organisms into the environment and conducts thorough scientific analyses to evaluate potential plant risks and environmental impacts before authorizing such introductions. Once a developer can demonstrate that a GE crop does not pose a risk to plant health, the developer can petition APHIS to seek deregulation of the crop. In FY 2013, APHIS made a total of 102 determinations of deregulation consisting of 165 plant lines. APHIS expects the number of determinations of non-regulated status to increase from 102 in FY 2013 to 112 in FY 2015.

APHIS ensures regulatory compliance on the part of the biotechnology community through inspections, educational and outreach efforts, and investigations and audits. In FY 2013, APHIS authorized 2,054 new permits and notifications at 10,698 locations in the United States, and issued 735 site inspections (with 98 percent of those inspected found to be in compliance with APHIS’ regulations). APHIS’ goal for FY 2015 is for at least 99 percent of sites inspected to be in compliance.

Through its efforts to ensure the safety and effectiveness of U.S. veterinary biological products, valued at \$1.35 billion, APHIS safeguards the health of millions of livestock and pet animals and protects domestic and worldwide markets for U.S. animals and animal products, worth \$154 billion. APHIS protects animals and animal owners from

contaminated, worthless, or dangerous products. The Agency also facilitates the entry of new, innovative products to the market, expanding options for animal owners to protect the health of their animals. For example, APHIS recently worked with the Department of Homeland Security to license a biotechnology-derived vaccine for foot-and-mouth disease (FMD). Because FMD spreads so quickly and causes enormous losses, most vaccines that use live virus are only produced in countries where FMD is already present. This is the first FMD vaccine that can be safely produced in the United States, and it expands the resources available to respond to this disease in the event that it is accidentally, or intentionally, introduced into the United States.

APHIS continuously evaluates its activities and makes adjustments to improve efficiency and effectiveness. APHIS has conducted business process improvement reviews of both its biotechnology regulatory determination reviews and its veterinary biologics licensing reviews with the goal of streamlining the processes and reducing the time required to allow companies to bring new products to market sooner. In FY 2011 - 2013, APHIS conducted a series of review of its veterinary biologics licensing process to find time savings. The reviews focused on a range of objectives including the electronic workflow of documents and streamlining of submission processing and testing. As a result, APHIS has reduced licensing times by more than 20 percent on average for all biologics. APHIS also initiated a business process improvement effort for its biotechnology reviews in 2012 and has worked since to implement changes to its petition review process, with a goal to reduce the time required for review from an average of 3 years to about 13 to 16 months. The changes included establishing specific timelines for each step, using new management and tracking tools, and getting the public involved earlier to identify risks and controversial issues. By taking these steps, APHIS delivers a more predictable petition process without compromising the quality of the analysis to support our decision making. The first petition to reach a determination of nonregulated status start to finish in the improved process did so 376 days sooner than the average time under the previous process. In FY 2015, APHIS will continue to evaluate the anticipated efficiencies from the process improvement efforts.

<b>Performance Measure</b>	<b>2010 Actual</b>	<b>2011 Actual</b>	<b>2012 Actual</b>	<b>2013 Actual</b>	<b>2014 Target</b>	<b>2015 Target</b>
Cumulative number of actions taken by USDA to deregulate biotechnology products based on the scientific determination that they do not pose a plant pest risk to agriculture	81	87	93	102	107	112
Percent of field release sites in compliance with biotechnology regulations designed to protect agriculture from plant pests	95%	95%	98%	99%	99%	99%
Average number of days to issue a product license for veterinary biologics	541 days	441 days	282 days	263 days	253 days	253 days

Selected Past Accomplishments Toward Achievement of the Key Outcome:

- As of FY 2013, APHIS has made a total of 102 determinations of deregulation consisting of 165 plant lines.
- In FY 2013, APHIS authorized 2,054 new permits and notifications at 10,698 locations in the United States, and issued 735 site inspections (with 98 percent of those inspected found to be in compliance with APHIS' regulations).
- APHIS worked with the Department of Homeland security to license a biotechnology-derived vaccine for FMD, the first FMD vaccine that can be safely produced in the United States.

Selected Accomplishments Expected at the FY 2015 Proposed Resource Level:

- APHIS expects the number of determinations of non-regulated status to increase from 102 in FY 2013 to 112 in FY 2015.
- APHIS will maintain a high percentage rate of compliance with APHIS' regulations for field test sites.
- APHIS will continue to support the development and licensing of veterinary biologic products.

**USDA Strategic Goal:** Help America Promote Agricultural Production and Biotechnology Exports as America Works to Increase Food Security.

**USDA Strategic Objective:** 3.2: Enhance America's ability to develop and trade agricultural products derived from new and emerging technologies.

Agency Strategic Goal	Agency Objectives	Programs that Contribute	Key Outcome
<p><u>Goal 5.</u> Ensure the safe trade of agricultural products, creating export opportunities for U.S. producers.</p>	<p><u>Objective 5.1:</u> Ensure the resolution of sanitary and phytosanitary issues and trade barriers.  <u>Objective 5.2:</u> Eliminate all remaining bovine spongiform encephalopathy (BSE) barriers to export markets through a deliberate process of engagement with trading partners with BSE restrictions.  <u>Objective 5.3:</u> Improve the export customer experience.</p>	<ul style="list-style-type: none"> <li>• Agriculture Import/Export</li> <li>• Overseas Technical &amp; Trade Operations</li> <li>• Physical and Operational Security</li> </ul>	<p>Resolve sanitary and phytosanitary (SPS) trade barriers, improve international animal and plant health standards, and collaborate with U.S. and foreign partners to build capacity and prevent agricultural pest and disease threats from reaching the United States.</p>

**Key Outcome:** Resolve sanitary and phytosanitary (SPS) trade barriers, improve international animal and plant health standards, and collaborate with U.S. and foreign partners to build capacity and prevent agricultural pest and disease threats from reaching the United States.

APHIS uses its technical expertise in animal and plant health to resolve sanitary (animal) and phytosanitary (plant) (SPS) issues that affect export opportunities for U.S. producers, allowing U.S. companies to be competitive in trade. In FY 2013, APHIS retained, expanded, or opened markets worth \$2.9 billion for U.S. agricultural exports. The Agency also plays a central role in resolving technical trade issues to ensure the fast and safe movement of agricultural imports and exports. In FY 2013, our overseas employees secured the release of 279 detained shipments of U.S. agricultural products worth more than \$34.8 million. To support these export opportunities, the Agency negotiates animal and plant health certification requirements; assists U.S. exporters in meeting foreign regulatory requirements, ensuring requirements are proportional to risk without being excessively restrictive; and provides technical information to support the safety of U.S. agricultural products destined for foreign markets. APHIS' employees – including headquarters personnel, field staff, and personnel stationed in 30 countries play a critical role in the success of these efforts.

APHIS also conducts capacity building activities to reduce risks to U.S. agriculture by helping developing countries strengthen their agricultural health infrastructure. Through these efforts, APHIS encourages developing countries to use the same science-based, international standards that the Agency uses to evaluate import requests. Much of this assistance is provided on a reimbursable basis aimed at a targeted and limited number of recipient countries based on the specific collaborators' needs. During FY 2013, APHIS acted upon 122 requests for technical assistance. For example, working with USDA's Foreign Agricultural Service and the United States Agency for International Development, APHIS was able to complete four distance learning training modules for plant health in Pakistan. In collaboration with the U.S. Department of Defense and U.S. Department of State, veterinarians from more than 20 countries were taught courses in veterinary epidemiology of trans-border animal diseases as well as risk-based analysis of the importation of animals and animal products.

One of APHIS' specific objectives to support U.S. exports is to eliminate all remaining trade barriers related to BSE. APHIS has contributed to OIE's goal of ensuring that science-based standards govern international trade in animals and animal products by, among other things, publishing a proposed comprehensive rule on BSE that brings the U.S.

BSE import regulations for bovines and bovine products closer in line with OIE standards. Additionally, Japan agreed in FY 2013 to permit the import of beef from cattle less than 30 months of age. These actions will likely result in hundreds of millions of dollars in exports of U.S. beef to Japan in coming years. APHIS will continue these efforts in FY 2015 and work towards eliminating all remaining BSE barriers to export markets through a deliberate process of engagement with trading partners with BSE restrictions. APHIS will coordinate with USTR, FAS, and USDA’s Food Safety and Inspection Service as well as continue to engage these countries through animal health discussions.

APHIS also supports U.S. exporters through inspecting animals and shipments of agricultural products destined for export and certifying that they are free of certain pests or diseases (as required by many trading partners). In FY 2013, APHIS (and its State and county counterparts) issued more than 605,000 phytosanitary certificates and more than 200,000 animal and animal product export certificates. In FY 2014 and 2015, APHIS will work to improve the export customer experience through expanding electronic processing of export documentation and deploying the service center concept for meeting animal and animal product exporter’s certification needs. These goals focus on streamlining the processes and paperwork that exporters need to move their products.

<b>Performance Measure</b>	<b>2010 Actual</b>	<b>2011 Actual</b>	<b>2012 Actual</b>	<b>2013 Actual</b>	<b>2014 Target</b>	<b>2015 Target</b>
Value of expanded and retained markets, new market access, and trade facilitated	\$2.4 billion	\$1.68 billion	\$2.56 billion	\$2.9 billion	\$1.9 billion	\$1.9 billion
Number of shipments released (in foreign ports of entry) as a result of APHIS intervention 2/	294	300	324	279	210	210

2/ As APHIS establishes/improves relations with foreign countries, the number of U.S. shipments held is anticipated to decline.

Selected Past Accomplishments Toward Achievement of the Key Outcome:

- Negotiated and resolved 200 SPS trade-related issues involving U.S. agricultural exports, with an estimated market value of \$2.9 billion.
- Secured the release of 279 shipments of U.S. cargo held up at foreign ports-of-entry, which prevented the rejection of shipments worth more than \$34.8 million.
- Published a final rule in November 2013 to bring the U.S. BSE import regulations in line with OIE standards.

Selected Accomplishments Expected at the FY 2015 Proposed Resource Level:

- Continue to resolve SPS trade-related issues involving U.S. agricultural exports to facilitate trade.
- Continue to provide the necessary documentation in support of U.S. cargo held up at foreign ports-of-entry.
- Work with Federal partners to develop strategies to engage trading partners that continue to impose BSE-related restrictions.

**USDA Strategic Goals:** Ensure That All of America’s Children Have Access to Safe, Nutritious, and Balanced Meals. Assist Rural Communities to Create Prosperity So They Are Self-Sustaining, Repopulating, and Economically Thriving.

**USDA Strategic Objectives:** 4.4: Protect agricultural health by minimizing major diseases and pests to ensure access to safe, plentiful, and nutritious food. 1.1: Enhance rural prosperity, including leveraging capital markets to increase government’s investment in rural America.

Agency Strategic Goal	Agency Objectives	Programs that Contribute	Key Outcome
<p><u>Goal 6.</u> Protect the health of U.S. agricultural resources by implementing surveillance, preparedness and response, and control programs.</p>	<p><u>Objective 6.1:</u> Monitor the health of U.S. agricultural resources.  <u>Objective 6.2:</u> Ensure effective preparedness and response systems.  <u>Objective 6.3:</u> Ensure effective control, eradication, management, and enforcement programs.  <u>Objective 6.4:</u> Manage conflicts caused by wildlife, detect and control wildlife diseases, and protect threatened and endangered species.  <u>Objective 6.5:</u> Provide and coordinate timely diagnostic laboratory support and services.</p>	<ul style="list-style-type: none"> <li>• Animal Health Technical Services</li> <li>• APHIS Information Technology Infrastructure</li> <li>• Animal and Plant Health Regulatory Enforcement</li> <li>• Aquatic Animal Health</li> <li>• Avian Health</li> <li>• Buildings and Facilities</li> <li>• Cattle Health</li> <li>• Contingency Fund</li> <li>• Cotton Pests</li> <li>• Emergency Preparedness and Response</li> <li>• Equine, Cervids, and Small Ruminant Health</li> <li>• Field Crop and Rangeland Ecosystem Pests</li> <li>• National Veterinary Stockpile</li> <li>• Pest Detection</li> <li>• Specialty Crop Pests</li> <li>• Swine Health</li> <li>• Veterinary Biologics</li> <li>• Veterinary Diagnostics</li> <li>• Wildlife Damage Management</li> <li>• Zoonotic Disease Management</li> </ul>	<p>Reduce or mitigate the impact of agricultural pests and diseases as well as wildlife damage by providing tools and services—including diagnostic, detection, control, management, and enforcement methods and programs—to protect and enhance animal and plant health.</p>

**Key Outcome:** Reduce or mitigate the impact of agricultural pests and diseases as well as wildlife damage by providing tools and services—including diagnostic, detection, control, management, and enforcement methods and programs—to protect and enhance animal and plant health.

APHIS’ surveillance, preparedness and response, and control activities are designed to quickly detect and address destructive animal and plant pests and diseases and reduce and prevent billions of dollars in damage (about \$1.26 billion in FY 2013 alone) to agricultural resources each year. They not only ensure children and other consumers in the United States and across the world have access to safe and nutritious food; they also directly support farmers’ efforts to export their products. Healthy farms and ranches and the robust agricultural exports help create a sustainable agricultural system and keep rural America thriving. Along with the programs discussed in the Agency’s Goal 1, these efforts protect U.S. livestock, poultry, specialty crop, corn, cotton, and wheat industries worth more than \$167 billion.

The first component of APHIS’ efforts, early detection, is critical to averting economic and environmental damage. Once a pest or disease becomes established or spreads, mitigation costs can reach millions of dollars and result in substantial costs to producers and consumers, as well as irreversible damage to ecosystems. An article published in the Journal of Veterinary Diagnostics and Investigations estimated that a detection of FMD identified on day 7

would have an impact of \$2.3 billion on the economy; if not identified until day 22, it could have an impact of \$69 billion. In monitoring for potentially serious animal diseases, APHIS conducts more than 500,000 diagnostic tests per year on approximately 250,000 animal samples collected. To bolster surveillance efforts, APHIS continues to implement the animal disease traceability program that would allow affected animals to be found quickly in the event of an outbreak. APHIS conducts early detection plant pest and disease surveys—targeting various fruit, vegetable, and honey bee pests—in cooperation with all 50 States, 2 U.S. territories, Tribal and local governments, industry partners, and other stakeholders. In FY 2013, the Agency targeted 95 high-risk pests of national concern for survey in citrus, corn, grape, oak, pine, small grains, soybean, stone fruit, and nursery crop commodities, as well as exotic wood boring bark beetles and cyst nematodes.

Rapid response can make the critical difference in succeeding or failing to contain pest and disease outbreaks. When an animal or plant pest or disease is detected, APHIS works with Federal, State, and local partners to coordinate a rapid response effort. One key component in the Agency's emergency response strategy is the National Veterinary Stockpile (NVS) program. Through its NVS, the Agency has countermeasures to respond to 4 of the 15 most significant animal diseases of concern within 24 hours of detection. For FY 2015, the NVS plans to hold a full scale exercise in Wisconsin to test their current response plans and a table top exercise validating timely classic swine fever vaccine shipment from the manufacturer to Puerto Rico.

APHIS also works closely with its State counterparts to address ongoing pest and disease issues and has longstanding partnerships with industry groups. By partnering together, APHIS and its State and industry cooperators have successfully eradicated boll weevil from more than 99 percent of U.S. cotton acreage, dramatically reducing growers' production costs. APHIS' Cotton Pests program directly protects 6.7 million acres of cotton production worth \$1.7 billion in Texas (where the last remaining boll weevil population is present) and indirectly protects 10.2 million acres worth \$6.8 billion nationwide. In FY 2015, APHIS and its cooperators will continue to address the last known boll weevil infested area. APHIS also directly protects nearly 1.6 million acres of specialty crops and enables more than 21,000 businesses to continue operating while addressing pests of concern using the various tools and methods developed. The types of businesses include farms, shippers, and processors that handle specialty crops regulated by the Agency because of pests or diseases like the European grapevine moth (EGVM). As a result of no new EGVM detections during 2 years of surveillance, APHIS removed four counties from the quarantined area in FY 2013, leaving only Napa County and portions of Solano and Sonoma counties (in proximity to EGVM finds in Napa) under quarantine. APHIS hopes to complete the eradication of EGVM in FY 2015 while continuing to survey to ensure the pest does not reemerge.

Diseases and pests found in wild animals can be transmitted to agricultural animals as well. For instance, feral swine can host more than 30 pathogens and parasites including foreign animal diseases, FMD, and classical swine fever (CSF), while bison can carry brucellosis. Feral swine have quickly established themselves throughout the nation, increasing from 1 million animals in 17 States to about 5 million animals in 38 States in the last 20 years. In 2013, APHIS implemented a pilot program specifically designed to strategically removal feral swine from regions in New Mexico. In only a few months, the Wildlife Damage Management program removed 640 feral swine over an area expanding more than 4.5 million acres, saving New Mexico property owners approximately half a million dollars in annual damages alone. In FY 2014, APHIS is implementing a national, cooperative cost-share program to slow -- and eventually stop -- the leading edges of population spread; eliminate swine populations where possible; and control swine numbers to achieve acceptable levels in other States. The Agency will continue these efforts in FY 2015.

To support these pest and disease detection and management programs, APHIS coordinates diagnostic laboratory support and services. The Agency and its partners in the National Animal Health Laboratory Network (NAHLN), test animals for endemic and suspected foreign animal diseases. The NAHLN is comprised of 60 State and university laboratories located in 40 States, as well as two NVSL facilities and two other Federal health diagnostic laboratories not associated with animal health disease diagnostic work. To increase diagnostic capacity for high-risk plant pathogens, APHIS provides training and accreditation services to support to the National Plant Diagnostic Network (NPDN), working with USDA's National Institute of Food and Agriculture. APHIS has reviewed quality management standards for and accredited 37 NPDN labs to perform high-risk disease testing.

<b>Performance Measure</b>	<b>2010 Actual</b>	<b>2011 Actual</b>	<b>2012 Actual</b>	<b>2013 Actual</b>	<b>2014 Target</b>	<b>2015 Target</b>
Percent of States and Tribes receiving cooperative agreement funds that have a current strategic plan for animal disease traceability	N/A	N/A	N/A	75%	80%	95%
Percent of high-risk plant pests (as identified on the Priority Pest List) for which early detection surveys were conducted in the United States	89%	86%	79%	86%	88%	90%
Value of livestock and poultry protected by APHIS' animal health programs	N/A	N/A	\$154 billion	\$154 billion	\$154 billion	\$154 billion
Production value of cotton directly protected by APHIS' cotton pest programs	N/A	N/A	\$1.7 billion	\$1.7 billion	\$1.7 billion	\$1.7 billion
Value of wheat and corn directly protected by APHIS' Field Crop Pests program	N/A	N/A	\$23 million	\$23 million	\$23 million	\$23 million

Selected Past Accomplishments Toward Achievement of the Key Outcome:

- Published a final rule implementing the new animal disease traceability framework, which became effective in March 2013.
- In cooperation with State and industry partners, eradicated boll weevil from more than 99 percent of U.S. cotton acreage and pink bollworm from more than 99.9 percent of the acreage, dramatically reducing growers' production costs.
- Conducted a feral swine pilot in New Mexico, removing 640 feral swine from more than 4.8 million acres; this represents an important step in the 5-year goal of eradication of feral swine from New Mexico.

Selected Accomplishments Expected at the FY 2015 Proposed Resource Level:

- Monitor for diseases in wild animals such as pseudorabies, swine brucellosis, CSF, and trichinella.
- Hold a full scale exercise to test National Veterinary Stockpile response plans and a table top exercise validating timely shipment of CSF vaccine.
- Complete the eradication of EGVM in FY 2015 while continuing to survey to ensure the pest does not reemerge.
- Remove approximately 130,000 feral swine through the implementation of a national, cooperative program to slow, then stop the spread of feral swine that damage agriculture, natural resources, and property, and that threaten human health and safety.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Strategic Goal Funding Matrix  
(On basis of appropriation)  
(Dollars in thousands)

Program / Program Items	2012 Actual	2013 Actual	2014 Estimate	Increase or Decrease	2015 Estimate
<b>Department Strategic Goal 1: Assist rural communities to create prosperity so they are self-sustaining and economically thriving.</b>					
<b>Department Objective 1.1: Enhance rural prosperity, including leveraging capital markets to increase government's investment in rural America.</b>					
Animal Welfare.....	\$27,087	\$25,000	\$28,010	-	\$28,010
Staff Years.....	224	213	218	-	218
Horse Protection.....	696	642	697	-	697
Staff Years.....	5	5	6	-	6
Wildlife Damage Management.....	72,500	67,836	87,428	-	87,428
Staff Years.....	534	526	620	-	620
Wildlife Services Methods Development.....	18,000	17,536	18,856	-	18,856
Staff Years.....	164	163	163	-	163
Total Cost, Strategic Goal.....	118,283	111,014	134,991	-	134,991
Staff Years, Strategic Goal.....	927	907	1,007	-	1,007
<b>Department Strategic Goal 2: Ensure our National forests and private working lands are conserved, restored, and made more resilient to climate change, while enhancing our water resources.</b>					
<b>Department Strategic Objective 2.1: Improve the health of the nation's forests, grasslands, and working lands by managing our natural resources.</b>					
Tree & Wood Pests.....	55,638	52,273	54,000	-8,608	45,392
Staff Years.....	321	319	319	-4	315
Field Crop & Rangeland Ecosystems Pests (Grasshopper).....	4,578	4,225	4,592	-	4,592
Staff Years.....	39	39	39	-	39
Total Cost, Strategic Goal.....	60,216	56,498	58,592	-8,608	49,984
Staff Years, Strategic Goal.....	360	358	358	-4	354
<b>Department Strategic Goal 3: Help America promote agricultural production and biotechnology exports as America works to increase food security.</b>					
<b>Department Strategic Objective 3.2: Enhance America's ability to develop and trade agricultural products derived from new and emerging technologies</b>					
Agriculture Import/Export.....	13,354	12,325	14,099	-	14,099
Staff Years.....	92	92	92	-	92
Biotechnology Regulatory Services.....	18,135	16,738	18,135	-	18,135
Staff Years.....	92	90	92	-	92
Overseas Technical & Trade Operations.....	20,104	18,472	20,114	-	20,114
Staff Years.....	73	73	76	-	76
Total Cost, Strategic Goal.....	51,593	47,534	52,348	-	52,348
Staff Years, Strategic Goal.....	257	255	260	-	260

Program / Program Items	2012 Actual	2013 Actual	2014 Estimate	Increase or Decrease	2015 Estimate
<b>Department Strategic Goal 4: Ensure that all of America's children have access to safe, nutritious, and balanced meals.</b>					
<b>Department Strategic Objective 4.4: Protect agricultural health by minimizing major diseases and pests to ensure access to safe, plentiful, and nutritious food.</b>					
Agricultural Quarantine Inspection (Appropriated).....	27,500	26,304	26,900	-	26,900
Staff Years.....	364	360	360	-	360
Animal and Plant Health Regulatory Enforcement.....	16,275	15,021	16,224	-	16,224
Staff Years.....	142	138	142	-	142
Animal Health Technical Services.....	32,500	34,018	35,339	+2,550	37,889
Staff Years.....	64	64	64	-	64
APHIS Info. Technology Infrastructure.....	4,335	4,001	4,251	-	4,251
Staff Years.....	-	-	-	-	-
Aquatic Animal Health.....	2,261	2,087	2,253	-	2,253
Staff Years.....	22	22	22	-	22
Avian Health.....	52,000	47,993	52,340	-2,117	50,223
Staff Years.....	196	196	196	-2	194
Cattle Health.....	99,000	90,341	92,500	-	92,500
Staff Years.....	570	560	555	-	555
Contingency Fund.....	1,000	1,384	470	-	470
Staff Years.....	15	15	5	-	5
Cotton Pests.....	17,848	14,739	12,720	-3,665	9,055
Staff Years.....	61	61	58	-	58
Decentralized GSA Rental and DHS Security Payments.....	-	-	-	+42,567	42,567
Staff Years.....	-	-	-	-	-
Emergency Preparedness & Response.....	17,000	15,690	16,966	-	16,966
Staff Years.....	91	89	90	-	90
Equine, Cervid, and Small Ruminant Health.....	22,000	17,692	19,500	-	19,500
Staff Years.....	133	129	120	-	120
Field Crop & Rangeland Ecosystems Pests.....	4,490	4,144	4,234	-	4,234
Staff Years.....	21	19	19	-	19
National Veterinary Stockpile.....	2,750	2,538	3,722	-	3,722
Staff Years.....	1	1	1	-	1
Pest Detection.....	27,500	25,381	27,446	-	27,446
Staff Years.....	145	145	145	-	145
Physical/Operational Security.....	5,365	4,952	5,146	-	5,146
Staff Years.....	-	-	-	-	-
Plant Protection Methods Development.....	20,600	19,935	24,549	-4,000	20,549
Staff Years.....	140	139	141	-	141
Specialty Crop Pests.....	153,950	142,087	151,500	-14,107	137,393
Staff Years.....	700	694	688	-7	681
Swine Health.....	23,000	21,228	22,250	-	22,250
Staff Years.....	127	122	120	-	120
Veterinary Biologics.....	16,457	15,189	16,417	-	16,417
Staff Years.....	108	108	109	-	109
Veterinary Diagnostics.....	31,611	29,175	31,540	-	31,540
Staff Years.....	190	190	190	-	190
Zoonotic Disease Management.....	9,000	9,575	9,523	-	9,523
Staff Years.....	45	45	45	-	45
General Provision 748.....	-	-	20,000	-20,000	-
Staff Years.....	-	-	-	-	-
Buildings & Facilities.....	3,200	2,928	3,175	-	3,175
Total Cost, Strategic Goal.....	589,642	546,400	598,965	+1,228	600,193
Staff Years, Strategic Goal.....	3,135	3,097	3,070	-9	3,061
Subtotal, Appropriated Salaries and Expenses .....	816,534	758,519	841,721	-7,380	834,341
Subtotal, Buildings & Facilities.....	3,200	2,928	3,175	-	3,175
Total Cost, All Strategic Goals .....	819,734	761,447	844,896	-7,380	837,516
Total Staff Years, All Strategic Goals .....	4,679	4,617	4,695	-13	4,682

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Full Cost by Department Strategic Goals  
(On basis of appropriated funds)  
(dollars in thousands)

**Department Strategic Goal: Assist rural communities to create prosperity so they are self-sustaining, repopulating, and economically thriving.**

Program/Programs Items - Discretionary	2012	2013	2014	2015
Animal Welfare.....	\$22,211	\$20,500	\$22,968	\$22,968
Horse Protection.....	571	527	572	572
Wildlife Damage Management.....	59,450	55,626	71,691	71,691
Wildlife Services Methods Development.....	14,760	14,379	15,462	15,462
Program Operational Costs.....	11,828	11,101	13,499	13,499
Indirect Costs.....	9,463	8,881	10,799	10,799
Total Discretionary Costs for Strategic Goal 1.....	118,283	111,014	134,991	134,991
FTEs.....	927	907	1,007	1,007
Performance Measure: Animal Welfare: Percent of licensees inspected and registrants in substantial compliance of the Animal Welfare Act	95%	96%	97%	97%
Performance Measure: Animal Welfare: Percent of facilities determined to be in substantial compliance at the first unannounced inspection after receiving a license (conducted 6-9 months later)	N/A	N/A	Baseline	TBD
Performance Measure: Horse Protection: Percent reduction in detections of soring in horses protected by the Horse Protection Act	26%	30%	40%	50%

**Department Strategic Goal: Ensure our National forests and private working lands are conserved, restored, and made more resilient to climate change, while enhancing our water resources.**

Tree & Wood Pests.....	45,623	42,864	44,280	37,221
Field Crop & Rangeland Ecosystems Pests (Grasshopper).....	3,754	3,465	3,765	3,765
Program Operational Costs.....	6,022	5,650	5,859	4,998
Indirect Costs.....	4,817	4,520	4,687	3,999
Total Discretionary Costs for Strategic Goal 2.....	60,216	56,498	58,592	49,984
FTEs.....	360	358	358	354
Performance Measure: Acreage protected by the Tree & Wood Pest Programs (Area outside of quarantine)	596 million acres	596 million acres	596 million acres	596 million acres
Performance Measure: Value of forest products and ecosystem services protected (based on acreage protected)	\$1.19 trillion	\$1.19 trillion	\$1.19 trillion	\$1.19 trillion
Performance Measure: Rangeland acreage protected by APHIS' grasshopper program	664 million acres	664 million acres	664 million acres	664 million acres
Performance Measure: Value of rangeland protected by APHIS' grasshopper program	\$8.78 billion	\$8.78 billion	\$8.78 billion	\$8.78 billion

Program/Programs Items - Discretionary	2012	2013	2014	2015
--	------	------	------	------

**Department Strategic Goal: Help America promote agricultural production and biotechnology exports as America works to increase food security.**

Agriculture Import/Export.....	10,950	10,106	11,561	11,561
Biotechnology Regulatory Services.....	14,871	13,725	14,871	14,871
Overseas Technical & Trade Operations.....	16,485	15,147	16,493	16,493
Program Operational Costs.....	5,159	4,753	5,235	5,235
Indirect Costs.....	4,127	3,803	4,188	4,188
Total Discretionary Costs for Strategic Goal 3.....	51,593	47,534	52,348	52,348
FTEs.....	257	255	260	260

Performance Measure:	Cumulative number of actions taken by USDA to deregulate biotechnology products based on the scientific determination that they do not pose a plant pest risk to agriculture	93	102	107	112
----------------------	--	----	-----	-----	-----

Performance Measure:	Percent of field release sites in compliance with biotechnology regulations designed to protect agriculture from plant pests	98%	99%	99%	99%
----------------------	--	-----	-----	-----	-----

Performance Measure:	Average number of days to issue a product license for veterinary biologics	282 days	263 days	253 days	253 days
----------------------	--	----------	----------	----------	----------

**Department Strategic Goal : Ensure that all of America's children have access to safe, nutritious, and balanced meals.**

Agricultural Quarantine Inspection (Appropriated).....	\$22,550	\$21,569	\$22,058	\$22,058
Animal and Plant Health Regulatory Enforcement.....	13,346	12,317	13,304	13,304
Animal Health Technical Services.....	26,650	27,895	28,978	31,069
APHIS Info. Technology Infrastructure.....	3,555	3,281	3,486	3,486
Aquatic Animal Health.....	1,854	1,711	1,847	1,847
Avian Health.....	42,640	39,354	42,919	41,183
Cattle Health.....	81,180	74,080	75,850	75,850
Contingency Fund.....	820	1,135	385	385
Cotton Pests.....	14,635	12,086	10,430	7,425
Emergency Preparedness & Response.....	13,940	12,866	13,912	13,912
Equine and Cervid Health.....	18,040	14,507	15,990	15,990
Field Crop & Rangeland Ecosystems Pests.....	3,682	3,398	3,472	3,472
National Veterinary Stockpile.....	2,255	2,081	3,052	3,052
Pest Detection.....	22,550	20,812	22,506	22,506
Physical/Operational Security.....	4,399	4,060	4,220	4,220
Plant Protection Methods Development.....	16,892	16,347	20,130	16,850
Specialty Crop Pests.....	126,239	116,511	124,230	112,662
Swine Health.....	18,860	17,407	18,245	18,245
Veterinary Biologics.....	13,495	12,455	13,462	13,462
Veterinary Diagnostics.....	25,921	23,924	25,863	25,863
Zoonotic Disease Management.....	7,380	7,851	7,809	7,809

Program/Programs Items - Discretionary		2012	2013	2014	2015
Buildings & Facilities.....		3,200	2,928	3,175	3,175
General Provision 748 Citrus Greening.....		-	-	20,000	-
Decentralized GSA Rental and DHS Security Payment.....		-	-	-	42,567
Program Operational Costs.....		58,644	54,347	57,579	55,445
Indirect Costs.....		46,915	43,478	46,063	44,356
Total Discretionary Costs for Strategic Goal 4.....		589,642	546,400	598,965	600,193
FTEs.....		3,135	3,097	3,070	3,061
Program/Programs Items - Mandatory		2012	2013	2014	2015
Farm Bill: 10202 - National Clean Plant Network.....		5,000	-	-	-
Farm Bill: 10201 - Plant Pest & Disease Mgt. & Disaster Prevention.....		50,000	47,450	-	-
Farm Bill: 10007 - Consolidated Plant Pest & Disease Mgt. & Disaster Prevention Programs .....		-	-	58,360	62,500
Trust Funds.....		10,186	13,071	9,000	9,000
Program Operational Costs.....		-	-	-	-
Indirect Costs.....		-	-	-	-
Total Mandatory Costs for Strategic Goal 4.....		65,186	60,521	67,360	71,500
FTEs.....		165	65	65	65
Performance Measure:	Value of expanded and retained markets, new market access, and trade facilitated	\$2.56 billion	\$2.9 billion	\$1.9 billion	\$1.9 billion
Subtotal, Salaries & Expenses Discretionary.....		816,534	758,519	841,721	834,341
Subtotal, Buildings & Facilities.....		3,200	2,928	3,175	3,175
Total Discretionary Request.....		819,734	761,447	844,896	837,516
FTEs.....		4,679	4,617	4,695	4,682