

2014 Explanatory Notes  
Animal and Plant Health Inspection Service

Contents

Purpose Statement .....	18-1
Statement of Available Funds and Staff Years .....	18-6
Permanent Positions by Grade and Staff Year.....	18-8
Motor Vehicle Fleet and Aircraft Data .....	18-9
Salaries and Expenses:	
Appropriations Language .....	18-11
Lead-off Tabular Statement.....	18-12
Project Statement.....	18-14
Justifications .....	18-18
Proposed Legislation .....	18-62
Geographic Breakdown of Obligations and Staff Years .....	18-64
Classification by Objects .....	18-66
Physicians Comparability Allowance Worksheet.....	18-67
Status of Program .....	18-68
Buildings and Facilities:	
Appropriations Language .....	18-119
Lead-off Tabular Statement.....	18-120
Project Statement.....	18-120
Justification .....	18-121
Geographic Breakdown of Obligations and Staff Years .....	18-122
Classification by Objects .....	18-123
Status of Program .....	18-124
Summary of Budget and Performance .....	18-126
Strategic Goal Funding Matrix.....	18-135
Full Cost by Strategic Objective.....	18-137

## 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. 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 5,634 permanent full-time employees and 1,819 other than permanent full-time employees as of September 30, 2012. Of the total, 1,217 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. As of January 15, 2013, audits in which APHIS has been involved during 2012 – 2013 include those listed below.

### OIG Reports – Completed

#33601-12-CH 8/20/12 Effectiveness of the Smuggling, Interdiction and Trade Compliance Unit: Audit report issued August 20, 2012 with 13 Recommendations. 4 recommendations are closed; 9 are pending closure.

#33701-01-AT 11/2012 Follow-up: APHIS Implementation of the Select Agent or Toxin Regulations: Audit started May 13, 2010. Report was issued on November 2012 with 12 recommendations. 3 are closed. Other recommendations have future closure dates (of June 2013).

### OIG Reports – In Progress

#05099-29-AT Citrus Crop Indemnity Payments Resulting from Hurricane Wilma in Florida: Audit still in progress.

#24601-09-KC Food and Safety Inspection Service N60 Testing of E-Coli: Audit still in progress.

#33601-01-41 APHIS Oversight of Research Facilities: Audit started July 6, 2011; audit still in process.

#50099-84-HY USDA Response to Colony Collapse Disorder: Audit started May 28, 2010; audit still in progress.

#50401-01-01 Department of Agriculture’s Consolidated Financial Statement for 2011 and 2011: Audit started January 4, 2011; audit still in progress.

#50601-01-16 Section 632(a) Transfer of Funds from the U.S. Agency for International Development to the U.S. Department of Agriculture for Pakistan: Audit started July 15, 2011; audit still in process.

#50601-01-ER USDA Controls Over Shell Egg Inspections: Audit started October 18, 2010; audit still in progress.

#50601-02-ER Effectiveness of the Department’s Recent Efforts to Enhance Agricultural Trade: Audit started October 29, 2010; audit still in progress.

### GAO Reports – In Progress

#120759 Review of Cost-Reimbursement Contracts in Federal Agencies: Audit started February 26, 2009; audit still in progress.

#120956 Agency Acquisition Savings Strategies: Audit started December 17, 2010; audit still in process.

#131046 Potential Overlap, Duplication and Fragmentation of Federal Service, Technology, Engineering, and Mathematics (STEM) Education Programs: Audit started December 21, 2010; audit still in process.

#290824 FDA Overseas Offices: Collaboration with other U.S.A. Agencies: Audit started January 5, 2010; audit still in progress.

#361161 Horse Welfare: Audit report issued June 2011 with 4 recommendations. Statement of Action dated November 23, 2011. APHIS is implementing recommendations.

#361185 Renewable Energy Initiatives: Audit started May 5, 2010; audit still in process.

#361204 Agro-terrorism Response and Recovery Efforts: Audit started May 19, 2010; Agency awaits GAO final report (draft report issued July 2011).

#361290 Food and Drug Administration's Mandatory Food Recall Authority: Audit started June 2, 2011; audit still in progress.

#361223 Antibiotic Use in Food Animals: Audit started August 10, 2010; Agency awaits GAO final report (draft report issued August 2011).

#361249 USDA Administrative PAYGO: Audit started November 30, 2010; audit still in progress.

#361330 Agricultural Quarantine Inspections: Audit started September 2011; audit still in progress.

#361356 Overlap and Duplication in Federal Invasive Species Programs: Audit started December 2011; audit still in progress.

#440936 Training of Customs of CBP Officers: Audit started November 24, 2010; audit still in progress.

#440979 Equal Access to Justice Act: Audit started May 26, 2011; audit still in process.

#460619 Duplication of Federal Inspection of High Containment Labs: Audit started May 23, 2011; audit still in progress.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

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

Item	<u>2011 Actual</u>		<u>2012 Actual</u>		<u>2013 Estimate</u>		<u>2014 Estimate</u>	
	Amount	SY	Amount	SY	Amount	SY	Amount	SY
<b>Salaries and Expenses:</b>								
Discretionary Appropriations.....	\$865,000	4,757	\$816,534	4,679	\$821,531	4,655	\$797,601	4,645
Mandatory Appropriations.....	55,000	15	55,000	15	50,000	15	50,000	15
<b>Agricultural Quarantine Inspection User Fees:</b>								
Total Collections.....	534,730	1,350	548,329	1,350	557,650	1,350	567,130	1,350
<b>Buildings and Facilities:</b>								
Discretionary Appropriations.....	3,536	-	3,200	-	3,220	-	3,175	-
<b>Trust Funds:</b>								
Mandatory Funding.....	9,418	150	10,186	150	9,000	150	9,000	150
Rescission.....	-1,737	-	-	-	-	-	-	-
Transfers In.....	11,052	-	21,405	2	-	-	-	-
Transfers Out.....	-319,116	-	-351,305	-	-349,591	-	-355,534	-
Adjusted Appropriations.....	1,157,883	6,272	1,103,349	6,196	1,091,810	6,170	1,071,372	6,160
Balance Available, SOY.....	244,692	45	224,547	15	208,559	12	190,135	22
Other Adjustments (NET).....	11,034	-	21,871	-	-	-	-	-
Total Available.....	1,413,609	6,317	1,349,767	6,211	1,300,369	6,182	1,261,507	6,182
Lapsing Balances.....	-5,192	-	-6,647	-26	-	-	-	-
Balance Available, EOY.....	-224,547	-15	-208,559	-12	-190,135	-22	-194,720	-20
Subtotal Obligations, APHIS.....	1,183,871	6,302	1,134,561	6,173	1,110,234	6,160	1,066,787	6,162
<b><u>Obligations under other USDA appropriations:</u></b>								
<b>Agricultural Marketing Service:</b>								
for administrative and technical support.....	7,270	-	6,623	-	6,739	-	6,752	-
<b>Agricultural Research Service:</b>								
for administrative and technical support.....	4,443	-	3,611	-	3,674	-	3,682	-
<b>Farm Service Agency:</b>								
for administrative and technical support.....	-	-	25	-	25	-	25	-
<b>Food Safety Inspection Service</b>								
for administrative and technical support.....	-	-	60	-	61	-	61	-
<b>Food &amp; Nutrition Service:</b>								
for administrative and technical support.....	6	-	-	-	-	-	-	-
<b>Foreign Agricultural Service:</b>								
for administrative and technical support.....	2,321	-	3,262	-	3,319	-	3,326	-
<b>Forest Service:</b>								
for administrative and technical support.....	523	-	451	-	459	-	460	-
<b>Grain Inspection Service:</b>								
for administrative and technical support.....	1,058	-	1,551	-	1,578	-	1,581	-
<b>National Appeals Division:</b>								
for administrative and technical support.....	7	-	10	-	10	-	10	-
<b>National Institute of Food and Agriculture:</b>								
for administrative and technical support.....	-	-	25	-	25	-	25	-
<b>Natural Resource Conservation Service</b>								
for administrative and technical support.....	76	-	1,350	-	1,374	-	1,376	-
<b>Office of Departmental Management</b>								
for administrative and technical support.....	730	-	-	-	-	-	-	-
<b>Office of General Counsel</b>								
administrative and technical support.....	-	-	-	-	200	-	200	-
<b>Office of the Chief Information Officer:</b>								
administrative and technical support.....	39	-	-	-	-	-	-	-
<b>Office of the Chief Financial Officer:</b>								
administrative and technical support.....	40	-	-	-	-	-	-	-
<b>Office of Human Resources Management:</b>								
administrative and technical support.....	411	-	-	-	-	-	-	-
<b>Office of the Secretary:</b>								
administrative and technical support.....	-	-	11	-	11	-	11	-
Total, Agriculture Appropriations.....	16,924	-	16,979	-	17,476	-	17,511	-

Item	<u>2011 Actual</u>		<u>2012 Actual</u>		<u>2013 Estimate</u>		<u>2014 Estimate</u>	
	Amount	SY	Amount	SY	Amount	SY	Amount	SY
<u>Other Federal Funds:</u>								
DOD: for Information Technology								
and other services and support.....	556	-	-	-	560	-	563	-
DOD, U.S. Air Force.....	6,955	-	5,588	-	5,686	-	5,697	-
DOD, U.S. Coast Guard.....	13	-	38	-	39	-	39	-
DOD, Air National Guard.....	1,893	-	1,777	-	1,808	-	1,812	-
DOD, U.S. Navy.....	3,542	-	3,612	-	3,675	-	3,683	-
DOD, U.S. Marine Corps.....	737	-	812	-	826	-	828	-
DOD, U.S. Army .....	2,080	-	1,681	-	1,710	-	1,714	-
Department of Energy.....	224	-	189	-	192	-	193	-
Dept of Health and Human Services.....	535	-	96	-	98	-	98	-
DHS: for AQI and other services and support.....	1,424	-	1,890	-	1,923	-	1,927	-
NASA, National Aeronautics and Space Administration...	339	-	405	-	412	-	413	-
USDOJ, Geological Survey, National Park Service, Office of Insular Affairs.....	1,489	-	1,851	-	1,883	-	1,887	-
USDOJ, Bureau of Land Management & Reclamation: for administrative and technical support.....	552	-	478	-	486	-	487	-
USDOJ, Fish and Wildlife Services: for natural resources and endangered species.....	2,273	-	2,238	-	2,277	-	2,282	-
USDOT, Federal Aviation Administration	1,513	-	270	-	275	-	275	-
Department of State: for miscellaneous services .....	16	-	-	-	-	-	-	-
EPA, IACB: for miscellaneous services.....	441	-	701	-	713	-	715	-
GSA: for miscellaneous services.....	9	-	6	-	6	-	6	-
Other Federal Funds.....	1,328	459	1,054	190	872	385	875	400
Total, Other Federal Funds.....	25,917	459	22,686	190	23,443	385	23,492	400
<u>Non-Federal Funds:</u>								
Funds from States and local entities for								
wildlife services support.....	39,773	545	47,356	545	47,625	575	47,718	560
Import-Export User Fees.....	35,362	325	42,801	325	43,550	342	43,637	342
NVSL Testing Fees.....	395	4	-	-	-	4	-	4
Phytosanitary Certificate User Fees.....	23,166	165	14,762	106	15,240	121	15,271	121
Reimbursable Overtime.....	8,374	90	7,900	85	8,257	94	8,273	94
Product Certificates.....	68	-	-	-	-	-	-	-
Veterinary Diagnostics User Fees.....	5,780	39	4,250	29	3,886	29	3,894	29
Other User Fees.....	2,804	-	27	-	27	-	28	-
Non-Federal.....	73	-	524	-	533	-	534	-
Subtotal, Reimbursable Salaries and Expenses.....	158,635	1,627	157,285	1,280	160,037	1,550	160,357	1,550
Total Obligations, Animal and Plant Health Inspection Service.....	\$1,342,506	7,929	\$1,291,846	7,453	\$1,270,271	7,710	\$1,227,144	7,712

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Permanent Positions by Grade and Staff Year Summary

Item	2011 Actual			2012 Actual			2013 Estimate			2014 Estimate		
	Hdqts	Field	Total	Hdqts	Field	Total	Hdqts	Field	Total	Hdqts	Field	Total
Senior Executive Service.....	24	10	34	25	11	36	25	11	36	25	11	36
GS-15.....	78	62	140	63	55	118	60	55	115	60	55	115
GS-14.....	318	262	580	309	266	575	312	260	572	312	260	572
GS-13.....	266	501	767	263	481	744	259	468	727	259	471	730
GS-12.....	219	899	1,118	212	911	1,123	208	896	1,104	208	904	1,112
GS-11.....	101	852	953	89	845	934	88	847	935	88	854	942
GS-10.....	2	10	12	2	7	9	2	7	9	2	7	9
GS-09.....	102	461	563	88	431	519	90	413	503	90	441	531
GS-08.....	8	272	280	7	270	277	6	267	273	6	267	273
GS-07.....	95	507	602	90	484	574	88	473	561	88	490	578
GS-06.....	20	286	306	14	243	257	11	250	261	11	271	282
GS-05.....	17	207	224	6	183	189	6	180	186	6	202	208
GS-04.....	5	42	47	5	34	39	5	34	39	5	34	39
GS-03.....	2	5	7	2	6	8	1	5	6	1	5	6
GS-02.....	6	2	8	3	4	7	3	4	7	3	4	7
Other Graded Positions.....	19	138	157	26	137	163	27	127	154	27	127	154
Total Perm. Employment EOY.....	1,282	4,516	5,798	1,204	4,368	5,572	1,191	4,297	5,488	1,191	4,403	5,594
Unfilled Positions EOY.....	28	97	125	13	49	62	21	76	97	32	119	151
Total Permanent Positions.....	1,310	4,613	5,923	1,217	4,417	5,634	1,212	4,373	5,585	1,223	4,522	5,745
Staff Year Estimate.....	1,543	6,386	7,929	1,450	6,003	7,453	1,502	6,218	7,720	1,500	6,210	7,710

## ANIMAL AND PLANT HEALTH INSPECTION SERVICE

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

The APHIS mission requires the use of vehicles to deliver services in a timely manner. APHIS' veterinarians, animal health technicians, inspectors, plant protection and quarantine officers, wildlife biologists, and other technical personnel rely upon motor vehicles to assist in their daily job activities, which entail travel between inspection sites, farms, ranches, ports, nurseries, and other commercial firms. The use of Government-Owned Vehicles has shown to be more cost effective than having personnel use privately-owned vehicles. To maintain the life span of the vehicles, operators are required to keep historical maintenance records and to submit the vehicles' operational data. Periodic maintenance surveys and consolidation of the vehicle fleet ensure the full use of each vehicle in the fleet.

Replacement criteria: Vehicle replacement is done in accordance with Title 41, CFR, § 102-34.280.

Replacement/retirement decisions are conducted at the program level, based upon utilization, age, condition, and funding availability. Normally, passenger vehicles are not replaced unless they either have mileage of 60,000 or more, or are three years or older in age. APHIS has implemented efforts to both increase the number of alternative fuel vehicles and extend the life cycle of each vehicle.

Changes to the motor vehicle fleet. For FY 2014, APHIS motor vehicle fleet is estimated to remain flat after two years of fleet reductions. In particular, we expect to reduce the number of: sedans/station wagons by 2; sport utility vehicles by 10; and medium duty vehicles by 4. However, there is an expected need to increase the number of light duty trucks by 16. There is no planned change in the number of vans, buses, and heavy duty trucks.

Replacement of passenger motor vehicles. For FY 2014, the Agency proposes replacing 16 of the 362 vehicles currently in the Agency fleet. The vehicles replacement will be utilized in the field by APHIS' technical personnel. Vehicles designated for disposal meet the General Service Administration's standards by having mileage of 60,000 or more, or by being three years of age or older.

Impediments to managing the motor vehicle fleet. USDA is in the process of implementing fleet management software system to facilitate Department-wide accountability. Currently, APHIS manages its fleet by accessing a variety of software packages managed by the programs. APHIS also welcomes the availability of the USDA fleet card system. Finally, APHIS is implementing a new Vehicle Allocation Methodology. This new process will increase our ability to manage our fleet, and continue to decrease the size and cost of our fleet, while still meeting the needs of our programs and allowing us to serve the taxpayers in the most effective way possible.

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					
2011	420	285	1,126	562	2,565	-	459	16	5,433	\$17,050
Change	-39	-35	-39	-97	-107	-	-22	-1	-340	-706
2012	381	250	1,087	465	2,458	-	437	15	5,093	16,344
Change	-19	-20	-25	-27	-57	-	+7	-	-141	+1,313
2013	362	230	1,062	438	2,401	-	444	15	4,952	17,657
Change	-2	-	-10	+6	+10	-	-4	-	-	+530
2014	360	230	1,052	444	2,411	-	440	15	4,952	18,187

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

\*\* Excludes acquisition costs and gains from sale of vehicles as shown in FAST.

The APHIS aircraft fleet consists of 7 operable aircraft for domestic plant pest and disease management programs and, 71 for the wildlife damage management programs. Of the 71 aircraft: 62 are owned, 22 of which are non-operational, 5 are borrowed, and 4 are rented.

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.

Aircraft purchases are made primarily to replace aging or inoperable aircraft. Aircraft replacement authority is provided in the Appropriations Act; however, the Agency only replaces the aircraft when necessary to maintain fleet safety and efficient operating conditions. The Agency plans to add two additional aircraft in 2014.

## ANIMAL AND PLANT HEALTH INSPECTION SERVICE

The estimates include proposed changes in the language of this item as follows:

### 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), \$797,601,000, of which \$1,507,000, 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 \$8,944,000 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 \$37,891,000, to remain available until expended, shall be for Animal Health Technical Services; of which \$893,000 shall be for activities under the authority of the Horse Protection Act of 1970, as amended (15 U.S.C. 1831); of which \$49,840,000, to remain available until expended, shall be used to support avian health; of which \$4,335,000, to remain available until expended, shall be for information technology infrastructure; of which \$147,419,000, to remain available until expended, shall be for specialty crop pests; of which, \$8,877,000, to remain available until expended, shall be for field crop and rangeland ecosystem pests; of which \$48,290,000, to remain available until expended, shall be for tree and wood pests; of which \$3,723,000, 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 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, 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

2013 Estimate .....	\$821,531,000
Budget Estimate, 2014.....	<u>797,601,000</u>
Change in Appropriation.....	<u><u>-23,930,000</u></u>

Summary Of Increases and Decreases - Current Law  
(Dollars in thousands)

	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>		<u>2014</u>
	<u>Actual</u>	<u>Change</u>	<u>Change</u>	<u>Change</u>		<u>Estimated</u>
Discretionary Appropriations:						
<u>Safeguarding and Emergency Preparedness/Response</u>						
Animal Health Technical Services.....	\$29,550	+\$2,950	+\$199	+\$5,192	1a	\$37,891
Aquatic Animal Health.....	5,422	-3,161	+14	-3	1b	2,272
Avian Health.....	50,090	+1,910	+318	-2,478	1c	49,840
Cattle Health.....	109,594	-10,594	+606	-7,829	1d	91,777
Equine and Cervid Health <sup>a/</sup> .....	17,881	-12,831	+31	-1,346	1e	3,735
National Veterinary Stockpile.....	3,561	-811	+17	+956	1f	3,723
Sheep and Goat Health <sup>a/</sup> .....	18,945	-1,995	+104	-2,795	1g	14,259
Swine Health.....	25,547	-2,547	+141	-2,748	1h	20,393
Veterinary Biologics.....	16,424	+33	+101	-45	1i	16,513
Veterinary Diagnostics.....	32,309	-698	+193	-96	1j	31,708
Zoonotic Disease Management.....	10,447	-1,447	+55	-32	1k	9,023
Subtotal, Animal Health.....	<u>319,770</u>	<u>-29,191</u>	<u>+1,779</u>	<u>-11,224</u>		<u>281,134</u>
Agricultural Quarantine Inspection (Appropriated).....	25,948	+1,552	+168	-2,370	1l	25,298
Cotton Pests.....	20,958	-3,110	+109	-9,013	1m	8,944
Field Crop & Rangeland Ecosystems Pests.....	11,296	-2,228	+55	-246	1n	8,877
Pest Detection.....	26,702	+798	+168	-94	1o	27,574
Plant Protection Methods Development.....	21,230	-630	+126	-53	1p	20,673
Specialty Crop Pests.....	150,079	+3,871	+941	-7,472	1q	147,419
Tree & Wood Pests.....	74,994	-19,356	+341	-7,689	1r	48,290
Subtotal, Plant Health .....	<u>331,207</u>	<u>-19,103</u>	<u>+1,908</u>	<u>-26,937</u>		<u>287,075</u>
Wildlife Damage Management.....	72,058	+442	+444	+12,484	1s	85,428
Wildlife Services Methods Development.....	17,078	+922	+110	-25	1t	18,085
Subtotal, Wildlife Services .....	<u>89,136</u>	<u>+1,364</u>	<u>+554</u>	<u>+12,459</u>		<u>103,513</u>
Animal & Plant Health Regulatory Enforcement.....	15,455	+820	+100	-25	1u	16,350
Biotechnology Regulatory Services.....	13,037	+5,098	+111	-31	1v	18,215
Subtotal, Regulatory Services .....	<u>28,492</u>	<u>+5,918</u>	<u>+211</u>	<u>-56</u>		<u>34,565</u>

	2011 <u>Actual</u>	2012 <u>Change</u>	2013 <u>Change</u>	2014 <u>Change</u>	2014 <u>Estimated</u>
Contingency Fund.....	2,054	-1,054	+6	+501 1w	1,507
Emergency Preparedness & Response.....	19,707	-2,707	+104	-59 1x	17,045
Subtotal, Emergency Management .....	<u>21,761</u>	<u>-3,761</u>	<u>+110</u>	<u>+442</u>	<u>18,552</u>
Subtotal Safeguarding and Emergency Preparedness/Response.....	<u>790,366</u>	<u>-44,773</u>	<u>+4,562</u>	<u>-25,316</u>	<u>724,839</u>
<u>Safe Trade and International Technical Assistance</u>					
Agriculture Import/Export.....	12,579	+775	+82	+745 2a	14,181
Overseas Technical & Trade Operations.....	20,136	-32	+123	-442 2b	19,785
Subtotal Safe Trade and International Technical Assistance.....	<u>32,715</u>	<u>+743</u>	<u>+205</u>	<u>+303</u>	<u>33,966</u>
<u>Animal Welfare</u>					
Animal Welfare.....	24,435	+2,652	+166	+950 3a	28,203
Horse Protection.....	499	+197	+4	+193 3b	893
Subtotal, Animal Welfare.....	<u>24,934</u>	<u>+2,849</u>	<u>+170</u>	<u>+1,143</u>	<u>29,096</u>
<u>Agency Management</u>					
APHIS Information Technology Infrastructure.....	4,465	-130	+27	-27 4a	4,335
Physical/Operational Security.....	5,714	-349	+33	-33 4b	5,365
Subtotal, Agency Management.....	<u>10,179</u>	<u>-479</u>	<u>+60</u>	<u>-60</u>	<u>9,700</u>
Congressional Unidentified Funding.....	5,076	-5,076	-	-	-
Total, Appropriation or Change .....	<u>\$863,270</u>	<u>-\$46,736</u>	<u>+\$4,997</u>	<u>-\$23,930</u>	<u>\$797,601</u>

a/ In 2013, APHIS requested to separate the current Equine, Cervid, and Small Ruminant Health line item into two line items: Sheep and Goat Health, and Equine and Cervid Health. These two commodity groups have differing industry practices and share few disease concerns. The figures used above in this exhibit in 2011 – 2012 are for comparability purposes only. The appropriations for the Equine, Cervid and Small Ruminant Health line item in 2011 was \$36,826,000 and in 2012 it was \$22,000,000.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Salaries and Expenses

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

Program	2011 Actual		2012 Actual		2013 Estimate		Inc. or Dec.		2014 Estimate	
	Amount	SY	Amount	SY	Amount	SY	Amount	SY	Amount	SY
<u>Discretionary Appropriations:</u>										
<u>Safeguarding and Emergency Preparedness/Response</u>										
Animal Health Technical Services.....	\$29,550	64	\$32,500	64	\$32,699	64	+\$5,192	-	\$37,891	64
Aquatic Animal Health.....	5,422	22	2,261	22	2,275	22	-3	-	2,272	22
Avian Health.....	50,090	191	52,000	196	52,318	194	-2,478	-	49,840	194
Cattle Health.....	109,594	585	99,000	570	99,606	570	-7,829	-24	91,777	546
Equine and Cervid Health <sup>w/</sup> .....	17,881	38	5,050	24	5,081	24	-1,346	-7	3,735	17
National Veterinary Stockpile.....	3,561	1	2,750	1	2,767	1	+956	-	3,723	1
Sheep and Goat Health <sup>w/</sup> .....	18,945	109	16,950	109	17,054	109	-2,795	-6	14,259	103
Swine Health.....	25,547	156	23,000	127	23,141	127	-2,748	-21	20,393	106
Veterinary Biologics.....	16,424	108	16,457	108	16,558	108	-45	+1	16,513	109
Veterinary Diagnostics.....	32,309	190	31,611	190	31,804	190	-96	-	31,708	190
Zoonotic Disease Management.....	10,447	45	9,000	45	9,055	45	-32	-	9,023	45
Subtotal, Animal Health.....	<u>319,770</u>	<u>1,509</u>	<u>290,579</u>	<u>1,456</u>	<u>292,358</u>	<u>1,454</u>	<u>-11,224</u>	<u>-57</u>	<u>281,134</u>	<u>1,397</u>
Agricultural Quarantine Inspection (Appropriated).....	25,948	364	27,500	364	27,668	362	-2,370	-19	25,298	343
Cotton Pests.....	20,958	61	17,848	61	17,957	61	-9,013	-5	8,944	56
Field Crop & Rangeland Ecosystems Pests.....	11,296	60	9,068	60	9,123	58	-246	-	8,877	58
Pest Detection.....	26,702	145	27,500	145	27,668	145	-94	-	27,574	145
Plant Protection Methods Development.....	21,230	140	20,600	140	20,726	140	-53	-	20,673	140
Specialty Crop Pests.....	150,079	700	153,950	700	154,891	698	-7,472	-13	147,419	685
Tree & Wood Pests.....	74,994	376	55,638	321	55,979	319	-7,689	-7	48,290	312
Subtotal, Plant Health.....	<u>331,207</u>	<u>1,846</u>	<u>312,104</u>	<u>1,791</u>	<u>314,012</u>	<u>1,783</u>	<u>-26,937</u>	<u>-44</u>	<u>287,075</u>	<u>1,739</u>
Wildlife Damage Management.....	72,058	534	72,500	534	72,944	531	+12,484	+84	85,428	615
Wildlife Services Methods Development.....	17,078	164	18,000	164	18,110	163	-25	-1	18,085	162
Subtotal, Wildlife Services.....	<u>89,136</u>	<u>698</u>	<u>90,500</u>	<u>698</u>	<u>91,054</u>	<u>694</u>	<u>+12,459</u>	<u>+83</u>	<u>103,513</u>	<u>777</u>
Animal & Plant Health Regulatory Enforcement.....	15,455	142	16,275	142	16,375	142	-25	-	16,350	142
Biotechnology Regulatory Services.....	13,037	81	18,135	92	18,246	90	-31	-	18,215	90
Subtotal, Regulatory Services.....	<u>28,492</u>	<u>223</u>	<u>34,410</u>	<u>234</u>	<u>34,621</u>	<u>232</u>	<u>-56</u>	<u>-</u>	<u>34,565</u>	<u>232</u>
Contingency Fund.....	2,054	-	1,000	15	1,006	15	+501	-	1,507	15
Emergency Preparedness & Response.....	19,707	92	17,000	91	17,104	89	-59	+2	17,045	91
Subtotal, Emergency Management.....	<u>21,761</u>	<u>92</u>	<u>18,000</u>	<u>106</u>	<u>18,110</u>	<u>104</u>	<u>+442</u>	<u>+2</u>	<u>18,552</u>	<u>106</u>
Subtotal Safeguarding and Emergency Preparedness/Response.....	<u>790,366</u>	<u>4,368</u>	<u>745,593</u>	<u>4,285</u>	<u>750,155</u>	<u>4,267</u>	<u>-25,316</u>	<u>-16</u>	<u>724,839</u>	<u>4,251</u>
<u>Safe Trade and International Technical Assistance</u>										
Agriculture Import/Export.....	12,579	92	13,354	92	13,436	92	+745	-	14,181	92
Overseas Technical & Trade Operations.....	20,136	73	20,104	73	20,227	73	-442	+3	19,785	76
Subtotal Safe Trade and International Technical Assistance.....	<u>32,715</u>	<u>165</u>	<u>33,458</u>	<u>165</u>	<u>33,663</u>	<u>165</u>	<u>+303</u>	<u>+3</u>	<u>33,966</u>	<u>168</u>
<u>Animal Welfare</u>										
Animal Welfare.....	24,435	219	27,087	224	27,253	218	+950	-	28,203	218
Horse Protection.....	499	5	696	5	700	5	+193	+3	893	8
Subtotal, Animal Welfare.....	<u>24,934</u>	<u>224</u>	<u>27,783</u>	<u>229</u>	<u>27,953</u>	<u>223</u>	<u>+1,143</u>	<u>+3</u>	<u>29,096</u>	<u>226</u>
<u>Agency Management</u>										
APHIS Information Technology Infrastructure.....	4,465	-	4,335	-	4,362	-	-27	-	4,335	-
Physical/Operational Security.....	5,714	-	5,365	-	5,398	-	-33	-	5,365	-
Subtotal, Agency Management.....	<u>10,179</u>	<u>-</u>	<u>9,700</u>	<u>-</u>	<u>9,760</u>	<u>-</u>	<u>-60</u>	<u>-</u>	<u>9,700</u>	<u>-</u>
Congressional Unidentified Funding.....	5,076	-	-	-	-	-	-	-	-	-
Subtotal, Appropriated.....	<u>863,270</u>	<u>4,757</u>	<u>816,534</u>	<u>4,679</u>	<u>821,531</u>	<u>4,655</u>	<u>-23,930</u>	<u>-10</u>	<u>797,601</u>	<u>4,645</u>
Rescission P.L. 112-10.....	1,730	-	-	-	-	-	-	-	-	-
Subtotal, Discretionary Appropriated.....	<u>865,000</u>	<u>4,757</u>	<u>816,534</u>	<u>4,679</u>	<u>821,531</u>	<u>4,655</u>	<u>-23,930</u>	<u>-10</u>	<u>797,601</u>	<u>4,645</u>

Program	2011 Actual		2012 Actual		2013 Estimate		Inc. or Dec.		2014 Estimate	
	Amount	SY	Amount	SY	Amount	SY	Amount	SY	Amount	SY
Authority from Offsetting collections.....	210,092	1,627	205,042	1,627	154,175	1,550	+275	-	154,450	1,550
Mandatory Funding:										
Farm Bill, Section 10201 .....	50,000	15	50,000	15	50,000	15	-	-	50,000	15
Farm Bill, Section 10202 .....	5,000	-	5,000	-	-	-	-	-	-	-
Subtotal, Farm Bill.....	<u>55,000</u>	<u>15</u>	<u>55,000</u>	<u>15</u>	<u>50,000</u>	<u>15</u>	<u>-</u>	<u>-</u>	<u>50,000</u>	<u>15</u>
Trust Funds.....	9,418	150	10,186	150	9,000	150	-	-	9,000	150
Agricultural Quarantine Inspection User Fees:										
Total Collections.....	534,730	1,350	548,329	1,350	557,650	1,350	+9,480	-	567,130	1,350
Less: Transfer to DHS .....	-319,116	-	-348,805	-	-349,591	-	-5,943	-	-355,534	-
AQI User Fees (APHIS).....	215,614	1,350	199,523	1,350	208,059	1,350	+3,537	-	211,596	1,350
Subtotal, Mandatory Funding.....	<u>280,032</u>	<u>1,515</u>	<u>264,710</u>	<u>1,515</u>	<u>267,059</u>	<u>1,515</u>	<u>+3,537</u>	<u>-</u>	<u>270,596</u>	<u>1,515</u>
Total Appropriations .....	<u>1,353,394</u>	<u>7,899</u>	<u>1,286,286</u>	<u>7,821</u>	<u>1,242,765</u>	<u>7,720</u>	<u>-20,118</u>	<u>-10</u>	<u>1,222,647</u>	<u>7,710</u>
Transfers In:										
CCC.....	10,922	-	21,294	2	-	-	-	-	-	-
H1N1.....	-	-	-	-	-	-	-	-	-	-
Departmental .....	130	-	111	-	-	-	-	-	-	-
Transfers Out:										
Working Capital Fund.....	-	-	-2,500	-	-	-	-	-	-	-
Subtotal, Transfers.....	<u>11,052</u>	<u>-</u>	<u>18,905</u>	<u>2</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Balance Available, SOY.....	258,774	45	292,014	15	321,232	170	-24,206	+10	297,026	180
Balance Available, SOY rescission.....	-10,887	-	-	-	-	-	-	-	-	-
Recoveries Trust Funds.....	960	-	321	-	-	-	-	-	-	-
Recoveries.....	23,489	-	22,491	-	-	-	-	-	-	-
Total Available .....	<u>1,636,782</u>	<u>7,944</u>	<u>1,620,016</u>	<u>7,838</u>	<u>1,563,997</u>	<u>7,890</u>	<u>-44,324</u>	<u>-</u>	<u>1,519,673</u>	<u>7,890</u>
Lapsing Balances.....	-10,480	-	-10,572	-215	-	-	-	-	-	-
Balance Available, EOY.....	<u>-292,014</u>	<u>-15</u>	<u>-321,232</u>	<u>-170</u>	<u>-297,026</u>	<u>-180</u>	<u>+1,097</u>	<u>+2</u>	<u>-295,929</u>	<u>-178</u>
Total Obligations .....	<u>1,334,288</u>	<u>7,929</u>	<u>1,288,212</u>	<u>7,453</u>	<u>1,266,971</u>	<u>7,710</u>	<u>-43,227</u>	<u>+2</u>	<u>1,223,744</u>	<u>7,712</u>

a/ In 2013 APHIS requested to separate the current Equine, Cervid, and Small Ruminant Health line item into two line items: Sheep and Goat Health, and Equine and Cervid Health. These two commodity groups have differing industry practices and share few disease concerns. The figures used above in this exhibit are for comparability purposes only. The appropriations for the Equine, Cervid and Small Ruminant Health line item in 2011 was \$36,826,000 and in 2012 it was \$22,000,000.

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Salaries and Expenses

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

Program	2011 Actual		2012 Actual		2013 Estimate		Inc. or Dec.		2014 Estimate	
	Amount	SY	Amount	SY	Amount	SY	Amount	SY	Amount	SY
Discretionary Obligations:										
<u>Safeguarding and Emergency Preparedness/Response</u>										
Animal Health Technical Services.....	\$32,216	64	\$30,349	64	\$35,176	64	+\$3,075	-	\$38,251	64
Aquatic Animal Health.....	5,401	22	2,261	22	2,275	22	-3	-	2,272	22
Avian Health.....	53,649	191	53,206	194	52,574	192	-1,769	-2	50,805	190
Cattle Health.....	110,759	585	97,722	570	99,608	570	-7,831	-24	91,777	546
Equine and Cervid Health <sup>av</sup> .....	17,881	38	5,050	24	5,081	24	-1,346	-7	3,735	17
National Veterinary Stockpile.....	4,342	1	3,026	1	3,191	2	+1,047	-	4,238	2
Sheep and Goat Health <sup>av</sup> .....	19,197	109	18,502	109	17,444	107	-2,685	-9	14,759	98
Swine Health.....	25,543	156	22,897	127	23,141	127	-2,748	-21	20,393	106
Veterinary Biologics.....	16,416	108	16,445	108	16,558	108	-45	-	16,513	108
Veterinary Diagnostics.....	32,303	190	31,582	190	31,804	190	-96	-	31,708	190
Zoonotic Disease Management.....	10,447	45	8,956	45	9,055	45	-32	-1	9,023	44
Subtotal, Animal Health.....	328,154	1,509	289,996	1,454	295,908	1,451	-12,434	-64	283,474	1,387
Agricultural Quarantine Inspection (Appropriated)....	25,907	364	27,211	362	27,668	362	-2,370	-19	25,298	343
Cotton Pests.....	20,979	63	19,860	63	18,187	59	-9,183	-1	9,004	58
Field Crop & Rangeland Ecosystems Pests.....	11,259	62	8,896	60	9,524	60	-647	-4	8,877	56
Pest Detection.....	26,697	145	27,358	145	27,668	145	-94	-	27,574	145
Plant Protection Methods Development.....	21,066	140	20,081	140	20,726	140	-53	-	20,673	140
Specialty Crop Pests.....	155,425	704	166,886	704	159,450	691	-8,183	1	151,267	692
Tree & Wood Pests.....	74,933	380	78,300	324	60,642	319	-9,852	-2	50,790	317
Subtotal, Plant Health.....	336,265	1,858	348,592	1,798	323,865	1,776	-30,382	-25	293,483	1,751
Wildlife Damage Management <sup>bv</sup> .....	75,366	534	70,480	531	73,075	531	+12,453	+84	85,528	615
Wildlife Services Methods Development <sup>bv</sup> .....	18,782	164	16,924	163	18,081	163	+4	-1	18,085	162
Subtotal, Wildlife Services.....	94,148	698	87,404	694	91,156	694	+12,457	+83	103,613	777
Animal & Plant Health Regulatory Enforcement.....	15,011	142	16,189	142	16,375	142	-25	-	16,350	142
Biotechnology Regulatory Services.....	13,019	81	18,134	90	18,246	90	-31	-	18,215	90
Subtotal, Regulatory Services.....	28,030	223	34,323	232	34,621	232	-56	-	34,565	232
Contingency Fund.....	-	-	1,500	-	2,349	15	-349	-	2,000	15
Emergency Preparedness & Response.....	19,428	92	16,753	89	17,104	89	-59	+2	17,045	91
Subtotal, Emergency Management.....	19,428	92	18,253	89	19,453	104	-408	+2	19,045	106
Subtotal Safeguarding and Emergency Preparedness/Response.....	806,025	4,380	778,568	4,267	765,003	4,257	-30,824	-4	734,180	4,253
<u>Safe Trade and International Technical Assistance</u>										
Agriculture Import/Export.....	12,573	92	13,310	92	13,436	92	+745	-	14,181	92
Overseas Technical & Trade Operations.....	20,002	73	20,104	73	20,227	73	-442	+3	19,785	76
Subtotal Safe Trade and International Technical Assistance.....	32,575	165	33,414	165	33,663	165	+303	+3	33,966	168
<u>Animal Welfare</u>										
Animal Welfare.....	23,895	219	27,016	218	27,253	218	+950	-	28,203	218
Horse Protection.....	497	5	696	5	700	5	+193	+3	893	8
Subtotal, Animal Welfare.....	24,392	224	27,712	223	27,953	223	1,143	+3	29,096	226
<u>Agency Management</u>										
APHIS Information Technology Infrastructure.....	4,610	-	4,494	-	4,486	-	-126	-	4,360	-
Physical/Operational Security.....	5,540	-	5,224	-	5,398	-	-33	-	5,365	-
Subtotal, Agency Management.....	10,150	-	9,717	-	9,884	-	-159	-	9,725	-
Subtotal, Discretionary.....	873,142	4,769	849,412	4,655	836,504	4,645	-29,537	+2	806,967	4,647
Mandatory Obligations:										
Agricultural Quarantine Inspection User Fees.....	190,738	1,350	188,234	1,350	192,649	1,350	+771	-	193,420	1,350
Farm Bill, Section 10201 and 10202.....	52,378	17	52,115	15	50,348	15	-348	-	50,000	15
Trust Funds.....	14,641	150	11,702	150	12,000	150	-3,000	-	9,000	150
Subtotal, Mandatory.....	257,757	1,517	252,051	1,515	254,997	1,515	-2,576	-	252,420	1,515

Program	2011 Actual		2012 Actual		2013 Estimate		Inc. or Dec.		2014 Estimate	
	Amount	SY	Amount	SY	Amount	SY	Amount	SY	Amount	SY
Other Obligations:										
CCC.....	40,954	16	24,561	3	11,400	-	-11,400	-	-	-
Obligations from Offsetting collections.....	158,636	1,627	157,285	1,280	160,037	1,550	+320	-	160,357	1,550
Homeland Security, HUB Relo, & Department.....	885	-	111	-	34	-	-34	-	-	-
H1N1.....	2,914	-	4,793	-	4,000	-	-	-	4,000	-
Subtotal, Other.....	203,389	1,643	186,750	1,283	175,471	1,550	-11,114	-	164,357	1,550
Total, Obligations.....	1,334,288	7,929	1,288,212	7,453	1,266,971	7,710	-43,227	+2	1,223,744	7,712
Lapsing Balances.....	10,480	-	10,572	215	-	-	-	-	-	-
Balance Available, EOY.....	292,014	15	321,232	170	297,026	180	-1,097	-2	295,929	178
Total, Available.....	1,636,782	7,944	1,620,016	7,838	1,563,997	7,890	-44,324	-	1,519,673	7,890
Transfers In:										
CCC.....	-10,922	-	-21,294	-2	-	-	-	-	-	-
Departmental.....	-130	-	-111	-	-	-	-	-	-	-
Transfers Out:										
Working Capital Fund.....	-	-	2,500	-	-	-	-	-	-	-
Rescission P.L. 112-10.....	1,730	-	-	-	-	-	-	-	-	-
Balance Available, SOY.....	-258,774	-45	-292,014	-15	-321,232	-170	+24,206	-10	-297,026	-180
Balance Available, SOY rescission.....	10,887	-	-	-	-	-	-	-	-	-
Recoveries: Other (Net).....	-24,449	-	-22,812	-	-	-	-	-	-	-
Total, Appropriation.....	1,353,394	7,899	1,286,286	7,821	1,242,765	7,720	-20,118	-10	1,222,647	7,710

a/ In 2013 APHIS is requested to separate the current Equine, Cervid, and Small Ruminant Health line item into two line items: Sheep and Goat Health, and Equine and Cervid Health. These two commodity groups have differing industry practices and share few disease concerns. The figures used above in this exhibit are for comparability purposes only. The appropriations for the Equine, Cervid and Small Ruminant Health line item in 2011 was \$36,826,000 and in 2012 it was \$22,000,000.

b/ The 2012 appropriation included \$7 million in funding not associated with a particular Agency line item. Of the amount, \$2 million was reprogrammed to address animal welfare enforcement and the remaining \$5 million was used to cover the removal of earmark funding, primarily impacting the Agency's Wildlife Services programs.

## ANIMAL AND PLANT HEALTH INSPECTION SERVICE

### Justification of Increases and Decreases Salaries and Expenses

An increase of \$4,033,000 to fund increased pay costs which includes \$731,000 for annualization of the fiscal year 2013 pay raise and \$3,302,000 for the anticipated fiscal year 2014 pay raise.

This increase will enable APHIS to maintain current staffing levels, which are critical to achieving the Agency's objective of protecting American agriculture. Because a large portion of APHIS' budget is in support of personnel compensation, this increase for pay costs would help prevent a reduction in direct program operations that directly limit the Agency's ability to conduct offshore threat assessment and risk reduction activities; regulate and monitor to reduce the risk of introduction of invasive species; ensure the safe research, release, and movement of agricultural biotechnology products; manage issues related to the health of U.S. animal and plant resources and conflicts with wildlife; and develop emergency preparedness and response capabilities to quickly detect, contain and eradicate animal and plant pest and disease outbreaks. If additional funding is not provided, APHIS will redirect funds, internally, from program operations to cover this increase in pay for associated employees, thereby reducing program dollars available for hands-on operations.

A decrease of \$12,006,000 throughout APHIS related to cost savings measures and operating efficiencies.

APHIS has identified areas that will result in cost savings and operating efficiencies. These areas include eliminating development funding for low priority information technology investments and further consolidating certain services such as IT customer service support and telecommunications. The Agency also continues to manage vacancies and realign positions to realize savings. APHIS anticipates a total savings of \$12.006 million below the FY 2012 funding levels related to these measures. The estimated cost savings are predominantly for centralized support functions, not associated with a particular line item. Therefore, the savings have been distributed proportionately amongst all line items.

(1) A net decrease of -\$25,316,000 and 16 staff years for Safeguarding and Emergency Preparedness/Response:

A net decrease of -\$11,224,000 and 57 staff years for Safeguarding and Emergency Preparedness/Response - Animal Health

(a) A net increase of \$5,192,000 for the Animal Health Technical Services program (\$32,699,000 and 64 staff years available in 2013).

APHIS' Animal Health Technical Services enhance the tools available for acquiring and managing information vital for maintaining and improving global market access for animal agriculture. 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 on a national basis, 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 the Agency 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.

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 valued at more than \$65 billion in 2011 (National Agricultural Statistical Service). The establishment of minimum national standards and practices promote consistency in cross-cutting technical services provided. APHIS' animal disease traceability program (according to the proposed rule) will require, with some exceptions, the official identification of livestock moved interstate and help reduce the amount of time needed to identify animals and location of

animals that have been in contact with an infected animal. Only 35-40 percent of U.S. cattle currently have official identification. Rulemaking and other recent efforts are expected to substantially increase the percentage of animals officially identified. Knowing where diseased and at-risk animals are located helps to preserve animal health, reduce the number of animal deaths if outbreaks occur, and limits the extent of economic loss to owners and communities.

APHIS allows States and Tribes to implement traceability programs that work with their stakeholders as long as national standards are met. The Agency provides funding to help support the implementation of ADT at the local level. States and Tribes must have an approved ADT strategic plan on file with APHIS to be eligible for cooperative agreement funding. States and Tribes receiving cooperative agreement funding are required to provide quarterly reports on progress toward achieving the objectives stated within their strategic plan. ADT is a performance based program and the establishment of traceability performance standards will provide documentation on improvements made over time.

APHIS makes available technical applications and systems that are vital for national animal health surveillance and response activities. APHIS 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 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. To increase the knowledge base of accredited veterinarians, the program integrates formal training into the curriculum of all 28 U.S. veterinary schools.

APHIS continuously evaluates its Animal Health Technical Services activities and makes adjustments to improve efficiency and effectiveness. Throughout the development of the ADT rule, APHIS held public meetings, Tribal consultations, and species-based conference calls to discuss the proposed content with stakeholders. Following the extensive public outreach, APHIS revised its approach to animal identification and disease tracing. The Agency's new approach provides flexibility to the States and Tribes.

Without funding for this program, the information needed to trace the origin of diseased animals would not be available; even efforts funded by emergency programs could be stymied by a lack of records. This would result in increased disease spread and potential loss of marketability for animals and animal products. In addition, 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 40 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.

#### *Animal disease traceability (+\$5.623 million)*

APHIS introduced the National Animal Identification System (NAIS) in 2004 to enhance the United States' capability to minimize the spread of foreign and domestic animal diseases of concern. In 2009, USDA collected stakeholder views regarding the program from a variety of sources (e.g., *Federal Register*-announced comment periods, listening sessions, and stakeholder input). This input enabled APHIS to develop a new traceability approach.

The new 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 sectors of the industry

as a starting point to increase the number of animals officially identified, particularly cattle. As a result, USDA has gained support for advancing animal disease traceability.

The improved disease traceability framework will focus attention where the impact of disease spread is the greatest—animals moving interstate. Rulemaking requiring official identification of livestock along with certificates that document the health of the animals (unless otherwise exempt) brings assurance that necessary levels of participation will be achieved. This rulemaking, as its primary benefit, will enhance the ability of the United States to regionalize and compartmentalize animal health issues more quickly, minimizing losses and enabling reestablishment of foreign and domestic market access with minimum delay in the wake of an animal disease event. Therefore, the Agency’s animal disease traceability activities are crucial to minimizing and preventing economic damages to the U.S. livestock industry. The value of U.S. beef exports totaled \$5 billion in 2011. Protecting a half of a percent of these exports would justify the requested funding.

Unlike the previous system, this mandatory approach establishes regulations where current traceability efforts have had the greatest void, primarily in the cattle sector. While other species are included, current practices for many of those species result in adequate traceability. Those practices are being maintained.

The vast diversity of U.S. animal agriculture has made it difficult to deploy a “single, one-size-fits-all” solution similar to that of other countries. For example, the United Kingdom and Japan have a one-size-fits-all system for traceability since there is limited diversity in the ways that animal agriculture production is handled. The refocused framework for the United States relies on common standards to ensure compatibility of systems while supporting local flexibility. Tracing capability is the “end product,” and the new framework establishes traceability performance standards to ensure progress is made. APHIS’ objective is to decrease the amount of time needed to complete tracing animals, and the performance-based approach directs our efforts accordingly.

The new traceability approach also addresses many concerns that Congress identified with the NAIS. Included in those concerns were the ability to identify meaningful performance standards that can measure the value of the system and that are linked to cooperator funding, developing a mandatory system, and a reliable system that has reasonable operational costs. Traceability continues to be an important issue with trading partners. The new approach, while advancing traceability for disease response, will also 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 proposes an increase of \$5.62 million for the refocused ADT program, which will provide about \$14 million for the effort in 2014. APHIS will use approximately \$1.5 million of the total requested budget to support information technology systems to administer animal identification devices, allocate location identifiers, and manage the animal disease traceability information systems. APHIS will continue to provide the premises identification systems to States and Tribes that wish to use these systems. Planned expenditures include the contract with the National Information Technology Center to operate and maintain these tracing systems. Approximately \$6.641 million of the total requested budget will be used to fund cooperative agreements with States and Tribes to implement the revised traceability plan and contracts allowing USDA to obtain additional low-cost identification tags. The remaining budget will be used to support policy and program administration.

The requested increase will enable APHIS to maintain the current level of infrastructure, and to maintain the progress in premises registration and data collection and management that the program has made thus far. The proposed funding level more accurately reflects how much the program needs to carry out essential activities and retain the advances made to date.

*Reduction in Agency-level operating expenses (-\$488,000)*

A reduction of \$488,000 is requested for this line item related to Agency-level cost savings measures and operating efficiencies. Please refer to second paragraph on page 18-18.

Pay Increase (+\$57,000)

An increase of \$57,000 for pay costs which includes \$10,000 for annualization of the FY 2013 pay raise and \$47,000 for the anticipated FY 2014 pay raise.

- (b) A net decrease of \$3,000 for the Aquatic Animal Health program (\$2,275,000 and 22 staff years available in 2013).

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 valued at \$1.4 billion in 2007. The U.S. aquaculture industry provides less than seven percent of the seafood consumed in the United States. 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.

Without funding for this program, there would be reduced preparedness, surveillance and response to aquatic animal 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 74 percent of the Aquatic Animal Health program funding supports salaries and benefits, less than 1 percent is for cooperative agreements and programmatic contracts, and the remaining funding supports normal operating costs such as travel, supplies, and rent and utilities.

Increase for minor changes (+\$19,000)

A \$19,000 increase is requested for this line item related to minor programmatic changes.

Reduction in Agency-level operating expenses (-\$41,000)

A reduction of \$41,000 is requested for this line item related to Agency-level cost savings measures and operating efficiencies. Please refer to second paragraph on page 18-18.

Pay Increase (+\$19,000)

An increase of \$19,000 for pay costs which includes \$3,000 for annualization of the FY 2013 pay raise and \$16,000 for the anticipated FY 2014 pay raise.

- (c) A net decrease of \$2,478,000 for the Avian Health program (\$52,318,000 and 194 staff years available in 2013).

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' principal avian health program primarily focuses on notifiable avian influenza (NAI), which are the forms of avian influenza that must be reported to the World Organization 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. 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 2011 was 0, compared to 29 in FY 2007. 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 findings of NAI 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 Federal-State-industry cooperative program for decades. The NPIP surveillance program 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. By supporting the poultry industry's ability to market, the NPIP supports thousands of jobs in the major poultry producing States. 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.

Without 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 37 percent of the Avian Health funding will be used for salaries and benefits, 30 percent will be used for cooperative agreements, and 14 percent will be used for programmatic contracts. The remaining funding supports normal operating costs such as travel, supplies, rent and utilities.

*Reduce operations based on knowledge gained in recent years (-\$1.91 million)*

USDA has both an international and domestic role in controlling the spread of AI and reducing its effects to the economy and public health. Internationally, USDA is working closely with organizations such as the OIE, the United Nations' Food and Agriculture Organization, and the World Health Organization to assist highly pathogenic avian influenza H5N1-affected regions with disease prevention, management, and eradication activities. By helping these countries prepare for, manage, or eradicate highly pathogenic avian influenza H5N1 outbreaks, USDA has reduced the risk of the disease spreading from overseas to the United States. Domestically, USDA protects against the introduction of HPAI H5N1 in the United States. Surveillance of both wild and commercial bird populations serves as an early warning system to rapidly detect and take measures to prevent the spread of the disease in the United States. In the event of a detection of highly pathogenic avian influenza, State personnel will be the primary responders with additional assistance from their Federal counterparts in APHIS. APHIS and State animal health officials work cooperatively with the poultry industry to conduct continued surveillance of breeding flocks, and at slaughter plants, live-bird markets, livestock auctions, and poultry dealers. The Agency strives to prevent and control H5 and H7 AI from entering and spreading in commercial and backyard poultry flocks and causing significant economic damage.

The improving global AI situation and the completion of significant preparedness projects will allow APHIS to decrease spending on these activities. 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, primarily conducted through cooperative agreements. 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.

*Reduction in Agency-level operating expenses (-\$740,000)*

An additional reduction of \$740,000 is requested for this line item related to Agency-level cost savings measures and operating efficiencies. Please refer to second paragraph on page 18-18.

Pay Increase (+\$172,000)

An increase of \$172,000 for pay costs which includes \$31,000 for annualization of the FY 2013 pay raise and \$141,000 for the anticipated FY 2014 pay raise.

- (d) A net decrease of \$7,829,000 and 24 staff years for the Cattle Health program (\$99,606,000 and 570 staff years available in 2013).

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.

Early detection of devastating diseases such as foot-and-mouth disease (FMD) is vital; estimates show 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. 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. In 2012, bovine spongiform encephalopathy (BSE) surveillance information from the APHIS cattle health program was instrumental in allowing the United States to maintain the beef export market, worth approximately \$3 billion per year.

The Cattle Health program has also been highly successful in 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 benefits of eradicating brucellosis have been estimated to be greater than \$18.3 billion. An economic analysis conducted by the State of Wyoming 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 become active again. 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. The brucellosis program effort, along with the tuberculosis (TB) program effort, is developing a new regulatory framework that will provide greater flexibility to producers and States.

The Cattle Health program also continues to make progress in eradicating TB from domestic livestock. A study conducted by Iowa State University suggests that 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.

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 to be \$123 million during the first year of the outbreak.

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. 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 FMD and BSE.

APHIS, States, Tribes, and industry collaborate regularly and exchange ideas on policy and guidelines. APHIS 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 TB.

Without funding for this program, there would be reduced preparedness, surveillance and response to cattle 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 56 percent of the Cattle Health funding is for salaries and benefits, 8 percent is for cooperative agreements with States and Tribes, and 14 percent is for 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.

*Reduce lower priority program activities (-\$1.542 million)*

APHIS has identified two areas related to cattle health that can be reduced or eliminated in 2014. The Agency proposes to eliminate Federal contributions for managing Johne's disease, and modify the level of surveillance for brucellosis to focus on higher priorities related to cattle health.

Johne's disease is a chronic, infectious, and usually fatal intestinal disease of cattle that also occurs in sheep, goats, and deer. The disease is widely distributed throughout the world. First discovered domestically in 1908, it is now found in all regions of the United States. APHIS significantly reduced the Federal role in the disease surveillance program in 2012 and is requesting the elimination of all Johne's disease funding in 2014, which means no longer providing support and funding to the program cooperators. Analysis of the National Johne's Demonstration Herd data was completed in 2010 and the Federal government's primary role in the project concluded in 2011. APHIS published uniform program standards for the Voluntary Bovine Johne's Disease Cooperative Program in September 2010. States can use these standards to develop their own programs. Since Johne's disease is endemic in the United States (highly endemic in the case of the dairy industry, with more than 68 percent of herds infected), truly effective control measures can only be implemented on individual premises by educated producers. This type of case-by-case intervention is already happening on the part of informed producers. The 2007 National Animal Health Monitoring System Dairy Study and the 2008 Johne's Disease Integrated Programs Producer Survey indicated that approximately 35 percent of producers have Johne's disease control measures in place. In another survey that the Dairy Farmers of America recently conducted, 65 percent of the 9,853 member producers surveyed stated that they had control practices in place. These statistics support the belief that, if given the proper information about disease management tools, industry is willing to work towards disease control.

APHIS will reassign impacted staff to other cattle health activities as practical and reduce overall staff years by eliminating positions when vacancies arise. At the requested funding level, APHIS will continue to work on disease detection, management, and where possible eradication of diseases that significantly threaten cattle health in the United States.

*Amend cattle epidemiology methods (-\$6.522 million)*

APHIS has been working on several statistical and epidemiological methods to increase the efficiency of animal health surveillance without sacrificing confidence of industry and trading partners in our surveillance system. These efficiency methods include: using statistics to determine the surveillance levels

needed to achieve the objectives of disease detection for each animal species and given disease; using targeted surveillance focusing on animals with a higher probability of disease; leveraging historical data; combining surveillance streams; integrating disease testing where one sample is tested for multiple diseases; and applying benefit-cost analysis to measure the value of the information received from the dollars spent. By applying these efficiency methods, APHIS can significantly reduce sample collection needed for surveillance in cattle. APHIS intends to apply some or all of these to the current brucellosis surveillance plan. With the prevalence of brucellosis virtually zero in most States, surveillance levels can be modified to focus on detecting brucellosis if it re-occurs. APHIS will reassign staff to other cattle health activities as practical and reduce overall staff years by eliminating positions when vacancies arise.

*Develop continuity of business plans and other preparedness materials (+\$1,197,000)*

The ability to maintain markets in the event of a disease outbreak is critical to the security of American agriculture. Loss of confidence by importing countries and consumers can lead to major economic repercussions. Continuity of business planning utilizes scientific, risk-based systems for non-infected animals and non-contaminated animal products. Further, it establishes a transparent and effective system for promoting stakeholder acceptance and compliance with regulatory actions. APHIS will use additional funding to conduct data analysis and risk-based modeling to continue developing options for maintaining business operations in the face of an outbreak, and minimize disruptions and lost revenues.

*Reduction in Agency-level operating expenses (-\$1,446,000)*

An additional reduction of \$1,446,000 is requested for this line item related to Agency-level cost savings measures and operating efficiencies. Please refer to second paragraph on page 18-18.

*Pay Increase (+\$484,000)*

An increase of \$484,000 for pay costs which includes \$88,000 for annualization of the FY 2013 pay raise and \$396,000 for the anticipated FY 2014 pay raise.

- (e) A net decrease of \$1,346,000 and 7 staff years for the Equine and Cervid Health program (\$5,081,000 and 24 staff years available in 2013).

APHIS is requesting to separate the current Equine, Cervid, and Small Ruminant Health line item into two line items: Sheep and Goat Health, and Equine and Cervid Health. These two commodity groups have differing industry practices and share few disease concerns. Of the \$22 million appropriated in 2013, APHIS requests \$5.081 million and 24 staff years be designated for the Equine and Cervid Health program.

The Equine and Cervid Health Program protects the health of equines and cervids and improves the quality, productivity and economic viability of the equine and cervid industries. APHIS activities include disease prevention, monitoring and surveillance, and investigation and response actions undertaken when equine and cervid health issues are identified. APHIS' monitoring and surveillance activities detect foreign, emerging, zoonotic, and domestic equine and cervid diseases that have the potential to substantially impact the economy. APHIS works with international trading partners to facilitate safe trade in equines and cervids.

In 2007, the cervid industry in the United States included 5,600 deer farms and 1,900 elk farms with an economic value of \$894 million that supported nearly 30,000 jobs. APHIS' main cervid activities are testing approximately 15,000 captive cervids for tuberculosis each year and supporting the chronic wasting disease (CWD) herd certification program (HCP). The joint tuberculosis (TB) and brucellosis proposed rule will represent significant changes to TB activities in captive cervids when implemented; it 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. In 2014, APHIS will implement a survey to evaluate the effectiveness and impact of new APHIS regulations on the industry. Additionally, approval for a new diagnostic test for TB in captive cervids is expected to occur by FY 2013. 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.

The U.S. horse industry contributes \$39 billion in direct economic impact, according to a 2005 study conducted for the American Horse Council Foundation. USDA is required to report to the World Organization for Animal Health (OIE) any cases of foreign animal disease in the United States, including contagious equine metritis and equine piroplasmosis. APHIS provides information on testing and treatment protocols for select non-foreign equine diseases such as West Nile virus. States are asked 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 collects information, and coordinates response efforts and testing protocols for domestic equine diseases.

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. APHIS enforces the Commercial Transport to Slaughter Act, which ensures that these horses are afforded welfare provisions during their transport. The program has developed training modules for accredited veterinarians involved in certifying horses fit for transport to slaughter. Enforcement activities have been expanded at the southern border ports with Mexico to ensure all equines in transport to slaughter are treated humanely. APHIS actively enforces the provisions of the slaughter horse transportation program and investigates and prosecutes alleged violations.

Without continued program funding, there would be a reduced preparedness, surveillance, and response to equine/cervid health issues that could increase the likelihood of disease spread resulting in larger and more serious disease outbreaks, lack of national standards leading to a patchwork of State level requirements which diminish interstate commerce, and loss in international credibility regarding U.S. animal health status.

Approximately 59 percent of the Equine and Cervid Health funding will be used for salaries and benefits, less than 1 percent for cooperative agreements and programmatic contracts, and the remaining supports normal operating costs such as travel, supplies, rent and utilities.

*Reduce lower priority program activities (-\$1.295 million)*

APHIS will reduce lower priority equine and cervid program activities in 2014, including eliminating Federal contributions for addressing CWD. CWD is a degenerative neurological illness affecting elk and deer (cervids) in North America. APHIS has determined that continued efforts to manage CWD are not practical and therefore considers this to be a low priority for the Agency. On August 13, 2012, the rule that established uniform standards for a voluntary Federal-State cooperative CWD HCP and interstate movement requirements became effective. Implementation of the interstate movement of cervids was implemented in December 2012. Many States have herd certification programs in place, and the incidence of CWD detections in farmed cervids is decreasing. With the regulatory framework in place, continued APHIS activity, while useful, is no longer essential. Stakeholders can continue to carry on program activities. The success of the voluntary HCP is based upon cooperation and shared responsibility among the Federal government and State and local interests. However, since these are local or regional disease spread issues, State and local governments are better positioned to take a more active role and to better anticipate and plan for local or regional needs. APHIS will continue to conduct higher priority equine and cervid health activities and address concerns when identified.

APHIS will reassign staff years to other Equine and Cervid Health activities as practical and reduce the overall staff years by eliminating the positions when vacancies arise.

*Reduction in Agency-level operating expenses (-\$66,000)*

A reduction of \$66,000 is requested for this line item related to Agency-level cost savings measures and operating efficiencies. Please refer to second paragraph on page 18-18.

Pay Increase (+\$15,000)

An increase of \$15,000 for pay costs which includes \$3,000 for annualization of the FY 2013 pay raise and \$12,000 for the anticipated FY 2014 pay raise.

- (f) A net increase of \$956,000 for the National Veterinary Stockpile program (\$2,767,000 and 1 staff year in 2013).

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 deploy countermeasures within 24 hours for the most significant threats, including Foot and Mouth Disease, Exotic Newcastle Disease, and Classical Swine Fever (CSF). 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.

NVS has the capability to protect a team of 1,500 responders for 63 days and maintain anti-virals to support 3,000 responders for 6 weeks. The program also has contracts in place to provide personal protective equipment, 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.

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. Without a robust NVS, foreign animal disease outbreaks could quickly deplete State and industry response inventories, overwhelming the private sector and jeopardizing the stability of local and national agriculture economies. The NVS partners with Federal agencies for scientific input on current commercially available veterinary countermeasures such as vaccines, diagnostic test kits, and pharmaceuticals; and, develops criteria for deployment, including conducting exercises; and, determines ways to leverage stockpiles.

Approximately 6 percent of the NVS program funding supports salaries and benefits. Approximately 66 percent funds contracts and agreements and less than 1 percent funding IT system costs. The remaining supports normal operating costs such as travel, supplies, rent and utilities.

A net increase to replace animal vaccines (+\$989,000)

The NVS continuously evaluates its countermeasures stockpile and replaces vaccines and other countermeasures as they expire or are used. For example, the shelf life of the CSF vaccine will expire during FY 2014, and replacement will be necessary. Without the vaccine, an outbreak of CSF would pose a great threat to the United States. In 1997, an outbreak in the Netherlands spread to more than 400 herds and cost more than \$2.3 billion to eradicate. The Agency requests \$0.989 million to procure the necessary replacement doses for these animal vaccines and other countermeasures to continue to protect American agriculture from such devastating animal disease threats.

Reduction in Agency-level operating expenses (-\$34,000)

A reduction of \$34,000 is requested for this line item related to Agency-level cost savings measures and operating efficiencies. Please refer to second paragraph on page 18-18.

Pay Increase (+\$1,000)

An increase of \$1,000 for pay costs which includes \$200 for annualization of the FY 2013 pay raise and \$800 for the anticipated FY 2014 pay raise.

- (g) A net decrease of \$2,795,000 and 6 staff years for the Sheep and Goat Health program (\$17,054,000 and 109 staff years available in 2013).

APHIS is requesting to separate the current Equine, Cervid, and Small Ruminant Health line item into two line items: Sheep and Goat Health, and Equine and Cervid Health. These two commodity groups have differing industry practices and share few disease concerns. Of the \$22 million appropriated in 2013, APHIS is requesting \$17.054 million in 2013 be designated for the Sheep and Goat Health program.

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. APHIS sheep and goat program activities range from disease prevention, to monitoring and surveillance, to investigation and response actions undertaken when sheep and goat health issues are identified. Minimum standards established by the program allow safe trade between the States.

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. Only five new infected or source flocks are identified each year, down from 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. More than \$5 million in indemnity costs have been saved 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 works with international trading partners to facilitate safe trade in sheep and goats and their products. National coordination of surveillance in sheep and goats is essential for the industry to expand trade opportunities and maximize efficiencies in control and eradication of sheep and goat diseases given that most sheep and goats are slaughtered outside their State of birth.

Annually, the program conducts between five and seven reviews of a State's scrapie activities to confirm compliance with APHIS program standards. Scrapie reviews have been very effective in identifying and correcting problems with program delivery. Any enforcement actions involve education of industry stakeholders to ensure understanding of program requirements.

Without funding for this program, there would be reduced preparedness, surveillance and response to sheep and goat 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 75 percent of the Sheep and Goat Health funding supports salaries and benefits, 16 percent is for cooperative agreements and contracts, and the remaining supports normal operating costs such as travel, supplies, rent and utilities.

Modify program activities that address scrapie (-\$2.587 million)

Scrapie is a fatal, degenerative, infectious disease affecting the central nervous system of sheep and goats. The purpose of the Agency's national scrapie effort is to eradicate classical scrapie from the United States. The goal is to do so quickly and efficiently in order to open up export markets for both live animals and animal products, prevent losses in productivity, and protect the U.S. sheep and goat industry from the risk that the disease will be perceived as a human health risk or a threat to wildlife.

Cooperative efforts with States, allied industry, accredited veterinarians, and sheep and goat producers have reduced the prevalence of classical scrapie in the U.S. sheep population by 85 percent from 2003 to 2010. Achieving eradication requires maintaining many program activities at current levels; however, there are some flock certification activities that can be reduced. Specifically, APHIS can reduce the costs associated with the Scrapie Flock Certification Program (SFCP), a voluntary program within the National Scrapie Eradication Program. There are currently three categories in the SFCP. One category, *Complete Monitored*, is being considered for elimination because while popular, the standards developed and implemented through this category are not entirely effective in detecting infected flocks prior to certification. The majority of producers currently participating in this category are expected to either withdraw from the SFCP, or join another category that would be revised to be less costly to APHIS and have greater flexibility for participants. In addition to changes in the SFCP, APHIS also anticipates reduced costs due to the declining need for disease response that has resulted from the reduction in scrapie prevalence. At the proposed funding level, APHIS projects that the percent of black-faced sheep sampled at slaughter that test positive for classical scrapie to remain below the program goal of 0.13 percent.

Decrease for minor changes (-\$59,000)

A \$59,000 decrease is requested for this line item related to minor programmatic changes.

Reduction in Agency-level operating expenses (-\$240,000)

An additional reduction of \$240,000 is requested for this line item related to Agency-level cost savings measures and operating efficiencies. Please refer to second paragraph on page 18-18.

Pay Increase (+\$91,000)

An increase of \$91,000 for pay costs which includes \$16,000 for annualization of the FY 2013 pay raise and \$75,000 for the anticipated FY 2014 pay raise.

- (h) A net decrease of \$2,748,000 and 21 staff years from the Swine Health program (\$23,141,000 and 127 staff years available in 2013).

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.

The Swine Health program has been successful in eradicating significant diseases from commercial swine operations, such as swine brucellosis and pseudorabies virus (PRV). When PRV was prevalent, infected herds earned an average of \$6 per pound less than non-infected herds. The net benefits from the PRV eradication program are estimated to be more than \$170 million. The Swine Health program is currently revising its regulations to develop a framework that places greater emphasis on disease prevention, including adapting to unique and varying disease situations with quick response.

The program enforces the Swine Health Protection Act, which protects the commerce, health, and welfare of U.S. citizens by ensuring that food waste fed to swine does 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.

#### *Modify swine surveillance efforts (-\$2.515 million)*

APHIS has been working on several statistical and epidemiological methods to increase the efficiency of animal health surveillance without sacrificing confidence of industry and trading partners in our surveillance system. These efficiency methods include: using statistics to determine the surveillance levels needed to achieve the objectives of disease detection for each animal species and given disease; utilizing targeted surveillance focusing on animals with a higher probability of disease; leveraging historical data; combining surveillance streams; integrating disease testing where one sample is tested for multiple diseases; and applying benefit cost analysis to measure the value of the information received from the dollars spent. By applying these efficiency methods, APHIS can significantly reduce sample collection needed for surveillance in swine. APHIS will continue to conduct surveillance for major diseases of concern. APHIS will reassign staff to other swine health activities as practical and reduce overall staff years through the elimination of positions when vacancies arise.

At the proposed level of funding, the U.S. surveillance efforts will be aligned with many of our major trading partners. APHIS will retain the ability to modify surveillance to increase the levels of detection in the event of a disease outbreak or other circumstances that warrant such an action to protect the health of the U.S. swine population.

Reduction in Agency-level operating expenses (-\$327,000)

A reduction of \$327,000 is requested for this line item related to Agency-level cost savings measures and operating efficiencies. Please refer to second paragraph on page 18-18.

Pay Increase (+\$94,000)

An increase of \$94,000 for pay costs which includes \$17,000 for annualization of the FY 2013 pay raise and \$77,000 for the anticipated FY 2014 pay raise.

- (i) A net decrease of \$45,000 and an increase of 1 staff year for the Veterinary Biologics program (\$16,558,000 and 108 staff years available in 2013).

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. 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. APHIS' comprehensive approach ensures only quality, Federally-licensed veterinary biological products are available to U.S. customers.

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 1,016 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 continuously evaluates its activities and makes adjustments to improve efficiency and effectiveness. The Veterinary Biologics program maintains certification in International Organization for Standardization (ISO) 9001. Recently, the program conducted an internal Lean Six Sigma review to improve predictability and reduce overall licensing times. Efficiency improvements are allowing APHIS to reduce testing times, allowing manufacturers to have more predictability in the licensing process.

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 licensed and unlicensed 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.

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.

An increase to implement improvements to licensing of biotechnology products (+\$110,000)

In FY 2011, APHIS initiated a business process improvement plan under the Department's Lean Six Sigma initiative with the objective of decreasing turnaround times for license submissions. Some of these process improvements, including the electronic workflow of documents, are projected to increase program efficiency.

At the same time there has been an estimated 33 percent increase in the number of risk-related reports produced related to licensing of biotechnology related products. These types of products require a more complex risk analysis to be completed, ultimately leading to a greater volume of reports to be processed and a longer processing time. Additional funding will allow APHIS to automate risk analysis processing to more accurately track information. Consolidated timely review of the risk-analysis reporting function would further advance APHIS' commitment to efficiency improvements, identify existing bottlenecks, determine opportunities for potential time savings, and provide rapid and frequent reporting to the regulated industry regarding status of licensing. As a result of the improvement, APHIS will be able to reduce the time to license biotechnology products from the current level of 698 days to 630 days by FY 2015.

Reduction in Agency-level operating expenses (-\$251,000)

A reduction of \$251,000 is requested for this line item related to Agency-level cost savings measures and operating efficiencies. Please refer to second paragraph on page 18-18.

Pay Increase (+\$96,000)

An increase of \$96,000 for pay costs which includes \$18,000 for annualization of the FY 2013 pay raise and \$78,000 for the anticipated FY 2014 pay raise.

- (j) A net decrease of \$96,000 for the Veterinary Diagnostics program (\$31,804,000 and 190 staff years available in 2013).

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 program diseases, as well as, movement and export certification. The Veterinary Diagnostics 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 (FADs), 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. 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 FAD investigations are available 24/7. 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.

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.

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.

Increase for minor changes (+\$220,000)

A \$220,000 increase is requested for this line item related to minor programmatic changes.

Reduction in Agency-level operating expenses (-\$484,000)

A reduction of \$484,000 is requested for this line item related to Agency-level cost savings measures and operating efficiencies. Please refer to second paragraph on page 18-18.

Pay Increase (+\$168,000)

An increase of \$168,000 for pay costs which includes \$30,000 for annualization of the FY 2013 pay raise and \$138,000 for the anticipated FY 2014 pay raise.

- (k) A net decrease of \$32,000 for the Zoonotic Disease Management program (\$9,055,000 and 45 staff years available in 2013).

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 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. 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.

Without funding for this program, there would be a lack of animal health expertise to work with public health during high consequence, emerging public health events that have an animal health dimension. This could lead to larger and more serious disease outbreaks negatively impacting animal and human health.

Increase for minor changes (+\$73,000)

A \$73,000 increase is requested for this line item related to minor programmatic changes.

Reduction in Agency-level operating expenses (-\$145,000)

A reduction of \$145,000 is requested for this line item related to Agency-level cost savings measures and operating efficiencies. Please refer to second paragraph on page 18-18.

Pay Increase (+\$40,000)

An increase of \$40,000 for pay costs which includes \$7,000 for annualization of the FY 2013 pay raise and \$33,000 for the anticipated FY 2014 pay raise.

A decrease of \$26,937,000 and 44 staff years for Safeguarding and Emergency Preparedness/Response - Plant Health

- (1) A net decrease of \$2,370,000 and 19 staff years for the Agriculture Quarantine Inspection program (\$27,668,000 and 362 staff years available in 2013).

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 significant 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 new 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 9.4 million passengers in FY 2012). The program found that 97 percent of passengers destined for the continental United States were in compliance with agricultural quarantine regulations in FY 2012.

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. 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.

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.

Reduce selected program activities (-\$2.199 million)

In Hawaii, APHIS inspectors conduct pre-departure inspections at a variety of locations on different islands of passengers on flights en route to the mainland. Historically, these inspections have been convenient for travelers and shippers, while mitigating the risk posed by the movement of potential host of plant pests. In an effort to reduce overall funding, the program plans to reduce hours and close operations in certain locations, and reduce staffing through attrition and the expiration of term appointments. Travelers and airlines may experience delays or inconveniences associated with changes in the inspection process resulting from the reduced operations; however, the program will work to mitigate these delays and maintain focus on ensuring that products will reach the mainland without introducing invasive pests and diseases. Despite the requested decrease, the program projects to be able to maintain the effectiveness ratio of the pre-departure inspection program through focusing on higher-risk flights and reducing staffing on lower-risk flights.

Reduction in Agency-level operating expenses (-\$475,000)

An additional reduction of \$475,000 is requested for this line item related to Agency-level cost savings measures and operating efficiencies. Please refer to second paragraph on page 18-18.

Pay Increase (+\$304,000)

An increase of \$304,000 for pay costs which includes \$55,000 for annualization of the FY 2013 pay raise and \$249,000 for the anticipated FY 2014 pay raise.

- (m) A net decrease of \$9,013,000 and 5 staff years for the Cotton Pests program (\$17,957,000 and 61 staff years available in 2013).

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 preparedness capabilities to address cotton pests such as the cotton seed bug that could enter the United States. In addition, APHIS provides technical advice on trapping and treatment protocols to its partners in Mexico for their efforts to eradicate boll weevil and PBW. APHIS will use \$8.944 million in 2014 to conduct program activities. Without continued Federal funding, support and technical expertise for the final phase of eradication would not be possible and previously eradicated areas of 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.

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.

Cotton Pests eradication efforts (-\$8.871 million)

The Cotton Pests program has eradicated the boll weevil from more than 99 percent of all cotton-producing areas of the United States. It is this success that has resulted in the reduction of this program and the Farm Service Agency's boll weevil eradication loan program. 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.

APHIS expects to eradicate PBW from Arizona in FY 2013, and accordingly, fewer resources will be needed for the program. With the proposed decrease for FY 2014, APHIS would maintain limited sterile moth production to enable rapid response to any PBW outbreaks. The Agency would expect increased cost share from cotton growers and State partners for trapping and regulatory activities in areas where eradication activities have recently been completed. 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 in Agency-level operating expenses (-\$192,000)

An additional reduction of \$192,000 is requested for this line item related to Agency-level cost savings measures and operating efficiencies. Please refer to second paragraph on page 18-18.

Pay Increase (+\$50,000)

An increase of \$50,000 for pay costs which includes \$9,000 for annualization of the FY 2013 pay raise and \$41,000 for the anticipated FY 2014 pay raise.

- (n) A net decrease of \$246,000 for the Field Crop and Rangeland Ecosystem Pests program (\$9,123,000 and 58 staff years available in FY 2013)

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 range and natural lands. 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 conducts survey and suppression activities in 17 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, worth more than \$75 billion annually, according to the USDA’s National Agricultural Statistics Service.

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. 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 is implementing improvements for the Grasshopper program identified through an APHIS internal review. These include standardizing survey methods for the program across the 17 western States that face GMC outbreaks, increasing communication with Federal land managers and cooperators, reviewing contracting officer training needs, and developing an overall program strategic plan. Predictive models suggest that APHIS’ IFA program is preventing up to 10 additional States from becoming infested.

This program prevents an estimated \$6.3 billion in annual damage to agriculture, industry, and home owners. 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.

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.

*Increase for minor changes (+\$62,000)*

A \$62,000 increase is requested for this line item related to minor programmatic changes.

*Reduction related to adjusted cost share (-\$220,000)*

APHIS is requesting a \$220,000 decrease for the FCREP program in 2014 to allow for a more equitable distribution of program costs related to the KB program in Arizona. With this decrease, APHIS would fund 68 percent of KB program costs in Arizona, and State and/or private entities would be expected to increase their share of program costs to 32 percent. If cooperators cannot increase contributions, APHIS’ ability to maintain operations in Arizona and conduct national sampling activities may be impacted, which could potentially lead to disruptions to wheat exports.

Reduction in Agency-level operating expenses (-\$139,000)

A reduction of \$139,000 is requested for this line item related to Agency-level cost savings measures and operating efficiencies. Please refer to second paragraph on page 18-18.

Pay Increase (+\$51,000)

An increase of \$51,000 for pay costs which includes \$9,000 for annualization of the FY 2013 pay raise and \$42,000 for the anticipated FY 2014 pay raise.

(o) A net decrease of \$94,000 for the Pest Detection program (\$27,668,000 and 145 staff years available in FY 2013)

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 identification of 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 (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. 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.

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 2012, the program and its cooperators conducted surveys for 264 individual pests, pathogens, and noxious weeds exceeding its goal of 200, as well as conducted 133 commodity- and taxon-based surveys, with an average of 6-7 pests per survey, surpassing its goal of 5 for the number of pests per survey.

Approximately 53 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 11 percent is for other operating expenses such as travel, rent, utilities, and supplies.

Increase for minor changes (+\$180,000)

A \$180,000 increase is requested for this line item related to minor programmatic changes.

Reduction in Agency-level operating expenses (-\$402,000)

A reduction of \$402,000 is requested for this line item related to Agency-level cost savings measures and operating efficiencies. Please refer to second paragraph on page 18-18.

Pay Increase (+\$128,000)

An increase of \$128,000 for pay costs which includes \$23,000 for annualization of the FY 2013 pay raise and \$105,000 for the anticipated FY 2014 pay raise.

- (p) A net decrease of \$53,000 for the Plant Protection Methods Development program (\$20,726,000 and 140 staff years available in 2013).

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, the PPMD staff developed the tree insecticide treatment that is a key component of the Asian longhorned beetle eradication program, currently active in four States. PPMD staff also 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. In addition, the program developed post-harvest grape treatments that protected the U.S. grape export market and allowed continued imports from Chile (where the pests is also present) without the risk of spreading the moth.

The PPMD Program partners with States, universities, Tribes, other Federal agencies, and international partners to accomplish its goals. The coordination of biological control activities for the emerald ash borer is a good example that involves each of these stakeholder groups. 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. As examples, the program exceeded its 2012 target of 73 by developing, implementing or completing technology transfer for 75 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. Additionally, the program met its performance target of certifying 25 State and university laboratories to

conduct specific diagnostic tests (increasing overall capacity in the United States for emergency response). 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 use \$20.673 million to conduct these activities in FY 2014. Without this program, APHIS would not be able to provide the tools needed to carry out plant pest eradication and detection programs.

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.

*Increase for minor changes (+\$139,000)*

A \$139,000 increase is requested for this line item related to minor programmatic changes.

*Reduction in Agency-level operating expenses (-\$316,000)*

A reduction of \$316,000 is requested for this line item related to Agency-level cost savings measures and operating efficiencies. Please refer to second paragraph on page 18-18.

*Pay Increase (+\$124,000)*

An increase of \$124,000 for pay costs which includes \$22,000 for annualization of the FY 2013 pay raise and \$102,000 for the anticipated FY 2014 pay raise.

- (q) A net decrease of \$7,472,000 and 13 staff years for the Specialty Crop Pests program (\$154,891,000 and 698 staff years available in the FY 2013)

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; two specialty crops alone—citrus and grapes—represent approximately \$6 billion in revenues annually. APHIS is currently using SCP resources to address the following pests and diseases: the light brown apple moth (LBAM), the glassy-winged sharpshooter (GWSS), European grapevine moth (EGVM), pale cyst nematode (PCN), a variety of citrus diseases, and exotic fruit flies.

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 2011 (according to the Global Trade Atlas). The SCP program partners with affected industries, States, Tribes, academic institutions, and other Federal agencies, to deliver domestic programs. APHIS also regulates interstate and international movement of potentially affected products to prevent long-distance pest and disease spread that is facilitated by human activity. 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.

Without the SCP Program, export markets for U.S. specialty crops would be at risk and significant economic damages would occur in the United States. For example, the program has kept the United States free of 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 one of the widest host ranges of any fruit fly pests and is considered one of the most important agricultural pests in the world. It has been recorded infesting more than 300 cultivated and wild fruits. Without the program's efforts, many of these important crops would become impossible to grow due to fruit fly infestations. Additionally, the amount of harmful pesticide and chemical control use required in the absence of the fruit fly program would greatly increase as farmers attempted to control the pests on their own. Consumer prices for fresh fruits and vegetables would rise as well.

More than 50 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 32 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. Another 18 percent is for services, supplies, equipment, rent, and other operating expenses.

*Increase for enhanced surveillance for European Grapevine Moth (+\$1.172 million)*

European grapevine moth (EGVM), first detected in October 2009 in major grape producing areas in California, is a significant pest of grapes and other specialty crops. The pest damages grape production when larvae feed on the flowers and berries; subsequent fungal infection causes further damage leading to total destruction and loss of the crop. APHIS, State, and industry partners implemented an intensive response effort in 10 affected counties. APHIS provides overall coordination for the EGVM response, and the California Department of Food and Agriculture (CDFA), County Agricultural Commissioners, and associated industries conduct regulatory, survey, and treatment activities within the impacted areas. These activities have reduced the number of moths detected from 100,665 in FY 2010 to 77 in FY 2012, all of which were found in Napa County.

The program's successful strategy has allowed for 9 of the 10 counties to be released from quarantine in 2012. This leaves only Napa County, the most heavily infested area, as the remaining regulated area.

The program will continue regulatory and survey activities, as well as grower-led suppression treatments in FY 2013 in Napa County, with the aim of eliminating moth populations from much of Napa County (and eliminating it entirely within several years). In FY 2014, the program will use the requested increase to enhance surveys in Napa County (increasing the trapping density from 25 to 100 traps per square mile) to confirm which areas are free of EGVM and to continue activities in the remaining areas. APHIS would provide the funds to CDFA to conduct the on-the-ground surveys through a cooperative agreement. After approximately two years trapping with no detections, areas can be released from quarantine. Eliminating the moth population will prevent damage to California's grape producing areas, protecting the State's 12,000 grape farms, and prevent the potential spread of the pest to other grape producing States. The last year of intensive survey is essential to confirm that EGVM has been eliminated and that the area can be safely deregulated. APHIS expects approximately 12,500 acres to remain regulated in FY 2014 (out of the current 85,000). This will provide assurance to at-risk States and U.S. trading partners, protecting export markets for U.S. crops and providing stable opportunities for interstate commerce.

*Adjusted cost share for treatments on commercial property (-\$1.836 million)*

APHIS is requesting a \$1.836 million decrease for the program in 2014 to pursue opportunities for industry partners to cover costs of treatments needed on commercial properties. Most of the SCP programs are

cooperative in nature and APHIS will continue to work closely with partners while piloting this initiative for commercial growers to assume more financial responsibility for treatments on their properties.

Adjusted cost share rates for certain pests and diseases (-\$5.152 million)

APHIS is requesting a decrease of \$5.152 million for the SCP program in 2014 related to cost-sharing adjustments for several pests and disease programs. These adjustments will represent consistent allocations of funding for certain, longstanding pest and disease programs and allow cooperators that benefit from Federal programs to plan for future needs. The \$5.152 million decrease includes:

A reduction of \$172,000 is requested for plum pox virus activities. With this decrease, the Federal government would fund 85 percent of total anticipated costs related to addressing the disease in New York. State entities and/or the national stone fruit industry that benefits from the program would be responsible for the remaining 15 percent of costs. If State or industry entities cannot increase contributions, APHIS will reduce program activities, delaying the eradication timetable.

A reduction of \$2.146 million is requested for GWSS activities. With this decrease, the Federal government would fund 47 percent of anticipated costs related to addressing the pest in California. State and private entities would be responsible for the other 53 percent of costs. If State and private entities cannot increase contributions, APHIS will reduce area-wide treatments for GWSS, increasing the possibility that shipments of host materials will be infested and not able to be moved.

A reduction of \$2.834 million is requested for light brown apple moth activities. With this decrease, the Federal government would fund 70 percent of anticipated costs related to addressing the pest in California. State and private entities would be responsible for 30 percent of costs. If State and private entities cannot increase contributions, APHIS will reduce trapping activities and treatments of isolated infestations, increasing the possibility that the pest will spread to new areas without being detected.

Reduction related to Agency-level operating expenses (-\$2.263 million)

A reduction of \$2.263 million is requested for this line item related to Agency-level cost savings measures and operating efficiencies. Please refer to second paragraph on page 18-18.

Pay Increase (+\$607,000)

An increase of \$607,000 in pay costs for Specialty Crop Pests line item.

- (r) A net decrease of \$7,689,000 and 7 staff years for the Tree and Wood Pests program (\$55,979,000 and 319 staff years available in 2013).

The Tree and Wood Pests (TWP) program protects forests, private working lands, and natural resources from devastating pests such as the Asian longhorned beetle (ALB), emerald ash borer (EAB), and 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 supporting forest-related industries, recreation, and the overall livability of communities. 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.

Trees provide environmental value as forest and natural canopy as well as economic value when used in production of wood products. For example, maple syrup production from 10 States in 2011 was worth \$106 million according to USDA's National Agricultural Statistics Service. In addition, the loss of trees

would likely result in other effects that are less direct to measure, such as decreased tourism to forested areas, loss of culturally important resources (e.g., ash trees are used in basket making by Native American Tribes), diminished environmental services (e.g., carbon sequestration), and reduced recreational benefits. Without Federal funding for this program, forest pests would spread rapidly throughout the United States, and it would be increasingly difficult to respond to newly introduced pests. The loss of funding would increase the burden on the States and the public to respond to and address the impacts of these pests. Annually, forest pests could cost local governments up to \$1.7 billion due to tree damage and removal and result in \$830 million in lost residential property values, according to a 2011 study conducted through the National Center for Ecological Analysis and Synthesis Working Group. Ecosystems would be profoundly disturbed, and our trading partners would likely impose additional restrictions.

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.

*An increase to enhance ALB activities in Ohio and Massachusetts (+\$1,308,000)*

APHIS continues to face challenges in addressing EAB and seeks to use resources efficiently to address other pests, such as eradicating ALB. Accordingly, APHIS has scaled back its EAB program, focusing regulatory efforts on the leading edge of the infestation and continuing development of biological control tools for long-term management of the pest. APHIS is shifting funding internally within the TWP program to devote more resources to ALB; however, there is still a need for additional funds to enhance ALB eradication activities in Massachusetts and Ohio. The ALB activities include survey, regulatory enforcement, tree removal, and treatments in Massachusetts and Ohio that will accelerate the progress APHIS is making toward national ALB eradication. The surveys will determine the size of the infestation and ensure that all infested trees are found and removed. The regulatory activities are vital in the infested areas to reduce the likelihood of ALB spreading beyond current boundaries. Infested and high risk tree removal is reducing the ALB infestations and must continue to completely eradicate the beetle population. The increase will also allow treatment of exposed trees to resume, further reducing beetle numbers. In addition, the increase will allow the program to expand its ability to survey for infestations, which is crucial in the delimitation and eradication efforts. Specifically, the program would be able to complete the delimitation survey and begin the second cycle of survey in Massachusetts. In Ohio, the program would increase delimiting surveys from an estimated 33.3 percent in FY 2012 to 66.7 percent in FY 2014. Completing delimiting surveys is essential in determining what areas need to be treated and ensuring that regulatory measures are implemented to prevent pest spread. These activities will help prevent potential multi-billion dollar losses to the maple syrup, timber, tree, nursery, trade, and tourism industries in ALB-affected States. The annual contribution of forest-based manufacturing and forest-related tourism and recreation to the economies of Ohio, New York, and New England States (including Massachusetts) is approximately \$35 billion.

*Reduction related to adjusted cost share (-\$8,511,000)*

APHIS is requesting an overall decrease of \$8.511 million for the Tree and Wood Pests program in 2014 related to cost-sharing adjustments for two pests and disease programs. These adjustments will represent consistent allocations of funding for certain, longstanding pest and disease programs and allow cooperators that benefit from Federal programs to plan for future needs. The \$8.511 million decrease includes:

- A reduction of \$7.134 million for ALB activities. With this decrease, APHIS would fund 80 percent of the ALB program costs, and State and/or private entities would be expected to increase their share of program costs to 20 percent. If cooperators cannot increase their contributions, APHIS will reduce program activities, extending the timeline for eradication by several years.
- A reduction of \$1.377 million for EAB activities. With this decrease, APHIS would fund 80 percent of the EAB program costs, and State and/or private entities would be expected to increase their share of

program costs to 20 percent. If cooperators cannot increase their contributions, APHIS will further reduce EAB activities, impacting APHIS' ability to track the spread of EAB and accurately target releases of biological control agents.

Reduction related Agency-level operating expenses (-\$762,000)

An additional \$762,000 decrease is requested in this line item related to Agency-level cost savings measures and operating efficiencies. Please refer to second paragraph on page 18-18.

Pay Increase (+\$276,000)

An increase of \$276,000 for pay costs which includes \$50,000 for annualization of the FY 2013 pay raise and \$226,000 for the anticipated FY 2014 pay raise.

A net increase of \$12,459,000 and 83 staff years for Safeguarding and Emergency Preparedness/Response – Wildlife Services

- (s) A net increase of \$12,484,000 and 84 staff years for the Wildlife Damage Management program (\$72,944,000 and 531 staff years available in FY 2013).

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 and beaver damage, managing wildlife species and diseases, and conducting a national rabies management program.

APHIS reduces damage to livestock and private property by providing the American people with technical and direct management assistance to resolve wildlife conflicts, while ensuring strategies are biologically sound, environmentally responsible, socially acceptable, and protective of wildlife to the greatest extent possible. Livestock losses attributed to predators cost producers more than \$138 million annually, according to the most recent surveys by National Agriculture Statistics Service. In FY 2011, APHIS protected more than 1.9 million head of livestock in Texas, saving producers an estimated \$83 million. In North Carolina, a beaver management program saved municipalities, counties, and private landowners almost \$9 for every \$1 spent. More than 1,700 private landowners, businesses, city, county and State government, benefits from APHIS' WDM services.

APHIS' natural resource protection includes protecting natural areas and native wildlife from invasive species such as the brown tree snake (BTS); safeguarding rare, threatened and endangered wildlife species from more abundant ones; and providing information on the ecology and values associated with wildlife encountered by the public. The BTS has eliminated most native bird, lizard, and bat species on Guam. 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 2011, the Agency intercepted approximately 12,000 BTS on Guam at or near ports of exit. In FY 2014, APHIS budgeted \$750,000 for BTS activities.

Rabies is 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 the spread of wildlife rabies to new areas of the United States, while working toward eliminating rabies where practical. In FY 2012, APHIS and its cooperators distributed more than 6 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.

Cooperator participation further leverages taxpayer's dollars. Without the services provided by the APHIS' WDM program, Federal and State agencies, county and municipal governments, private homeowners, farmers, ranchers, and other property owners could use methods that compromise the safety and security of America's agriculture, human health and safety, personal property and natural resources. Trained APHIS employees conduct activities using traps, toxicants and pyrotechnics that could pose a risk to individuals, pets, the environment and the general public.

Of this program's budget, approximately 85 percent supports personnel costs, 5 percent supports contract and cooperative agreements, 1 percent supports program-specific IT system costs and the remaining supports normal operating costs such as travel, supplies, and rent and utilities.

*Implement a national control program for feral swine (+\$20.00 million)*

Feral swine are a harmful and destructive invasive species. Their geographic range in the United States is rapidly expanding and their populations are increasing exponentially. The population increase and expanding range is significantly impacting animal and human health; crops and livestock; rural, suburban, and urban areas; and, natural resources and native resources, causing an estimated \$1.5 billion in damages annually. A study conducted in Texas demonstrated that feral swine populations have increased 21 percent a year in recent years. APHIS requests \$20 million to implement a national strategic plan to conduct integrated feral swine removal, reduce damage to property, and reduce threats to agriculture and urban areas. We see this amount as the minimum funding level necessary to conduct an effective control program in the 38 States where feral swine are located. Without this increase, the feral swine population and the amount of damage they cause would grow significantly.

Existing efforts to reduce the number of animals, on an ad-hoc basis, hasn't worked; the population of these animals has grown from approximately 1 million in 17 States to about 5 million in 38 States in the past 20 years. The number is expected to reach more than 10 million by 2017 nation-wide without an intervention strategy. Feral swine are highly adaptable, destructive animals—they have decimated high value agricultural crops, urban/suburban parks and private lands, and compete and prey on sensitive, threatened, and endangered species and native wildlife. Averaging between 100 and 400 pounds, feral swine have been seen to prey and kill livestock, including calves and lambs. Feral swine threaten the health and safety of American agriculture as they are hosts of more than 30 pathogens and parasites (including foreign animal diseases, such as foot-and-mouth disease, classical swine fever) that are transmissible to humans, domestic livestock, or other wildlife species. Approximately 75 percent of the new diseases that have affected humans over the past 10 years have been caused by pathogens originating from an animal or from products of animal origin.

APHIS will serve as the lead Federal agency while working cooperatively with other Federal, State, and local entities to address the more than five million feral swine found in 38 States. The overall objective of the program will be to minimize damage caused by feral swine. The program will target its control efforts at reducing populations and keeping feral swine away from agricultural resources in States where feral swine are well established. In States where feral swine are emerging or populations are low, the program will have a short-term goal of eliminating these animals.

The Agency anticipates removing more than 75,000 feral swine annually nationwide. APHIS will incorporate suburban areas into the feral swine control program. Currently most control work is implemented to protect agriculture. APHIS will develop plans and dedicate efforts to eliminate or prevent feral swine from being established in at least two States during the first five years. The Agency estimates that damages will stabilize within ten years and decline within 16 years. APHIS requests funds to conduct feral swine operational activities; develop new and improved tools, conduct economic analysis and risk modeling and develop outreach materials and activities; and conduct disease surveillance and diagnostic testing to monitor feral swine for diseases that may pose risk to domestic livestock or human health.

As feral swine quickly establish themselves throughout the nation, they carry a host of endemic diseases readily transmissible to humans, domestic livestock, or other wildlife species. Wildlife – including feral swine – serves as a reservoir for many known pathogens, and also can be a source from which previously

unknown diseases emerge. Feral swine have frequent interactions with livestock and humans and could play a major role in the spread and containment of human and foreign animal diseases (FADs). More than 30 pathogens and parasites have been identified in feral swine. Classical swine fever is not known to exist in the United States, but a recent outbreak along the border with Mexico suggests that feral swine movement in the region could pose a substantial risk to the United States domestic swine industry. Early detection of FADs in feral swine, through surveillance, is an effective way to reduce the possibility of transmission, minimizing the resulting impacts to human health, livestock and the nation's economy.

Currently, risk analysis and mitigation is based on opportunistic sampling of feral swine collected in the vicinity of farms. APHIS will increase target sampling to improve the understanding of risks and to develop mitigation measures for reducing disease threats that feral swine pose. In 2014, APHIS will expand testing to approximately 22,000 samples to detect diseases that threaten livestock and another 1,200 samples to detect zoonotic diseases in more than 2,800 feral swine (multiple samples collected per swine). To implement the feral swine proposal, APHIS will use 95 staff years. To conduct surveillance, operational and sampling activities, as well as the development of new methods, APHIS will redirect staff from activities that will require fewer resources in FY 2014. Additionally, APHIS will work cooperatively and cost-share with State wildlife agencies and local cooperators to conduct activities related to the control and eradication of feral swine. Due to the movement of feral swine across State and local boundaries, APHIS will hire Federal staff on a temporary basis to allow the maximum level of hiring flexibility.

*Reduce selected program activities and increase cooperator cost share (-\$4.313 million)*

APHIS proposes to reduce lower priority program activities, while maintaining focus on higher priorities related to WDM. These activities include assistance to aquaculture producers, rabies bait disbursements outside the national barrier zone, and non-critical aviation safety services. The funding reductions are accompanied by staff-years reductions of 7 for the rabies program and 4 for the aquaculture program.

APHIS will achieve savings by eliminating WDM assistance to aquaculture producers in approximately eight States. This includes assistance to anglers, baitfish and crawfish producers, catfish farmers, fish hatcheries, sport fish producers for pond stocking, and tropical fish producers. APHIS will continue supporting the aquaculture industry by offering these services to cooperators on a reimbursable basis. Cooperators may also contract with private vendors who provide wildlife damage services.

APHIS also proposes to reduce funding for rabies activities in States outside of the barrier zone for the Oral Rabies Vaccination program. APHIS will work with the impacted States to provide service on a reimbursable basis. APHIS will continue to focus on maintaining the current rabies barrier zones. APHIS is also proposing to postpone equipment purchases and reduce non-critical activities at the Wildlife Services' Aviation Training Center (ATOC) in Cedar City, Utah. Employees at this Center coordinate aviation safety training for Agency aerial operations activities. With the requested decrease, the program will postpone or reduce other less urgent expenditures, such as some new equipment purchases (e.g., new simulator and/or new helicopters), non-ATOC employee sponsored travel, pilot salary offsets, and State aircraft operating costs offsets. Some non-critical services provided by ATOC may continue to be offered if cooperators fund the associated direct costs. Because safety is vital to APHIS, the Agency will continue to provide employee training as it is a core mission of the Center.

*Cost-share reduction (-\$2,556,000)*

The Agency would continue to provide certain services; however, it will require cooperators to increase their share of the costs. Although funding for wildlife damage management is reduced by \$2.556 million the Federal government would still fund approximately 50 percent of total program costs.

*Reduction in Agency-level operating expenses (-\$1,117,000)*

A reduction of \$1,117,000 decrease is requested for this line item related to Agency-level operating efficiencies. Please refer to second paragraph on page 18-18.

Pay Increase (+\$470,000)

An increase of \$470,000 for pay costs which includes \$85,000 for annualization of the FY 2013 pay raise and \$385,000 for the anticipated FY 2014 pay raise.

- (t) A net decrease of \$25,000 and 1 staff year for the Wildlife Services Methods Development program (\$18,110,000 and 163 staff years available in 2013).

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 conducts research and develops 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. The National Wildlife Research Center (NWRC) provides scientific information for the development and implementation of socially-acceptable methods for managing wildlife damage. The NWRC ensures the availability of high-quality technical and scientific information on wildlife damage management for the protection of crops, livestock, natural resources, property, and public health and safety. More than 80 percent of NWRC research protocols involve partnerships. The methods developed by APHIS are essential to the cooperators using the services provided. In North Carolina, the methods applied to a beaver management program saved municipalities, counties, and private landowners almost \$9 for every \$1 spent. Internal assessments determined the benefits of cormorant control programs range from \$20 to \$50 million in avoided damages and 100-300 regional jobs saved. Annually, the NWRC tests between 14-16 new methods to address human/wildlife conflicts.

The agriculture and resource protection research focuses on reducing wildlife damage to aquaculture, crops, timber resources, livestock, and property. In addition, the program develops methods to mitigate wildlife-aviation strike hazards, and studies the role of fish-eating birds in the epidemiology of diseases impacting aquaculture and fisheries. Methods developed by this program reduce damage by invasive vertebrate species to property, agriculture, human health and safety, and native wildlife and ecosystems. The WSMD program develops data for products registered, such as a contraceptive to control the white-tail deer population, with the U.S. Environmental Protection Agency and the Food and Drug Administration and transferring technology to enable the private sector to provide tools for the management of human-wildlife conflicts. Wildlife disease research 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.

This program estimates that it will use 60 percent of its funding on personnel costs, 10 percent on contracts and cooperative agreements, and the remaining 30 percent to support facility maintenance, security, and research operational costs.

Enhance research and development activities (+\$117,000)

With the increase proposed for FY 2014, APHIS would enhance its research and development activities on short-term projects to reduce wildlife-aircraft strikes by developing habitat management recommendations at or near airports.

Reduction in Agency-level operating expenses (-\$286,000)

A reduction of \$286,000 is requested for this line item related to Agency-level cost savings measures and operating efficiencies. Please refer to second paragraph on page 18-18.

Pay Increase (+\$144,000)

An increase of \$144,000 for pay costs which includes \$26,000 for annualization of the FY 2013 pay raise and \$118,000 for the anticipated FY 2014 pay raise.

A decrease of \$56,000 for Safeguarding and Emergency Preparedness/Response – Regulatory Services

- (u) A net decrease of \$25,000 for the Animal and Plant Health Regulatory Enforcement program (\$16,375,000 and 142 staff years available in 2013).

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 far greater efficiency, effectiveness, and consistency than would 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 activities that could otherwise cause extensive economic damage and/or tremendous expenses related to eradication or mitigation activities designed to protect the American agriculture system.

In FY 2012, APHIS initiated a total of 4,203 cases, compared to 5,692 cases initiated in FY 2011. APHIS conducted an internal process improvement analysis of its enforcement process in FY 2011; as a result of this analysis, APHIS made a number of improvements to its business processes to expedite the processing time for enforcement actions involving violations that posed the greatest risk to animal and plant health and included expeditiously resolving hundreds of lower priority cases to reduce the overall back log of cases. To this end, the APHRE program has developed criteria to focus resources on the highest priority cases that involve the most egregious alleged violations. In FY 2012, APHIS reduced its inventory of open investigations by 63 percent. This decrease in inventory, coupled with the business process improvements previously conducted, decreased total case time by approximately 28 percent from an average of 646 days to an average of 468 days.

Approximately 85 percent of funds will be used for salaries and benefits, 3 percent for information technology management, and 12 percent for normal operating expenses including travel for mission-critical investigative and enforcement activities, supplies, printing, rent and utilities.

Increase for minor changes (+\$111,000)

An increase of \$111,000 is requested for this line item related to minor programmatic changes.

Reduction in Agency-level operating expenses (-\$262,000)

A reduction of \$262,000 is requested for this line item related to Agency-level cost savings measures and operating efficiencies. Please refer to second paragraph on page 18-18.

Pay Increase (+\$126,000)

An increase of \$126,000 for pay costs which includes \$23,000 for annualization of the FY 2013 pay raise and \$103,000 for the anticipated FY 2014 pay raise.

- (v) A net decrease of \$31,000 for the Biotechnology Regulatory Services program (\$18,246,000 and 90 staff years available in 2013).

APHIS oversees a science-based regulatory framework for the safe development and use of genetically engineered (GE) organisms. APHIS is responsible for regulating the importation, interstate movement, and field release of GE organisms that may pose a pest risk to plant health. Over the past two decades, APHIS has evaluated and determined non-regulated status for 93 petitions consisting of 156 plant lines. These approved GE organisms account for more than 90 percent of soybean, 80 percent of corn, and 80 percent of cotton adopted and grown by farmers in the United States. These activities support USDA's strategic goals to "Help America promote agricultural production and biotechnology exports as America works to increase food security."

As part of the science-based regulatory framework, APHIS requires a permit or notification for the introduction of GE organisms into the environment, such as a field test of a product under development, and conducts thorough scientific analyses to evaluate potential plant risks and environmental impacts before authorizing an introduction. The Agency ensures regulatory compliance on the part of the biotechnology community through inspections, educational and outreach efforts, and investigations and audits. In FY 2012, APHIS issued 2,125 new permits and notifications, safely authorized 11,602 field trials, and conducted more than 679 site inspections.

Overall, the application of biotechnology in agriculture has resulted in benefits to farmers, producers, and consumers. Biotechnology has helped to make both insect pest control and weed management safer and easier, contributed to the adoption of no-till and low-till agricultural practices, and helped safeguard crops against disease. APHIS uses sound science to evaluate and make determinations of non-regulated status for a GE organism, and new and innovative GE technologies can enter commerce and the worldwide marketplace. APHIS supports strategies designed to meet the need for food security, energy production, carbon offsets, and the economic sustainability of farms. If funding for the Biotechnology Regulatory Services program were eliminated, APHIS would not be able to evaluate newly developed GE crops for plant pest risks, and developers of the crops would likely not be able to export these products to other countries. APHIS recently implemented process improvements for its review of petitions to determine the regulatory status of GE organisms under its purview. These improvements are designed to reduce the average amount of time to complete a regulatory determination, from more than 2½ years to about 16 months. APHIS expects the cumulative number of determinations of non-regulated status published in the *Federal Register* for GE organisms found safe by USDA to increase from 93 in FY 2012 to 108 in FY 2014.

Approximately 78 percent of the program's funding supports salaries and benefits of personnel, 15 percent funds contracts and agreements, 4 percent funds major IT system costs, and the remaining supports normal operating costs such as travel, supplies, rent and utilities.

Increase for minor changes (+\$152,000)

A \$152,000 increase is requested for this line item related to minor programmatic changes.

Reduction related to Agency-level operating expenses (-\$263,000)

A reduction of \$263,000 is requested for this line item related to Agency-level cost-savings measures and operating efficiencies. Please refer to second paragraph on page 18-18.

Pay Increase (+\$80,000)

An increase of \$80,000 for pay costs which includes \$14,000 for annualization of the FY 2013 pay raise and \$66,000 for the anticipated FY 2014 pay raise.

A net increase of \$442,000 and an increase of 2 staff years for Safeguarding and Emergency Preparedness/Response – Emergency Management

(w) A net increase of \$501,000 for the Contingency Fund (\$1,006,000 and 15 staff years available in 2013).

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. In recent years, the Agency was able to conduct activities to effectively address outbreaks of European grapevine moth, rabies, contagious equine metritis (CEM), and most recently the giant African land snail.

APHIS has used the funding to control such emergencies before they can spread and cause significant economic damage. For example, APHIS used contingency funding to address an outbreak of CEM, a transmissible venereal disease of horses that is also easily spread indirectly through artificial insemination or contamination of instruments or equipment used at equine breeding facilities. CEM can have a significant impact on equine reproduction, especially since the mares can only be bred during certain seasons. APHIS responded quickly and established quarantines of all potentially infected and exposed animals and completed diagnostics and treatments of affected horses. Using resources available through the Contingency Fund, the Agency was able to respond rapidly and completely eradicated the disease from the United States and protecting the horses, semen, and embryos export market valued at an estimated \$415 million annually.

Without continued availability of the Contingency Fund, APHIS would have to rely on the Secretary's authority to transfer funds from other sources or the formal request to reprogram funds within the appropriation. These options, while helpful, are lengthier processes for approval of needed resources and would significantly delay APHIS' efforts to address small-scale, emergency situations.

Ensure availability of funds to respond to implement emergency short term activities. (+\$500,000)

APHIS' appropriation includes a contingency fund available for the control of outbreaks of insect, plant diseases, animal diseases, and for control of pest animals and birds to the extent necessary to meet emergency conditions. The Agency has utilized the funding to control such emergencies before they can spread and cause significant economic damage. In recent years, the Agency was able to conduct activities to address outbreaks of European grapevine moth, rabies, contagious equine metritis, and most recently the giant African land snail. APHIS requests an increase of \$500,000 to restore the line item to its previous funding level to ensure sufficient funds are available to implement emergency short term activities not otherwise provided for in the appropriation. With the full amount of funding, APHIS will be better able to promptly address outbreaks, decreasing the likelihood of pest and disease spread. APHIS will use \$1.507 million in 2014 to conduct program activities.

Reduction in Agency-level operating expenses (-\$12,000)

A reduction of \$12,000 is requested for this line item related to Agency-level cost savings measures and operating efficiencies. Please refer to second paragraph on page 18-18.

Pay Increase (+\$13,000)

An increase of \$13,000 for pay costs which includes \$2,000 for annualization of the FY 2013 pay raise and \$11,000 for the anticipated FY 2014 pay raise.

- (x) A net decrease of \$59,000 and an increase of 2 staff years for the Emergency Preparedness and Response program (\$17,104,000 and 89 staff years available in 2013).

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 recently managed the response to the outbreak of contagious equine metritis, which involved coordinating the response activities across multiple States and regions and developing national guidance documents to ensure a consistent response.

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, avoiding 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 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 2014, 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 63 percent of the program's funding supports salaries and benefits of personnel, 4 percent funds contracts and agreements, and the remaining supports normal operating costs such as travel, supplies, rent and utilities.

Increase for minor changes (+\$117,000)

An \$117,000 increase is requested for this line item related to minor programmatic changes.

Reduction in Agency-level operating expenses (-\$255,000)

A reduction of \$255,000 is requested for this line item related to Agency-level cost savings measures and operating efficiencies. Please refer to second paragraph on page 18-18.

Pay Increase (+\$79,000)

An increase of \$79,000 for pay costs which includes \$14,000 for annualization of the FY 2013 pay raise and \$65,000 for the anticipated FY 2014 pay raise.

(2) A net increase of \$303,000 and an increase of 3 staff years for Safe Trade and International Technical Assistance

(a) A net increase of \$745,000 for the Agriculture Import/Export program (\$13,436,000 and 92 staff years available in 2013).

APHIS protects and promotes U.S. agriculture by preventing the introduction of plant and animal pests and diseases and facilitating the safe trade of plants, plant products, live animals and live animal products. APHIS also enforces the Lacey Act, which requires an import declaration for shipments entering the United States that are made from plant-based materials including wood, furniture, pharmaceuticals, and other types of products. APHIS works closely with other Federal agencies, States, foreign governments, industry, and academia to carry out these activities.

APHIS also conducts activities related to the 2008 Farm Bill amendments to the Lacey Act that 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 these regulated plants. APHIS currently collects approximately 10,000 declarations per week, which is approximately two-three percent of the declarations. The Agency participates in an interagency group to determine how best to implement the new provisions and engages in outreach activities to educate the various industries and importers affected by the Lacey Act amendments.

In FY 2012, APHIS issued 9,096 import permit applications for live animals, animal products, organisms and vectors, and select agents. APHIS is also responsible for revising import regulations to ensure they are effective and based on current science. In March 2012, APHIS published a proposed rule that would streamline the importation of live bovine and bovine products with regard to bovine spongiform encephalopathy. The comprehensive rule provides a risk-based approach consistent with international animal health guidelines and scientific understanding. Additionally, APHIS initiated an improvement effort to streamline and optimize the import risk analysis process in FY 2011. By 2014, the Agency anticipates that there will be a reduction in the time it takes to complete the required correspondence and other essential activities in the process.

APHIS' Agriculture Import/Export program also negotiates animal health export requirements for live animals, germplasm, and animal products going to other countries to ensure safe trade between countries. During FY 2012, APHIS negotiated, or re-negotiated, 239 export protocols for animals and animal products: 46 protocols that opened new markets, 132 that expanded markets, and 61 that retained current markets. APHIS continued to increase cattle exports, reopen poultry exports from several States to Japan, and expand the European market for U.S. pet food in FY 2012. APHIS also developed 25 information

packages and questionnaire responses from various countries in an effort to maintain, expand, or open export markets.

APHIS estimated the value of new or maintained export markets for live animals, germplasm, and animal products at approximately \$2 billion for FY 2012. APHIS negotiates with importing countries to set conditions for various commodities that protect their country while facilitating trade. APHIS is working to make it easier for exporters to complete and submit export health documentation by pilot testing a new information system for electronic certification. If successful, the system will also facilitate APHIS' review of the documentation submitted by exporters and eventually allow the delivery of export certificates electronically to trading partners. Expanding market opportunities for animals and animal products benefits both individual producers and major food production companies. Small farmers have also benefited as increased export demand has resulted in consolidators purchasing animals from small farmers in order to assemble larger shipments; small farmers are able to take advantage of the economies of shipping large numbers of animals at one time.

Without continued funding for the Agriculture Import-Export program, there would be a lack of adequate safeguards for imported animals and animal products leading to increased likelihood of a disease incursion from imports.

Overall, approximately 75 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.

Conducting additional risk assessments (+\$825,000)

The Agriculture Import/Export program establishes regulations and policies for the import of live animals and animal products to safeguard against foreign pests and diseases. The program conducts science-based risk assessments and monitors global animal health status to ensure that the established import requirements and mitigation measures are based on the most current information available. APHIS requests an additional \$825,000 for five risk analysts to prepare risk analyses for regulatory actions based on requests from other countries for agricultural products.

Shifting priorities related to agricultural trade (+\$48,000)

APHIS requests a net increase of \$48,000 consisting of an increase of \$725,000 for Lacey Act activities and a decrease of \$677,000 related to general import and export operations.

As amended in the 2008 Farm Bill, the Lacey Act prohibits the importation of any plant—with limited exceptions—taken or traded in violation of domestic or international laws. The amendments were designed to address illegal logging in other countries. Illegal logging is environmentally destructive and undermines markets for wood products produced in the United States. The Lacey Act amendments have strong support from a broad coalition of forest industry groups, labor unions, and environmental advocacy organizations. Among other things, the Lacey Act requires a declaration for imported shipments of regulated products. This declaration must contain the scientific name of the plant, the importation value, the quantity of the plant, and name of the country where the plant was taken. The declaration requirement covers a broad range of products from lumber and wood pulp to sporting goods, pharmaceuticals, and planes. APHIS is working within an interagency group representing the U.S. Forest Service, U.S. Department of Homeland Security's Customs and Border Protection, U.S. Trade Representative, U.S. Department of Justice, U.S. Department of State, U.S. Fish and Wildlife Service, the Council on Environmental Quality, and the U.S. Department of Commerce, to implement the provisions. APHIS and cooperating Agencies developed an implementation plan for a phased-in enforcement process with the most complex products being added in later phases.

APHIS began phased-in enforcement of the Lacey Act in May 2009 and currently collects about 10,000 declarations per week. Approximately 10 percent of these are submitted on paper forms that require significant resources to analyze and store. Currently, electronic declarations can only be made through

licensed Customs brokers. APHIS currently has \$775,000 available for activities conducted under the amendments to the Lacey Act. The Agency is using these funds for personnel costs associated with funding a dedicated staff, secure document storage, and outreach activities to educate the various industries and importers affected by the Lacey Act amendments. The program will be selecting one percent of the declarations at random for a cursory review. The remaining declarations will be stored. For 2014, the Agency is requesting an additional \$725,000 for a total funding level of \$1.5 million. With these additional dollars, the program will work to implement a web-based system for collecting and maintaining declarations to help eliminate the need for paper-based declarations. In addition, APHIS plans to reassign staff from other areas to assist with Lacey Act activities and expand the outreach effort. With the requested increase, the program anticipates selecting 2-3 percent of the declarations for a cursory review. The remaining declarations will be stored.

APHIS requests a decrease of \$677,000 for general operations regarding the review of animal and animal product import and export requests. APHIS continues to look for ways to improve its import and export activities and estimates that the cost of business processes can be reduced, in particular through the potential increased use of electronic document submission and review. At the requested funding level, we project the number of foreign animal disease outbreaks associated with imports allowed by the recognition of animal health status within foreign regions will remain at zero, and the number of export markets opened, expanded, or retained by domestic regionalization will be 2.

Reduction in Agency-level operating expenses (-\$210,000)

A reduction of \$210,000 is requested for this line item related to Agency-level cost savings measures and operating efficiencies. Please refer to second paragraph on page 18-18.

Pay Increase (+\$82,000)

An increase of \$82,000 for pay costs which includes \$15,000 for annualization of the FY 2013 pay raise and \$67,000 for the anticipated FY 2014 pay raise.

(b) A net decrease of \$442,000 and a net increase of 3 staff years for the Overseas Technical and Trade Operations program (\$20,227,000 and 73 staff years available in the 2013)

The Overseas Technical and Trade Operations (OTTO) program partners with foreign governments, regional and international organizations, and other stakeholders to (1) monitor and respond to emerging foreign agricultural pests and disease threats to the United States, (2) facilitate U.S. agricultural trade through the resolution of technical trade barriers, and (3) support 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. Technical experts work with counterparts on international animal and plant issues that may affect U.S. agriculture by establishing relationships with foreign regulators, which allow direct intervention on behalf of U.S. exporters subject to potential trade restrictions. 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 help generate more than 1 million jobs around the country. In FY 2012, APHIS successfully negotiated and resolved 207 SPS trade-related issues involving U.S. agricultural exports, with an estimated market value of \$2.56 billion, and intervened in 324 releases of U.S. cargo held up at foreign ports-of-entry, which prevented the rejection of shipments worth more than \$41 million.

Agricultural trade is a bright spot for the U.S. export market but is 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 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. Overall, the OTTO program protects U.S. agricultural resources from costly foreign pests and diseases. Without this program, APHIS' ability to quickly 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.

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.

*Enhance capacity building efforts (+\$2 million and 4 staff years)*

Over the past several years, APHIS identified and reduced overseas agricultural pests and diseases, enhanced safe agricultural trade, increased food security, and strengthened emergency response preparedness through capacity building projects. Capacity building projects reduce risks to U.S. agriculture and trade by assisting developing countries in strengthening their agricultural health infrastructures. APHIS would use the requested \$2 million to support capacity building projects that target high priority, high-risk agricultural issues in developing countries and with major trading partners. These regulatory and technical counterparts make decisions affecting agricultural health and trade import restrictions. Establishing relationships with these counterparts through capacity building activities provides opportunities for APHIS to resolve agricultural health issues efficiently, including removing trade barriers.

The increase will allow APHIS to share technical science-based information and improve relationships with regulatory counterparts in other countries, while assisting them in building agricultural health infrastructures and regulatory capacity. APHIS will use approximately \$450,000 of the requested increase to conduct training classes in science-based plant health regulatory systems that guard against harmful pests and diseases in plant production systems. Plant health systems are important in contributing to overall stronger plant protection and quarantine systems, which increase economic growth and the capacity to trade. APHIS will use approximately \$775,000 to develop and conduct five animal health programs that target animal pests and diseases for Latin American countries, among others. By combining classroom learning and laboratory exercises, these programs will reinforce veterinary infrastructure requirements, enhance transboundary animal disease knowledge, and develop participants' risk analysis skills in the most proximate areas to the United States, where threats of pest and disease transmission are greatest. APHIS will use approximately \$775,000 of the requested increase to conduct five programs that coordinate with Asian and African countries to enhance emergency response preparedness planning, biosecurity and biosafety, rapid response techniques, and surveillance.

All of these initiatives will create non-Federal jobs by coordinating with contractors, land grant and minority-serving universities, and State cooperators. Additionally, the funds will support 4 staff years shifted from other program areas and allow APHIS to coordinate with other Federal agencies, such as the U.S. Agency for International Development, international and nongovernmental organizations, and major trading partners to promote science-based agricultural health standards in developing countries, resulting in global agricultural trade that is safe, predictable, and fair. Overall, these initiatives will allow APHIS to directly train approximately 350 participants from more than 70 countries and reach many more by developing educational materials for dissemination. These activities contribute to the development of agricultural health infrastructures in developing countries, with the goal of allowing them to prevent pest and disease outbreaks that may spread to other countries and using the same science-based, international standards that APHIS uses to evaluate import requests. This ultimately leads to the development of new export opportunities for U.S. producers and the ability of foreign trading partners to engage in broader, safe agricultural trade.

Reduce funding provided to cooperating international partners related to foreign animal disease surveillance (-\$2.233 million and 1 staff year)

The program protects U.S. agricultural health and the economy by improving early detection, reporting, and control of foreign animal diseases overseas and allowing APHIS to have eyes and ears around the globe to investigate and help control emerging disease threats to U.S. livestock and poultry. The program works with foreign governments and international nongovernmental organizations, such as the Inter-American Institute for Cooperation on Agriculture (IICA) and the Food and Agricultural Organization of the United Nations (FAO) to address high risk diseases that have potential pathways into the United States through trade or natural spread. APHIS is proposing a \$2.233 million decrease for this program to reduce funding provided directly to cooperating governments and international organizations while maintaining personnel and resources to provide technical assistance to partners on the highest risk diseases, such as foot-and-mouth disease (FMD) and classical swine fever. Providing such technical assistance will make efficient use of available funds and enable APHIS to achieve program goals in a cost-effective manner. APHIS aims to maintain the free status of the United States, Mexico, and Central America and to have no significant FMD outbreaks in Colombia. The Agency will continue to work with international partners and leverage its relationships with other organizations focused on international agricultural health to continue priority animal disease programs. APHIS will also shift 1 staff year from the surveillance activities to other program activities.

Reduction in Agency-level operating expenses (-\$274,000)

An additional reduction of \$274,000 is requested for this line item related to Agency-level cost savings measures and operating efficiencies. Please refer to second paragraph on page 18-18.

Pay Increase (+\$65,000)

An increase of \$65,000 for pay costs which includes \$12,000 for annualization of the FY 2013 pay raise and \$53,000 for the anticipated FY 2014 pay raise.

(3) An increase of \$1,143,000 and 3 staff years for Animal Welfare

(a) A net increase of \$950,000 for the Animal Welfare program (\$27,253,000 and 218 staff years available in 2013).

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. The program evaluates the care provided to approximately 2.2 million animals used in research, exhibition, the wholesale pet trade, or transported in commerce. The AW program places primary importance on the quality of care provided to those animals. The program places primary emphasis on records management, review of third-party complaints, re-inspection of problem facilities using a risk-based inspection system, and technical training of inspectors.

As part of its regulatory function, the program oversees more than 8,000 licensees and registrants, associated with more than 11,000 facilities, to assure these animals are being provided adequate humane care and treatment provided for in the regulations. In FY 2012, the program either conducted, or attempted to conduct, more than 11,100 random-based inspections to entities located across the United States including rural areas. APHIS uses the Risk Based Inspection System to focus efforts on those entities that pose the highest risk of not providing humane care and treatment to the animals.

Once licensed, the AW program conducts unannounced inspections to monitor compliance with the regulations over time. 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 exercises immediate deterrent options, such as letters of warning and the publication of such letters on the internet. APHIS 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 built through the APHIS Center for Animal Welfare are essential in balancing the current and future workload. The Center conducts educational workshops, scientific seminars, and listening sessions to convey critical and current animal welfare information, and work with universities, industry, and animal interest groups. Through the Center, APHIS works with State Departments of Agriculture, industry, kennel associations, animal interest groups and owners.

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 enforce the AWA and the health and safety of animals sold and transported to be America's pets and used to support lifesaving research 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.

*A net decrease for Animal welfare enforcement efforts (-\$759,000)*

APHIS requests a reduction of \$.759 million in FY 2014 related to improvements in the inspection and enforcement efforts of currently licensed entities. In recent years, APHIS has implemented measures that have enhanced animal welfare inspection and enforcement efforts of currently licensed entities and APHIS will continue to direct resources in a manner that maximizes its ability to enforce the AWA. Examples of these changes include: improved overall inspector performance and improved consistency and quality of inspections and inspection reports. Additional measures include strengthening regulations related to commercial dog breeders and dealers, re-evaluating the current methodology for calculating the frequency of inspection, and developing and sponsoring meetings and trainings aimed at increasing compliance with the AWA. Further, APHIS will also continue to prioritize inspections through risk-based determination. Where possible, the Agency will seek additional opportunities to gain efficiencies.

*Implementation of the retail pet store rule (+\$1,928,000)*

Implementation of the retail pet store rule will close the loophole of pets being sold over the Internet, phone and by mail, that are currently exempt from USDA oversight. APHIS estimates that approximately 3,000 to 5,000 new entities will require a USDA license to continue operations. Retail animal sellers operate under different business models than current regulated entities and represent a part of the industry where the Agency had not previously been engaged. Bringing these facilities into compliance and assisting them to remain in compliance with the AWA will include education, outreach, pre-licensing and licensing inspections and enforcement actions against violators.

In 2014, APHIS will identify these potential entities through searches, tracebacks from currently licensed and registered facilities, and through education and outreach. APHIS will educate entities applying for a license on the requirements of the AWA and conduct up to three physical inspections prior to issuing a license, and once the entities are licensed, they will subject to the unannounced compliance inspections.

*Reduction in Agency-level operating expenses (-\$412,000)*

A reduction of \$412,000 is requested for this line item related to Agency-level cost savings measures and operating efficiencies. Please refer to second paragraph on page 18-18.

*Pay Increase (+\$193,000)*

An increase of \$193,000 for pay costs which includes \$35,000 for annualization of the FY 2013 pay raise and \$158,000 for the anticipated FY 2014 pay raise.

- (b) A net increase of \$193,000 and 3 staff years for the Horse Protection program (\$700,000 and 5 staff years available in 2013).

APHIS's Horse Protection program serves as the sole Federal entity to uphold the Horse Protection Act (HPA), which strives to eliminate the practice of soring by prohibiting the showing, sale, exhibition or auction of horses subjected to the cruel and abusive practice. Soring is a technique used to irritate or blister a horse's forelegs through the injection or application of chemicals or mechanical irritants. This technique changes the gait of a horse, to a desired high-stepping one that provides a competitive edge and improves chances to win at shows. 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.

Sponsors and/or show management have statutory responsibility under the HPA to prevent unfair competition and must identify and disqualify sored horses. They contract with Horse Industry Organizations (HIOs) to prevent sore horses from participating in shows. The Horse Protection program carries out its responsibility through unannounced inspections at horse shows, and oversight of Designated Qualified Persons (DQPs) that are trained and licensed by HIOs. The Horse Protection program works collaboratively with the twelve current HIOs to train and license DQPs used to inspect horses for soring at all events covered by the HPA.

APHIS attends horse-related events annually to evaluate the effectiveness of the licensed DQPs, dependent on available funding. An increased APHIS presence, combined with the increased use of technology to identify substances used to sore the horses, has had a positive impact on compliance. When APHIS inspectors attended a recent national breed show, the violation rate decreased four percent over the previous year, when we were unable to attend. APHIS can document this declining violation rate and will provide indicators that its enhanced enforcement efforts at horse shows are responsible for increased compliance than in previous years.

APHIS presence serves as a deterrent; 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, and the remaining funds will support the purchase of necessary equipment for completing programmatic functions.

Increase for minor changes (+\$198,000)

In addition to inspection and other technologies, the program contracts out for testing to identify if foreign substances were applied to the legs of the horses to accentuate their gait. This testing technique requires blood to be drawn and tested for foreign substances. APHIS has seen a correlation between attendance at horse shows, sampling for foreign substances, and improvements in compliance. APHIS requests an increase of \$198,000 for the Horse Protection program to increase foreign substance testing from 250 to 350 samples, and to increase attendance at horse shows from 79 shows in FY 2011 to approximately 100 in FY 2014.

Reduction in Agency-level operating expenses (-\$9,000)

A reduction of \$9,000 is requested for this line item related to Agency-level cost savings measures and operating efficiencies. Please refer to second paragraph on page 18-18.

Pay Increase (+\$4,000)

An increase of \$4,000 for pay costs which includes \$1,000 for annualization of the FY 2013 pay raise and \$3,000 for the anticipated FY 2014 pay raise

(4) A decrease of \$60,000 for Agency Management

(a) A net decrease of \$27,000 for the APHIS Information Technology Infrastructure program (\$4,362,000 and 0 staff years available in 2013)

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. Systems not updated with current security patches make the Agency vulnerable to IT security threats. Further, 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.

AITI expenditures fund day-to-day operations for the Agency's IT infrastructure, with over 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.

Reduction in Agency-level operating expenses (-\$27,000)

A reduction of \$27,000 is requested for this line item related to Agency-level cost savings measures and operating efficiencies. Please refer to second paragraph on page 18-18.

(b) A net decrease of \$33,000 for the Physical and Operational Security program (\$5,398,000 and 0 staff years available in 2013).

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. In FY 2012, the program's personnel investigated 156 workplace violence allegations, 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 Horse Protection Act (HPA) at horse shows. In FY 2012, the program provided security for APHIS employees enforcing regulation at horse shows in 13 States and five inspections related to the AWA. The program has ensured the safety of APHIS employees and successfully enforced the HPA. 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. Without continued funding and a physically secure environment, the efficiency and effectiveness of all APHIS programs would be compromised as well as the employee's well-being and safety.

Additionally, 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 Agency is required by the Department of State to help fund the construction of the NECs based on the number of authorized APHIS positions. The cost-sharing program requires each participating agency to provide funding for several years in advance of actual occupancy for its share of the costs of providing new, safe, 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.

The POS program helps ensure effective compliance with laws and regulations that APHIS enforces by providing security support for APHIS inspectors across the United States. Over the past few years, APHIS has worked to increase the number events attended in the enforcement of the Horse Protection Act, and the Agency continues to make this a priority.

*Increase for minor changes (+\$35,000)*

A \$35,000 increase is requested for this line item related to minor programmatic changes.

*Reduction in Agency-level operating expenses (-\$68,000)*

A reduction of \$68,000 is requested for this line item related to Agency-level cost savings measures and operating efficiencies. Please refer to second paragraph on page 18-18.

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 at the wholesale level, 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 permit fees collected from regulated entities and individuals to be used to finance activities related to the review and maintenance of licenses and registrations, the review of applications for licenses and registrations for facilities, and compliance inspections conducted under the Act.

Offsets: The user fee would offset a portion of the appropriation for the Animal Welfare Act program.

Budget Impact: (\$ in thousands)

	2012	2013	2014	2015	2016
Discretionary Budget Authority	0	0	\$9,000	\$12,261	\$12,635
Discretionary Outlays	0	0	8,550	12,098	12,166

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)

	2012	2013	2014	2015	2016
Discretionary Budget Authority	0	0	\$3,750	\$5,109	\$5,265
Discretionary Outlays	0	0	3,563	5,041	5,069

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 the current appropriations for the Veterinary Biologics program.

Budget Impact: (\$ in thousands)

	2012	2013	2014	2015	2016
Discretionary Budget Authority	0	0	\$6,750	\$9,196	\$9,476
Discretionary Outlays	0	0	6,413	8,736	9,003

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Salaries and Expenses

Geographic Breakdown of Obligations and Staff Years (SY)

(Dollars in thousands)

State/Territory	<u>FY 2011 Actuals</u>		<u>FY 2012 Actuals</u>		<u>FY 2013 Estimate</u>		<u>FY 2014 Estimate</u>	
	Amount	SY	Amount	SY	Amount	SY	Amount	SY
<b><u>UNITED STATES:</u></b>								
Alabama.....	\$4,345	26	\$3,628	23	\$3,516	23	\$4,122	26
Alaska.....	712	2	1,065	1	1,032	1	1,041	1
Arizona.....	13,184	82	23,487	83	22,763	82	17,465	80
Arkansas.....	3,374	28	3,969	26	3,847	26	4,247	27
California.....	92,941	157	96,790	138	93,805	137	81,302	137
Colorado.....	59,100	306	49,507	344	47,980	341	57,553	383
Connecticut.....	1,636	8	1,553	6	1,505	6	1,554	6
Delaware.....	731	2	725	2	703	2	620	2
Florida.....	44,553	226	45,271	266	43,875	264	45,496	232
Georgia.....	5,765	35	5,060	35	4,904	35	4,075	33
Hawaii.....	20,803	218	25,475	287	24,689	284	20,548	237
Idaho.....	11,743	83	10,674	87	10,345	86	12,957	88
Illinois.....	7,020	37	5,505	40	5,335	40	5,917	41
Indiana.....	5,683	38	4,721	32	4,575	32	5,436	39
Iowa.....	68,502	409	60,451	348	58,587	345	59,404	348
Kansas.....	4,063	30	3,649	29	3,536	29	3,667	30
Kentucky.....	5,406	37	4,751	33	4,605	33	4,978	35
Louisiana.....	3,026	31	3,276	30	3,175	30	2,998	32
Maine.....	1,330	10	1,290	9	1,250	9	1,136	9
Maryland.....	194,565	1,008	200,823	964	192,200	953	165,093	938
Massachusetts.....	37,105	74	21,904	122	21,229	121	22,128	121
Michigan.....	10,295	74	8,680	66	8,412	65	10,290	71
Minnesota.....	18,713	128	16,575	161	16,064	160	17,733	162
Mississippi.....	7,781	58	6,702	45	6,495	45	7,197	48
Missouri.....	6,592	54	9,824	47	9,521	47	5,231	42
Montana.....	4,878	25	4,978	36	4,825	36	4,468	33
Nebraska.....	3,875	25	4,144	25	4,016	25	3,196	25
Nevada.....	2,314	16	2,237	18	2,168	18	2,345	19
New Hampshire.....	13,508	8	13,364	16	12,952	16	13,556	17
New Jersey.....	8,547	44	5,722	32	5,546	32	5,663	32
New Mexico.....	4,888	48	5,313	40	5,149	40	6,270	45
New York.....	25,382	136	29,856	152	28,935	151	23,244	135
North Carolina.....	29,312	175	33,248	132	32,223	131	26,725	137
North Dakota.....	4,044	30	3,975	30	3,852	30	3,321	30
Ohio.....	11,492	60	22,027	54	21,348	54	11,268	53
Oklahoma.....	4,301	31	4,418	31	4,282	31	4,282	32
Oregon.....	5,766	22	5,834	26	5,654	26	5,293	22
Pennsylvania.....	7,316	48	6,642	44	6,437	44	7,101	46
Rhode Island.....	417	2	465	1	451	1	461	1
South Carolina.....	3,194	24	2,821	21	2,734	21	2,896	22
South Dakota.....	2,613	13	2,454	16	2,378	16	2,284	15
Tennessee.....	5,184	34	6,700	31	6,493	31	5,740	34
Texas.....	55,372	332	44,366	329	42,998	326	51,517	347
Utah.....	4,998	31	5,350	37	5,185	37	5,106	35
Vermont.....	931	5	1,066	8	1,033	8	1,057	8
Virginia.....	5,491	27	4,209	23	4,079	23	4,503	25
Washington.....	7,402	32	7,270	34	7,046	34	6,574	34
West Virginia.....	2,350	19	2,715	19	2,631	19	2,957	20
Wisconsin.....	6,659	31	5,337	30	5,172	30	6,332	34
Wyoming.....	4,587	46	4,184	30	4,055	30	3,962	30

State/Territory	FY 2011 Actuals		FY 2012 Actuals		FY 2013 Estimate		FY 2014 Estimate	
	Amount	SY	Amount	SY	Amount	SY	Amount	SY
<b>U.S. TERRITORIES:</b>								
District of Columbia.....	39,649	126	13,390	88	13,350	88	13,797	88
Guam.....	431	2	159	1	159	1	162	1
Puerto Rico.....	8,105	119	9,182	110	9,155	110	9,408	110
Virgin Islands.....	63	0	78	1	78	1	80	1
<b>INTERNATIONAL REGIONS</b>								
<b>AFRICA:</b>								
South Africa.....	331	2	482	1	481	1	490	1
Senegal.....	1,015	3	559	1	557	1	568	1
Other.....	417	2	310	0	309	0	314	0
<b>ASIA/PACIFIC:</b>								
China.....	763	2	1,274	3	1,270	3	1,295	3
Japan.....	839	2	968	1	965	1	983	1
South Korea.....	430	1	422	1	421	1	429	1
Other.....	2,091	12	1,969	2	1,963	2	1,999	2
<b>CARIBBEAN:</b>								
Dominican Republic.....	1,251	1	488	0	487	0	495	0
Other.....	0	0	323	0	322	0	328	0
<b>CENTRAL AMERICA:</b>								
Guatemala.....	23,231	19	26,652	4	26,576	4	27,039	4
Nicaragua.....	457	1	258	0	257	0	262	0
Panama.....	19,624	5	15,177	6	15,133	6	15,401	6
Other.....	1,215	2	951	1	948	1	966	1
<b>EUROPE/NEAR EAST:</b>								
Austria.....	651	2	692	1	690	1	703	1
Belgium.....	1,321	2	1,413	2	1,409	2	1,435	2
Other.....	944	4	1,175	2	1,172	2	1,194	2
<b>NORTH AMERICA:</b>								
Canada.....	263	3	354	1	353	1	360	1
Mexico.....	9,763	40	6,462	4	6,444	4	6,682	5
<b>SOUTH AMERICA:</b>								
Brazil.....	1,102	8	880	2	878	2	896	2
Chile.....	848	5	543	1	542	1	552	1
Other.....	1,679	13	2,781	1	2,773	1	2,822	1
<b>Total direct obligations:</b>	<b>\$970,275</b>	<b>4,802</b>	<b>\$930,992</b>	<b>4,673</b>	<b>\$902,285</b>	<b>4,631</b>	<b>\$860,967</b>	<b>4,633</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)

	2011 <u>Actual</u>	2012 <u>Actual</u>	2013 <u>Estimate</u>	2014 <u>Estimate</u>
<b>Personnel Compensation:</b>				
Washington, DC.....	\$86,448	\$85,100	\$85,356	\$86,721
Field.....	259,345	255,301	256,067	260,163
11 Total personnel compensation.....	345,793	340,401	341,422	346,884
12 Personnel benefits.....	116,974	104,600	104,914	106,632
13 Benefits for former personnel.....	1,958	4,599	1,964	2,060
Total, pers. comp. & benefits.....	<u>464,725</u>	<u>449,600</u>	<u>448,300</u>	<u>455,576</u>
<b>Other Objects:</b>				
21 Travel & transportation of personnel.....	21,488	20,216	21,733	22,356
22 Transportation of things.....	1,657	1,342	1,342	1,460
23 Rent, Communications, and Utilities.....	27,450	22,677	22,791	22,735
24 Printing and reproduction.....	924	422	464	523
25.0 Other Services.....	26,251	22,246	21,356	21,500
25.1 Contractual Services Performed by Other				
Federal Agencies.....	58,380	50,590	47,554	42,554
25.2 Related Expenditures.....	3,934	2,910	2,736	2,736
25.3 Repair, Alteration or Maintenance of				
Equipment, Furniture or Structure.....	7,334	6,456	6,069	6,069
25.4 Contractual Services - Other.....	25,556	26,160	24,067	9,572
25.5 Agreements.....	241,048	244,354	224,285	195,431
25.6 ADP Services and Supplies.....	9,112	5,075	4,872	4,440
25.7 Miscellaneous Services.....	11,187	7,762	7,452	7,452
25.8 Fees.....	1,338	1,616	1,551	1,551
26 Supplies and materials.....	44,829	47,353	45,459	45,161
31 Equipment.....	17,146	17,082	17,508	17,105
32 Land & Structure.....	-	220	220	220
41 Grants, Subsidies & Contributions.....	5,141	2,094	1,927	1,927
42 Indemnity/Compensation.....	2,456	2,713	2,495	2,495
43 Int. & Div.....	20	34	34	34
45 Special Payments.....	299	70	70	70
Total, other objects.....	<u>505,550</u>	<u>481,392</u>	<u>453,985</u>	<u>405,391</u>
Total direct obligations.....	<u>\$970,275</u>	<u>\$930,992</u>	<u>\$902,285</u>	<u>\$860,967</u>
<b><u>Position Data:</u></b>				
Average Salary, ES positions.....	\$163,797	\$163,872	\$163,957	\$164,032
Average Salary, GS positions.....	\$86,866	\$87,124	\$87,175	\$87,225
Average Grade, GS positions.....	10.50	10.53	10.58	10.60

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

**Physicians' Comparability Allowance (PCA) Worksheet**

**APHIS Table 1**

		CY 2012 (Actual)	CY 2013 (Estimates)	BY 2014* (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.			

\*FY 2014 data will be approved during the FY 2015 Budget cycle.

- 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 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 on a national basis, thus leveraging the work of animal health professionals across the country to meet local, State and national veterinary health objectives. Accredited private veterinarians trained and v accredited by the Agency 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.

### 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 valued at more than \$65 billion in 2011 (National Agricultural Statistical Service). Knowing where diseased and at-risk animals are located helps to preserve animal health, reduce the number of animal deaths if outbreaks occur, and limits the extent of 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 became effective on March 11, 2013. In FY 2012, in preparation for the final rule, APHIS began developing implementation plans and considering other activities that are needed. For example, the Animal Disease Traceability Working Group, comprised of Federal and State animal health officials, will work with States and Tribes to establish procedures to conduct test exercises on the performance of activities related to traceability. By doing so, APHIS will determine how animals can be traced from the State or Tribe of origin to the State or Tribe of destination within a certain timeframe during a disease investigation. When completed, APHIS will use these test exercises to collect data reflecting tracing capabilities and administer them as part of upcoming cooperative agreements. This information provides benchmarks of current capabilities and will be used to measure improvement and document progress made after implementing the Animal Disease Traceability framework.

### Information Management

The Animal Health Technical Services program develops new information management systems, while maintaining and improving existing data systems and applications. In FY 2012, APHIS implemented the Aquaculture Surveillance Management System that consolidated information about aquatic animal health that had previously been located in different systems or spreadsheets. APHIS is now able to incorporate national data standards into data management applications, access historical information, and enter in new data.

In FY 2012, the program modified the Licensing, Serial Release, Testing Information System (LSRTIS). 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

Disease spread modeling is used to evaluate disease outbreak scenarios, planning, and assessment of disease control strategies when real-world information and experience are scarce or unavailable. In FY 2012, APHIS completed the model examining the simulated results of foot-and-mouth disease (FMD) vaccination. The modeling demonstrated the number of vaccine doses required should FMD be detected in the United States. Such estimates can be used to augment current FMD vaccine stockpiles, such as the North American FMD Vaccine Bank.

APHIS also continued development and application of the National Cattle Movement Model. The goal of this model is to better understand the cattle transportation network and its influence on the spread and control of livestock diseases, such as FMD. The model enables States to improve pre-event strategies, and determine where resources would be needed in the event of cattle disease spread. The initial model included cattle populations within 48 States, (excluding New Jersey and Hawaii) and the inventory and location of cattle in those States, were provided to the USDA National Agricultural Statistics Service. In FY 2013, APHIS will expand the scope of the model to include information provided on interstate health certificates used in national cattle movement.

## National Veterinary Accreditation Program

Approximately 65,500 accredited veterinarians act as the first line of defense for reportable domestic and foreign animal diseases. The voluntary National Veterinary Accreditation Program certifies private veterinary practitioners to work cooperatively with Federal veterinarians and State animal health officials. In FY 2012, APHIS enabled applicants to submit their applications on-line, making it easier for veterinarians to apply for the program. This resulted in an estimated savings of 7,300 staff hours annually that would have been needed to renew paper applications. APHIS also updated 17 existing web-based supplemental training modules for accredited veterinarians and posted an additional nine modules. Updates for supplemental training and renewal requirements provided increased knowledge of animal disease surveillance, prevention, zoonoses, and disaster preparedness.

## 2. Aquatic Animal Health

The Aquatic Animal Health Program protects the health and, thereby, improves the quality, productivity, and economic viability of the aquaculture industry, which was valued at \$1.4 billion in 2007. APHIS is developing a National Aquatic Animal Health infrastructure to help the domestic aquaculture industry grow and meet the increasing demand for safe and competitive seafood. To do so, APHIS conducts surveillance in aquatic animal health species that is 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.

The National Aquatic Animal Health Task Force is comprised of subject matter experts and senior leaders from three Federal agencies: Department of Agriculture, Department of Commerce, and Department of the Interior. Together, the agencies share responsibility to protect the health of U.S. aquatic animals and coordinate communication and response efforts among States and Tribes. In FY 2012, APHIS, in collaboration with these Federal agencies, worked with Washington, Alaska, and the Northwest Indian Fisheries Commission to determine the risk posed by infectious salmon anemia virus (ISA) 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. A total of \$8.6 million in Federal funding was used to combat ISA in Atlantic salmon between 2001 and 2007, including the cost of indemnifying farmers for animals destroyed. Initial findings indicate that Pacific salmon are relatively resistant to ISA. In FY 2013, APHIS is continuing to collect genetic information about ISA in salmon populations throughout Alaska, Washington, Oregon, California, and Idaho; develop improved detection tools for the virus; and assess the risk of the strain of virus, if present, in Pacific salmon.

In the event of an aquatic disease outbreak, disease prevalence will need to be determined accurately, quickly, and geographically in order to minimize impact. In FY 2012, APHIS continued development of its aquaculture-related laboratory infrastructure at the National Veterinary Services Laboratories in Ames, Iowa. These developments will improve the ability to perform confirmatory testing for aquatic diseases, such as ISA, and other activities related to the aquatic animal health program. APHIS began working with the National Animal Health Laboratory Network System to develop the testing of aquatic animal diseases at specialty labs. Additionally, APHIS, in cooperation with Iowa State University Center for Food Safety and Public Health, developed three aquatic animal health-focused modules to certify private veterinary practitioners to work cooperatively with Federal veterinarians and State animal health officials during a domestic or foreign animal disease event. Two modules are currently in use, with a third becoming available in early 2013.

In FY 2012, APHIS discontinued cooperative agreement funding to control viral hemorrhagic septicemia (VHS) in the Great Lakes due to the effectiveness of the Federal Order that restricts movement of VHS susceptible species out of the Great Lake States except under certain conditions. Therefore, APHIS conducted surveillance to ensure the disease had not spread outside the restricted area. At the end of FY 2012, there have been no reports of VHS occurring on fish farms. In FY 2013, APHIS will evaluate surveillance data and engage stakeholder groups to reassess whether Federal requirements will be necessary for fish movement within and out of the Great Lakes Region.

### 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 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, State and 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 avian species and products being moved or traded.

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

Surveillance and testing of commercial establishments, live bird markets, and upland game birds allows the United States to certify to our trading partners that many classes of poultry originate from flocks that are monitored or are free of diseases such as salmonella, mycoplasma, and notifiable AI. The National Poultry Improvement Plan (NPIP) has been a successful Federal-State-industry cooperative program that, along with the LBMS, has 42 States and Puerto Rico participating in the prevention and control of AI. The purpose of the NPIP is to provide a cooperative industry-State-Federal program through which new diagnostic technology can be effectively applied to the improvement of poultry and poultry products throughout the country. LBMS testing is important to prevent and control the disease in markets themselves, but also among production premises and poultry distributors that supply those markets. In 2012, APHIS performed approximately 1.8 million tests through the NPIP, with an additional 100,000 specimens tested under the LBMS. The number of LBMS premises that tested positive for AI decreased from 4 in 2009 to 2 in 2012. The positive premises were depopulated, cleaned, and disinfected according to established standards.

APHIS conducted additional influenza sampling in upland game birds to increase knowledge on the transmission mechanisms from wild birds to poultry and humans. During 2012, APHIS sampled 175 birds from 12 AI mortality events and found no highly pathogenic AI. Wild birds sampled between 2007 and 2011 have found a 6 percent increase in the prevalence of low pathogenic AI.

In addition to testing bird populations, APHIS monitors importation of poultry and poultry product imports to minimize disease spread through trade. In support of avian influenza detection at U.S. ports of entry, APHIS investigative and enforcement services initiated more than 3,700 cases, issued 225 official warnings, collected \$770,253 in stipulated penalties, and obtained an administrative order assessing an additional \$325,000 in civil penalties against a prominent international express courier company with a history of chronic non-compliance with agricultural inspection requirements.

Prevention of avian disease is further enhanced through outreach efforts. The Biosecurity for Birds (BSB) program continues to engage key audiences with its messages to raise awareness about measures to prevent the introduction and spread of AI and other infectious poultry diseases. The program has allowed APHIS to reach targeted segments of the avian marketplace, including backyard poultry producers and pet bird owners, to educate them on AI and

practices to reduce the threat of an HPAI introduction. In 2012, the campaign continued to reach a wide variety of audiences through highly sought after educational materials and expanded its social media presence. Bird Health Awareness Week featured a live Twitter chat with an APHIS veterinarian and the launch of a new online game. The Healthy Harry and Dr. Kate video series continued to be promoted and has received 70,000 views. The BSB campaign continues to distribute highly sought after 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 must also prepare for the possibility of disease spread. Disease spread modeling is used to evaluate disease outbreak scenarios, planning, and assessment of disease control strategies. In 2012, APHIS completed analysis of simulated highly pathogenic AI outbreaks in Minnesota. Results produced the estimated number of samples that would be required from poultry premises following an outbreak. This information could be used to evaluate laboratory capacity needs during the post-outbreak phase of an emergency.

Due to a more stable AI situation and concentration on response and containment activities, APHIS scaled back international efforts in FY 2012. However, APHIS helped establish, and 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 whose strategic goal is to respond and contain the threats of disease outbreaks. 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.

#### 4. Cattle Health

The Cattle Health program protects the health of cattle and improves the quality, productivity and economic viability of the cattle industry valued at \$85 billion. APHIS activities include disease prevention, monitoring and surveillance, and investigation and response actions when diseases of concern are detected. APHIS also maintains regulations, program standards and guidelines that direct cattle health activities at the Federal, State and 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.

##### Surveillance and Monitoring

APHIS conducts surveillance and monitoring for diseases to safeguard the health of the U.S. cattle population and demonstrate disease status to trading partners. In FY 2012, 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 conduct testing for critical cattle health diseases, including bovine tuberculosis (TB), bovine spongiform encephalopathy (BSE), brucellosis, and cattle fever tick.

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, it has been reported in several other species of both domestic and non-domestic animals, as well as in humans. The TB program has made significant progress, markedly decreasing the prevalence of the disease in U.S. livestock. Since the program's inception in 1917, the disease prevalence rate in cattle herds dropped from 5 percent to less than 0.001 percent. 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. In 2012, 903,289 tuberculin skin tests were conducted and 8,093 slaughter samples tested. In 2012, through on-going surveillance testing and slaughter surveillance, six TB-affected cattle herds, three beef and three dairy, were detected.

Another national 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 disease. Removal of specified risk materials from cattle slaughtered for human consumption further mitigates risk to human health. The Agency's BSE ongoing surveillance effort is designed to detect one case of BSE in one million adult cattle with 95 percent confidence. This effort exceeds the standard required by the World Organization for Animal Health (OIE). APHIS' surveillance approach includes samples collected at slaughter and livestock markets, farms, rendering facilities, and diagnostic laboratories. As a result, APHIS is able to detect BSE at very low prevalence and assess any change in the BSE status of cattle. In FY 2012, APHIS tested approximately 42,000 samples for BSE. In April 2012, through targeted surveillance APHIS discovered the fourth case of BSE in the United States.

Bovine brucellosis, caused by the bacteria *Brucella abortus* in cattle and bison, is a serious infectious and contagious disease that has significant consequences for animal and public health and national and international trade. In cattle, brucellosis can cause decreased milk production, weight loss, abortions, infertility, and lameness, impacting the livelihood of cattle producers and impacting the supply of meat and dairy products to the public. The Agency's cooperative Federal-State brucellosis eradication effort has been successful in eradicating bovine brucellosis from our domestic cattle and bison herds. All 50 States have been Class Free for bovine brucellosis since July 2009, despite recent detections in the Greater Yellowstone Area (GYA) States of Idaho, Montana, and Wyoming. The GYA remains our primary focus for brucellosis in livestock because the disease is endemic in GYA wild elk and bison.

In FY 2012, brucellosis was detected in two cattle herds and two privately owned bison herds in the GYA States. One of the cattle herds has successfully completed all required testing and was released from quarantine; the other three herds 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.

APHIS continued with the implementation of the new national bovine brucellosis slaughter surveillance plan designed to increase the efficiency of this surveillance stream. In FY 2012, APHIS tested approximately 3.3 million head of cattle under the Market Cattle Identification (MCI) slaughter surveillance program and an additional 478,000 head of cattle at livestock markets. Approximately 360 epidemiologic investigations were conducted on suspicious MCI surveillance tests. APHIS conducts testing of cattle and domestic bison on farms or ranches for movement, private sale, issue of herd certification, and for show or exhibition purposes. In FY 2012, APHIS tested 405,000 animals for such purposes. Additionally, in FY 2012, approximately 3.9 million calves and approximately 16,420 adult cattle were vaccinated for brucellosis and approximately 1,104 herds were certified as brucellosis certified-free cattle herds.

APHIS continues to conduct surveillance and monitoring to eliminate the presence of bovine babesiosis, more commonly known as cattle fever. The United States was declared free of cattle fever in 1943 after eliminating the two tick vectors; however, there remains a permanent quarantine buffer between Texas and Mexico. Bordering Mexican states harbor both tick species and the disease continues to affect the U.S. cattle population. In FY 2012, APHIS' Cattle Health Program conducted 32,718 inspections of individual premises for ticks, including 7,660 river trail patrols. Surveillance for ticks includes inspection of cattle prior to leaving the quarantined areas, surveillance at local markets, and horseback river patrols to capture stray Mexican cattle who serve as vectors for the ticks to enter the United States. As a result of surveillance efforts, APHIS identified 50 newly infected premises inside the border, 21 fewer than in FY 2011. Further, there were only 11 newly infected premises at the end of the fiscal year outside the border compared to 37 in FY 2011. APHIS remains focused on controlling the spread of cattle fever tick as it is a severe and often fatal disease of cattle that was responsible for losses to the cattle industry in 1906, equal to more than \$1 billion in today's dollars.

In 2012, APHIS continued collaborating with neighboring countries to prevent the entrance of cattle diseases, including bovine tuberculosis, 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 prevents reestablishment of screwworm in the United States by

working with Panama, Mexico, and Central American countries to maintain a screwworm-free barrier zone within Panama, north of 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 rearing facility in Pacora, Panama. In 2012, there were no outbreaks or detections of screwworm infestations in Panama north of the barrier zone in Darien Province.

### *Investigation and Response Activities*

When a disease outbreak occurs, APHIS responds quickly and with the appropriate level of action needed to address the situation. In FY 2012, APHIS responded to six newly TB-affected herds, one case of BSE (atypical, not a classical case), and four cases of brucellosis. The Cattle Health program's investigation and response to these disease cases safeguarded the health of more than 97.8 million cattle.

In 2012, six new TB-affected herds were identified. APHIS assisted States in conducting the investigations in South Dakota (one beef herd), Michigan (one beef and one dairy herd), Texas (one beef herd), and California (two dairy herds). APHIS was successful in identifying the second California dairy herd through investigating herds with fence-line contact with the affected herds. Of the six new herds, two cattle herds (the California dairy herd and one Texas beef herd) were depopulated with Federal indemnity funds and the remaining four herds are under test-and-removal management plans. APHIS restricts movement of animals from TB-affected areas to control the spread of the disease. The Cattle Health Program has five State classifications for TB where a higher rate of TB prevalence within the State results in a lower ranking and, therefore, more restrictive movement requirements. The State 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 2012, 48 States, two Territories, and one zone were TB AF, including Puerto Rico and the U.S. Virgin Islands. California was MAA. Michigan continued to be divided into three classifications: AF, MAA, and MA status.

In April 2012, APHIS received a report of an inconclusive BSE test result on a sample from a California rendering facility. After the sample was confirmed by APHIS' National Veterinary Services Laboratory as positive, APHIS and the State of California began an extensive epidemiological investigation of the dairy herd of origin (approximately 1,400 dairy cattle), offspring from the infected animal, and associated premises. APHIS also collaborated with FDA and the State of California in the investigation of feed suppliers for possible contaminated feed. No additional cases and no feed supplier irregularities were identified through the epidemiological investigation. It was determined this occurrence was an atypical, not a classical, case of BSE. The animal was never presented for slaughter for human consumption. As a result, at no time was the U.S. food supply or human health at risk, and the United States' longstanding system of interlocking safeguards against BSE continued to be effective.

Four brucellosis-affected herds were detected in FY 2012. These herds are located in Idaho (one beef herd and one privately owned bison herd), Montana (one privately owned bison herd), and Wyoming (one beef herd). Both brucellosis-affected herds detected in Montana and Wyoming and the privately owned bison herd detected in Idaho were located within the State's designated surveillance area (DSA). The beef cattle herd detected in Idaho is outside the State's DSA. The herds were detected as a result of slaughter surveillance (Idaho beef herd), designated surveillance area testing requirements (Idaho privately owned bison herd), epidemiologic investigation tracing (Montana privately owned bison herd), and on-farm presale testing (Wyoming beef cattle herd). The Wyoming beef cattle herd was released from quarantine pursuant to three consecutive negative whole herd tests, the final herd test conducted post-calving. The other three brucellosis-affected herds remain under quarantine with affected herd management plans in place, including additional herd tests and movement controls. Two privately owned bison herds detected in FY 2011, one in Montana and one in Wyoming, also remain under quarantine with affected herd management plans in place.

APHIS' current efforts to control cattle fever ticks along the quarantine line include 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, a permanent quarantine area was designated along a 500 mile border with Mexico

from the Gulf of Mexico to Del Rio, Texas, and a cooperative Federal-State program was established. On-going cooperative efforts by APHIS and the Texas Animal Health Commission (TAHC) since 2010 have continued to decrease the prevalence of ticks and have allowed Texas to fully release all acreage under quarantine for two of the three temporary preventive quarantine areas. This represented a release of 749,689 acres (roughly the size of Rhode Island) from quarantine with 144,580 acres remaining under quarantine in the free area. 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 91,500 individual animal inspections and treatments. In FY 2012, the permanent quarantine buffer zone and the free area of Texas contained 61 newly quarantined premises compared to 108 in FY 2011. 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.

### Scientific and Regulatory Development

In FY 2012, APHIS took steps to modernize the cattle health regulatory framework, including developing a proposed rule that describes a new direction for the brucellosis and bovine TB program efforts. APHIS formed a joint working group to discuss overarching regulatory concepts for both the TB and brucellosis efforts since they were undergoing similar changes with several common objectives. The joint TB and Brucellosis Regulatory Working Group, comprised of Federal, State and Tribal partners, developed a regulatory framework that was published in the *Federal Register* on May 6, 2011. This framework described a single rule for both the TB and brucellosis that will reduce administrative burdens placed on producers, while maintaining cattle health, consumer confidence and trade opportunities.

The rule provides for a national brucellosis surveillance plan and includes implementation of a risk-based disease management area concept rather than loss-of-State status. Based on the comments received from private citizens, State agencies, industry groups, animal welfare organizations, environmental groups, and Congress, a proposed rule is currently under review.

APHIS conducted several webinars that provided additional information about the proposed regulation. APHIS hosted two webinars in November 2011 that provided information about a calculator that could be used to determine the fair market value for animals that are destroyed because of TB or brucellosis, and options for indemnity payments. Further, in August 2012, APHIS presented an overview of the Proposed Rule and Program Standards for Brucellosis and Bovine Tuberculosis. Recordings of both webinars are available on the APHIS webpage for stakeholders to review.

On December 27, 2010, APHIS published an interim rule that provides for a national brucellosis surveillance plan and includes implementation of a risk-based disease management area concept rather than loss-of-State status. Since the publication of the interim rule, APHIS has been working with States to transition to the new national bovine brucellosis slaughter surveillance plan. The new national bovine brucellosis slaughter surveillance plan is designed to detect brucellosis infection with 95 percent confidence that the prevalence level of brucellosis does not exceed one infected animal per one million animals, reduces slaughter surveillance sampling by more than 50 percent, and eliminates redundancies in surveillance activities. Since 2009, APHIS has reduced the number of slaughter surveillance samples collected for brucellosis from 7.3 million to 3.3 million in 2012. To further improve efficiencies, APHIS has consolidated laboratory testing and established a standardized testing protocol. These changes allow APHIS to concentrate resources where the risk of disease is greatest, meet international surveillance standards, and maintain the integrity of U.S. export products. APHIS will continue to look for ways to improve surveillance efficiency in FY 2013 and beyond.

In FY 2012, APHIS continued to collaborate with a small South Texas livestock feed company to register a new product with the U.S. Food and Drug Administration (FDA) to control the spread of cattle fever ticks. APHIS began two field studies in 2012 to collect data required for the registration process under FDA's Investigational New Animal Drug program. APHIS is currently 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 laboratory trials with the experimental vaccine will occur in early FY 2013.

## 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 been valued at \$39 billion for equine, \$894 million for cervid, and \$705 million for sheep and goat (products only). APHIS activities include monitoring and surveillance, investigation and response, and disease prevention and preparedness actions undertaken when health issues are identified. APHIS' monitoring and surveillance activities detect foreign, emerging, zoonotic, and domestic diseases that have the potential to 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, in collaboration 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 2012, the Equine, Cervid, and Small Ruminant Health program conducted disease surveillance and/or monitoring for the following diseases: contagious equine metritis, chronic wasting disease (CWD) Eastern 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 achieve eradication of classical scrapie from the United States: conducts live-animal, necropsy and slaughter testing to identify infected animals; performs genetic testing to both 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 tests exposed animals that have moved out of infected flocks and animals exposed due to sale or movement of exposed or positive animals. During FY 2012, APHIS tested 40,792 scrapie samples in sheep and goats, compared to 37,192 samples testing in FY 2011. This 10 percent increase in testing is largely due to increased surveillance of scrapie in goats. In the past nine years APHIS has seen a decrease of 96 percent in the detection of positive scrapie sheep found at slaughter (adjusted for face color). In 2012, there was a 1.2 percent decrease in positive sheep. Further, there was a 35 percent decrease in the percent positive black face sheep sampled at slaughter compared to FY 2011.

To meet the goal of eradicating bovine TB from the United States, APHIS tests captive cervids for the disease. As of August 31, 2012, the program has conducted 19,721 single cervical tuberculin skin tests in captive cervid species with 368 suspected positive cases reported to APHIS. In FY 2013, APHIS will implement the use of a new screening test (the Cervid TB Stat-Pak) and a secondary test (Dual Path Platform VetTB) if a positive is found with the initial test. The new tests are more sensitive, less invasive, and produce more timely results. APHIS will also conduct outreach with State and other Federal animal health officials, producers and the industry organizations to provide additional information and instructions on the use and interpretation of the tests.

CWD is a fatal, degenerative prion disease that affects the central nervous system and lymphoid system of cervids. To date, 60 CWD positive captive cervid herds in 13 states have been identified. Most recently, CWD was reported in an Iowa white tail deer herd. This represents the first case of CWD in the State. Fourteen CWD positive herds currently remain (seven elk herds in Colorado, three elk herds in Nebraska, three white tail deer herd in Iowa, and one red deer herd in Minnesota). Approximately 22,600 farmed cervids were tested for routine CWD surveillance in FY 2012.

APHIS recognizes the need to monitor equine diseases that pose a risk to animal and human health. To accomplish this goal, APHIS assists State-level animal health officials in safeguarding this \$39 billion industry. In 2012, APHIS assisted States in the testing and epidemiological investigation of 15 cases of VSV, with five cases being determined positive. At the end of FY 2012, three premises were under quarantine, with an additional one on a 21-day countdown for removal of quarantine. Additionally, in 2012, APHIS reported 411 cases of equine WNV, the highest number since 2007, and 161 cases of Eastern equine encephalitis.

#### Investigation and Response

APHIS conducts investigations, responds to disease outbreaks, and enforces regulations that safeguard the health of the nation's livestock. In FY 2012, APHIS assisted in the epidemiological investigation and response of eight flocks to which scrapie positive animals were traced. All infected animals were successfully traced back to their flocks of origin or birth. APHIS 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. In FY 2012, there was a 47 percent decrease in the number of newly identified infected and source flocks compared to the previous year. This decrease is due to the consistency of the regulated industry in applying official identification and effective surveillance and control activities.

No new cases of TB in captive cervids were found in FY 2012. However, APHIS continued to support two captive cervid herds under an indefinite quarantine in Michigan since testing positive for TB in 2009. The herds are located in an area in the northeast lower peninsula of Michigan where free-ranging white-tailed deer are a reservoir for bovine TB. APHIS continues to collaborate with the State of Michigan to mitigate the risk of transmission from this wildlife reservoir to livestock. APHIS continues to assist States in responding to CWD findings in farmed cervids and epidemiological investigations and trace outs by providing guidance and resource support as available.

Since 2009 APHIS has assisted in testing more than 200,000 horses related to an outbreak of EP from a Texas facility. States and the equine industry rely on APHIS for information, research and assistance during equine disease outbreaks. In FY 2012, APHIS collaborated with the Agricultural Research Service on a variety of EP research studies including identification of a new competent tick vector and the successful treatment for clearance of the organism from the horse. APHIS' collaboration continues to assist stakeholders in preventing and understanding EP organisms.

#### Disease Prevention and Preparedness

APHIS' Herd Certifications Programs (HCP) for CWD, TB, and scrapie provide criteria and minimum Federal standards for participating livestock owners to meet. APHIS approves State applications for the national CWD HCP, conducts periodic reviews to ensure compliance, and supports confirmatory testing of presumptive cases. Participation in the programs, such as the Scrapie "free" Flock Certification Program (SFCP), which began in 1992, provides participating producers the opportunity to protect their animals from scrapie and to enhance the marketability of their animals by certifying their origin in flocks with minimal scrapie risk. There are currently 1,316 flocks enrolled in the SFCP, and of these 560 are certified and 10 are export certified.

APHIS enforces the provisions of the horse slaughter transportation program and the Commercial Transport to Slaughter Act, which ensures that the horses are afforded welfare provisions during their transport to slaughter. In FY 2012, APHIS developed training modules on certifying horses fit for transport to slaughter with 368 accredited veterinarians completing the training in the first year alone.

#### Regulatory Development

In 2011, APHIS solicited input from stakeholders on options for improving the efficiency and the effectiveness of the SFCP program. As a result, in FY 2012 APHIS began preparations for streamlining the program that includes eliminating the least used options available to producers for certifying flocks. APHIS will maintain the export

monitored category of certification that allows producers to meet OIE standards for export, while reducing the amount of resources required for certification of flocks. Announcement and implementation of the revised program is expected in FY 2013.

To further ensure animals moving across state lines are healthy, APHIS drafted two proposed rules requiring disease testing prior to interstate movement. The draft proposed rules include testing requirements for EIA, a viral disease that can spread to affect the health and productivity of the animal, and a TB/brucellosis rule that included among other items, interstate testing requirements for cervids. The proposed rules provide a comprehensive, flexible, and risk-based approach to managing EIA and TB/brucellosis.

The CWD interim final rule was published in June 13, 2012 followed by a 60 day public comment period. The rule became effective on August 13, 2012 and implementation of the interstate movement of cervids began December 2012.

#### 6. National Veterinary Stockpile

The National Veterinary Stockpile (NVS) is a critical component of USDA's emergency preparedness and response efforts because it serves as the primary source of materials, supplies, and equipment required to respond to, control, and contain foreign animal and other significant animal disease outbreaks. The two primary goals of the NVS are to deploy countermeasures against the significant animal disease threats within 24 hours of detection, and to assist States, tribes, and territories in the rapid request, receipt, processing, and distribution of these countermeasures during an event. In preparation, APHIS works with these partners on their logistical plans, conducting logistical training, and full scale logistical test exercises.

In FY 2012, APHIS maintained the capability to: protect a team of responders for 10 days in a high-risk environment, protect up to 1,500 responders for 60 days, and maintain antivirals to support 3,000 responders for 6 weeks. The NVS also established transportation and delivery contracts to ensure that materials can be delivered to an animal health event location within 24 hours. In FY 2012, APHIS updated plans with additional contractors to support vaccine deployment from the North American Foot-and-Mouth Disease (FMD) Vaccine Bank and NVS vaccine manufacturers to ensure availability of disease response countermeasures during an event. Expanding the number of contractors provides a greater level of security.

The NVS continued to evaluate its current supply and replaced expired materials in the NVS 24-hour Push Packs, as well as, the remainder of its general inventory. Push Packs contain personal protective equipment and decontamination supplies that precede other items needed to support an on-going emergency response effort. APHIS also participated in the Department of Defense and the Food and Drug Administration shelf-life extension program for Tamiflu, a preventive medicine for protecting against influenza and conducted site visits of NVS storage locations.

Test exercises allow APHIS to identify gaps, shortfalls, or limitations that could potentially impact response capabilities. In FY 2012, APHIS, the State of Colorado, and tribal nations conducted a full scale exercise related to an FMD outbreak. The purpose of the exercise was to give participants experience with the process to request, receive, store, manage, and distribute NVS countermeasures that could impair Colorado's ability to conduct logistics warehouse operations in a real emergency; and deploy and use cattle-handling equipment in the event of an animal disease outbreak. NVS also conducted training exercises in North Carolina and Mississippi, which focused on providing participants hands-on training in the preparation, deployment, and operation of foam depopulation technology used during an animal disease outbreak. This training enabled the NVS program and participating stakeholders and partners to refine their skills, knowledge, and procedures before using them in an actual event.

#### 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 undertaken when swine health issues are potentially identified. APHIS also maintains regulations and program standards and guidelines that direct swine 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.

#### Monitoring and Surveillance for Swine Diseases

APHIS' Swine Health program conducts surveillance to detect foreign, emerging, zoonotic and domestic diseases that potentially could have a substantial impact on domestic producers and the national economy. In FY 2012, APHIS conducted comprehensive surveillance for pseudorabies virus (PRV), swine brucellosis (SB), classical swine fever (CSF), and swine influenza virus (SIV). The comprehensive surveillance system allows the Agency to use various sample streams to conduct targeted surveillance for multiple diseases, such as PRV and CSF. This approach allowed APHIS to maintain the same level of surveillance, and target those samples with highest risk while reducing surveillance costs.

The Swine Health program collected surveillance data through diagnostic laboratory samples, samples collected at slaughter, on-farm samples, in markets and samples of feral swine. Altogether, 308,553 swine were tested for PRV through various surveillance streams in FY 2012. More specifically, APHIS tested 287,011 swine for PRV through slaughter surveillance and tested 21,542 swine through samples submitted to diagnostic laboratories. APHIS also tested 270,800 samples for swine brucellosis where many of these samples were the same samples tested for PRV. Additionally, classical swine fever is a highly contagious viral disease that affects the health of swine. In FY 2012, APHIS tested 13,762 samples for CSF. At the end of FY 2012, all States were free for brucellosis, PRV and CSF.

Domestic swine remain at risk to diseases such as PRV, swine brucellosis and CSF in part due to the increasing number of feral swine in the United States. In 2012, the feral swine population is estimated to be more than five million. APHIS conducts targeted, risk-based sampling of feral swine to monitor diseases of concern. APHIS tested 2,805 samples for PRV, 2,645 samples for SB and 2,739 samples for CSF from feral swine in FY 2012.

Swine are susceptible to many of the influenza viruses that humans and other species carry. Therefore, surveillance for SIV has become increasingly important to monitor the virus present in the swine population. APHIS tested approximately 75 percent more samples for SIV in FY 2012 than in the previous year. APHIS monitors for genetic changes in endemic, emerging, and novel influenza virus isolates from pigs exhibiting influenza-like illness. Increased participation in the voluntary testing for SIV allowed APHIS to provide a greater number of isolates for research activities, such as the potential development of diagnostic reagents and vaccines. In FY 2012, APHIS collected 9,425 samples for SIV from 2,692 herds.

In addition to surveillance for swine diseases, APHIS has the responsibility under the Swine Health Protection Act to license and monitor, through inspections, facilities that feed cooked garbage to swine and to conduct searches for unlicensed facilities that feed raw garbage to swine. This practice is a major risk factor for infectious swine diseases such as foot-and-mouth disease or CSF. In 2012, APHIS conducted 5,950 inspections of licensed premises and 35,347 searches for non-licensed facilities. APHIS identified 120 non-licensed feeders through searches. Most sites voluntarily sought a license to bring themselves into compliance. For facilities that refused to obtain a license, an enforcement action was taken to resolve the issue.

#### Investigations and Responses to Disease Outbreaks

In cases where testing and removing infected animals is not deemed a successful disease management approach, APHIS uses whole herd depopulation. In 2012, APHIS identified four cases of PRV (Hawaii, and Georgia) and four cases of SB (Oklahoma, Texas, Hawaii and Georgia) with two of these herds being dually infected for both diseases. In all cases APHIS quarantined infected herds determined to have positive disease animals, conducted routine testing to determine prevalence in the herd, and either performed whole herd depopulation or removed infected

animals. Response efforts such as test and removal or whole-herd depopulation are essential to safeguarding commercial herds.

In FY 2012 there were three major SIV's associated with human infections, with the majority from the variant H3N2 virus. More than 300 human infections from 10 States were reported by public health officials. The cause of most infections was tied to close contact with swine at county and State fairs. All outbreaks were jointly investigated by State public and animal health officials, with support from the Centers for Disease Control and Prevention and APHIS. APHIS assisted States and industry in determining the isolates from the swine associated with the outbreaks. This information is used to improve animal health diagnostics and vaccines. Subtyping and sequence data obtained 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 genetic database).

### Regulatory Developments

APHIS has been highly successful in eliminating PRV from the U.S. commercial swine herds. At the end of FY 2012 all States had maintained PRV-free status for nine years. Because of this success, APHIS considered ways to modernize the existing regulatory framework to reflect a comprehensive, risk and science-based program that would enhance surveillance, while reducing the burden on States and producers. APHIS will work with States, Tribes, and industry in FY 2013 to further develop a new approach to surveillance, monitoring and disease response for PRV and SB.

### 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 for the diagnosis, prevention, and treatment of animal diseases. CVB accomplishes its mission by developing rules and regulations concerning the production and licensing of veterinary biologics; thorough evaluation of pre-licensing dossiers and issuance of licenses and permits; testing of products submitted for licensure; facility and product inspections; product certifications; investigations of non-compliance; and 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 a significant 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. Prior to the regulation of veterinary biologics, farmers and animal health officials found products to be ineffective, or contaminated with harmful diseases, including foreign animal diseases. In FY 2012, APHIS received 150 applications for new and renewal licenses; issued 40 licenses/permits for the prevention, diagnosis, management, or cure of existing or new/emerging animal diseases; and denied or inactivated 125 applications by industry. By the end of FY 2012, there were 100 different manufacturers licensed for approximately 2,000 active veterinary biological product licenses/permits for the control of more than 215 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 2012, APHIS conducted 66 on-site inspections, of which 11 percent of the inspections were in support of a new establishment or product license for the industry. Newly created veterinary biologics are important as they provide products to diagnose, prevent, or treat animal disease that either did not exist, or improve upon previous biologics. APHIS performed 67 regulatory actions, issued 30 violation notices, and conducted 21 investigations of possible regulation violations. In addition, the Agency received 462 adverse event reports related to veterinary biological products. Adverse events are undesirable effects that occur after the use of a vaccine or other 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.

Import and export certificates are required by the United States and foreign countries to certify that products have been prepared in accordance with the Virus-Serum-Toxin Act. In FY 2012, APHIS reviewed/processed 3,623 Certificates of Licensing and Inspection, and reviewed/processed 1,058 Export Certificates for veterinary biological products. The Agency processed 100 percent of Export Certificates within 4 days, and processed 100 percent of Certificates of Licensing and Inspection within 28 days. Timely processing assists in ensuring that markets are accessible for veterinary biologics manufacturers whose business involves the exportation of their product. APHIS helped to ensure there were no foreign animal disease events related to the importation of more than 79 million biologics doses.

In FY 2012, APHIS completed several Business Process Improvement (BPI) projects under the Department's Lean Six Sigma initiative. The objective of the BPI projects was to decrease the turnaround time for license submissions. The Veterinary Biologics program focused on 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. APHIS projects additional savings from reductions in reagent/reference production and laboratory testing. Other proactive steps to improve processes will continue to be reviewed and implemented in FY 2013.

#### Collaborative Efforts

In FY 2012, APHIS provided expertise and training at a joint Center for International Cooperation in Animal Biologics education program. More than 176 delegates from 22 countries participated in this 3-week course aimed at educating industry personnel and foreign officials on U.S. regulatory processes. The training 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. In 2012, APHIS received the World Health Organization (WHO) recognition as a Competent National Authority in the certification scheme on the quality of pharmaceutical products moving in international commerce. The WHO recognition enhances APHIS' ability to facilitate the export and sale of licensed products to other countries and promotes domestic production. This recognition requires maintenance of the following: an effective national licensing system, good manufacturing practices, effective controls to monitor licensed/registered products, an inspection staff, and administrative capacity to issue required certificates.

APHIS responded to 46 requests for assistance with export issues, which addressed urgent concerns from the biologics industry regarding continued access to international markets. In one instance, APHIS worked directly with the Brazilian government to prevent a ban of veterinary exports to Brazil, which would have shut down all U.S. animal health products, including veterinary biologics and pharmaceuticals, exported to Brazil. The estimated value of veterinary biologics exports to Brazil is \$70 million.

APHIS also worked with the Department of Homeland Security to license a biotechnology-derived vaccine for foot-and-mouth disease (FMD). This is the first FMD vaccine that can be safely produced in the United States. The vaccine expands the resources available to respond to this disease in the event it is accidentally, or intentionally, introduced into the United States. FMD is one of the most economically devastating livestock diseases in the world. Depopulation alone would cost billions of dollars, but indirect costs due to the loss of export markets and farm income would be greater than \$20 billion.

#### 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. The Veterinary Diagnostic line item also provides funding for the personnel associated with the National Animal Health Laboratory Network (NAHLN) and specific infrastructure support.

Diagnostic testing of surveillance samples improves the overall security of the nation's livestock. APHIS handled more than 448,000 diagnostic tests and 49,000 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 in 2012. Many of these tests and reagents are not available to customers from another source, and therefore stakeholders are dependent on APHIS to conduct or provide them. APHIS also participated in diagnostic methods validation and provided training and assistance to laboratories upon request.

The Veterinary Diagnostics line provides funding for the Foreign Animal Disease Diagnostic Laboratory (FADDL) and the Diagnostic Virology Laboratory (DVL). These laboratories provide diagnostic support for foreign animal diseases (FADs), as well as FAD investigations. For example, FADDL and DVL participated in 171 foreign animal disease investigations, received 6,637 classical swine fever surveillance submissions, and supported multiple international investigations in Ecuador, Dominican Republic, Haiti, Mexico, Peru, and Guatemala.

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 2012, APHIS provided 31 different proficiency panels to international, Federal, State and private laboratories. To assist other laboratories in the development and validation of 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.

The Veterinary Diagnostics line contributed to APHIS' mission of readiness to respond to animal health emergencies by providing training to Federal and State personnel. In FY 2012, APHIS assisted in training approximately 100 Foreign Animal Disease Diagnosticians at four domestic and one international course, plus provided training on multiple animal diseases at NVSL facilities.

To address 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 existing Federal and State laboratory resources and utilizes standardized diagnostic protocols and procedures, APHIS established the NAHLN. The NAHLN coordinates diagnostic testing at Federal laboratories and State-sponsored laboratories, while NVSL remains the confirmatory laboratory. The NAHLN consists of 54 State and university laboratories, located across 39 States as well as two laboratories from NVSL. In addition there are three laboratories from other Federal agencies whose primary mission is not domestic animal disease diagnostic work within the United States.

To further improve its standards and consistency, the NAHLN collaborated with the American Association of Veterinary Laboratory Diagnosticians to expand and improve the Quality Management System (QMS) Training Programs. The curriculum included an interactive environment with training on quality system requirements, the accreditation process, document control, internal auditing, and root cause analysis. The training was provided to representatives from NAHLN and other U.S. laboratories as well as to international representatives from India, Iraq, Kazakhstan, Kenya, Pakistan, Russia, Tajikistan, Tanzania, Uganda, and Ukraine.

In FY 2012 the program deployed new software that will assist in managing resources in the event of a significant animal disease outbreak. Implementation of the Laboratory Capacity Estimation Model across all NAHLN laboratories will increase the Nation's capability to prepare for and respond to high-consequence emerging animal and/or zoonotic diseases by determining diagnostic testing capacity estimates in individual and overall NAHLN laboratories.

#### 10. Zoonotic Disease Management

The Zoonotic Disease Management program enhances State, national, and international collaborative efforts to promote healthy animals, people, and eco-systems. This integrated approach is commonly referred to as "One Health" (OH). The Zoonotic Disease Management Program provides national leadership for the animal health component of OH 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 for widespread learning from event management. Sharing animal health expertise across disciplines improves the collective response to OH issues.

The Zoonotic Disease Management Program enhances APHIS' efforts to address zoonoses in animals, thereby protecting public health while directly benefiting animal health and marketability. In 2012, APHIS held zoonotic disease activities such as stakeholder meetings, strategic working groups, assisted the Centers for Disease Control and Prevention (CDC) with the animal component of field investigations, and created informational documents about pre-harvest food safety, antimicrobial resistance, and additional zoonotic diseases, such as Q fever and influenza.

APHIS built new collaborations and partnerships in the OH community in FY 2012. APHIS participated in working groups in various States to develop relationships and provide animal health expertise at the local level. APHIS worked with the State Departments of Agriculture within Montana and Washington and local/national public health to respond to a Q fever outbreak in goat herds and to conduct a review of lessons learned. APHIS expertise determined the appropriate response for the Q fever situation, demonstrating the importance of considering animal agriculture expertise and implications to public health. Without APHIS' involvement, public health responders would have conducted unnecessary testing, impacting profitability to producers. APHIS, in collaboration with Canada and Mexico, updated and tested the North American Plan for Animal and Pandemic Influenza. Influenza viruses, which affect the health of humans, livestock, poultry and wildlife, can have serious economic and environmental impact. Finally, APHIS held zoonotic disease training sessions for first responders in Ohio and West Virginia. These activities served to educate those in the public health field regarding implications from animal agriculture.

APHIS' Zoonotic Disease Management program serves as an essential component of the Agency for providing animal agriculture expertise about zoonotic diseases. In FY 2012, APHIS responded with CDC, State animal health officials, and the swine industry to human influenza cases originating from exposure to swine at fairs. APHIS assisted by determining biosecurity precautions to reduce the risk of spread both among swine and between swine and people. APHIS, CDC, industry, and State animal health and public health officials collaborated to respond to the influenza outbreak. Minimizing opportunities for disease spread helped to reduce both animal and human health care costs. Finally, APHIS partnered with other government and USDA agencies, and 4-H extension agents to create a multi-faceted education initiative for 4-H youth on public health and zoonotic diseases. These partnerships support further information sharing and the development of strategies for how animal health agencies can effectively engage with public health counterparts.

In FY 2012, APHIS worked to develop and implement zoonotic disease planning materials to issue guidance and standard operating procedures. APHIS will use these documents as the foundation for involvement in zoonotic disease activities, such as determining the type and level of involvement of APHIS employees on the basis of severity and impact to agriculture. Appropriate planning and use of these documents will create a consistent approach to zoonotic disease issues and ensure that APHIS maximizes its resources on events involving animal health.

Pre-harvest food safety is another component being addressed by APHIS through the Zoonotic Disease Management program. APHIS conducted a stakeholder survey of industry groups and other Federal agencies to capture concerns and needs that these groups have with regard to pre-harvest food safety and shared results with FSIS. APHIS also developed a position paper describing the importance of pre-harvest food safety and the role of the Agency.

## 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. The AQI program encompasses various activities to address pest risks posed by international travel and trade. 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 for specific products; 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 from these areas, APHIS inspects all baggage of passengers leaving these islands. When inspectors identify a commodity 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. Without funding for the pre-departure program, the risk of pest or disease introduction from Hawaii and Puerto Rico to the continental United States would greatly increase. Additionally, certain commodities would be prohibited entry into the continental United States without the inspections and treatments provided by the program. 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 pre-clearance or the port-of-entry arrival of commercial vessels, trucks, loaded railroad cars, aircraft, and passengers entering the United States from a foreign destination.

#### Pre-Departure Inspections

APHIS inspected the baggage of approximately 14.6 million passengers before they left Hawaii and Puerto Rico and intercepted 306,000 prohibited items and 6,733 reportable pests (quarantine-significant pests that must be reported to Federal or State authorities) in 2012. 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 2012, the target was 97.3 percent and the actual compliance rate was 97.0 percent (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 2012, the program conducted 40,896 inspections of regulated agricultural commodities shipped from Hawaii and 8,717 inspections of regulated agricultural commodities shipped from Puerto Rico. In addition, the program oversaw or conducted 1,431 cargo treatments in Hawaii and 2,585 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.

### Inspections and Pest Interceptions

In FY 2012, approximately 153 million passengers and pedestrians entered the United States by air, bus, ship, train, or on foot. Agricultural inspectors inspected the baggage of approximately 26 million (17 percent) of these travelers with x-ray technology or detector dogs. Also in FY 2012, the program inspected approximately 744,000 (1 percent) of the 87 million passenger vehicles entering the United States from Canada and Mexico. Inspectors also cleared approximately 49,000 ships and 1.2 million cargo, mail, and express carrier shipments, intercepting approximately 80,000 pests. Of the travelers inspected, approximately 97 percent of international air passengers, 98 percent of southern border vehicles, and 91 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 imported plant cultivars and germplasm to prevent pathogens from entering our environment and food supply. In 2012, PGQP released from quarantine 39 bamboo clones, 136 grass clones, 100 pome fruits, 66 potato clones, 1 potato true seed lot, 215 rice seed accessions, 1 currant, 41 stone fruit clones, 109 stone fruit seedlings, 74 sugarcanes, 16 sweet potatoes, and 13 woody ornamentals. For 6 of these 12 crops, the number of releases increased from 2011. The program began preparations for a cassava quarantine program. In addition, the program added new pathogen detection procedures for the *Xylella fastidiosa* bacterium in stone fruits and ornamentals, the *Xanthomonas oryzae* bacterium in rice, and potato yellow vein virus in potatoes. Although some strains of *Xylella fastidiosa* occur in the United States, other strains which have not been reported in the United States affect stone fruits and ornamental trees. APHIS tests for and excludes this bacterium to prevent the introduction of foreign strains. *Xanthomonas oryzae* causes a devastating rice disease in Asia. Only a mild strain has been reported in one area of the United States. The program tests for and excludes this bacterium to protect the rice industry in the United States. In addition, APHIS detected new pathogens in sugarcane, potatoes and sweet potatoes. Outreach efforts included presentations to the American Bamboo Society, the American Phytopathology Society Policy Board, the North American Plant Protection Organization, Crop Germplasm Committees, and visiting foreign delegations. Vegetative propagules of sugarcane, potatoes, and sweet potatoes are prohibited plants (with some exceptions, including from countries where golden nematode is not known to be present). Therefore, they cannot enter the United States in commercial shipments, only as small amounts of canes, tubers, roots or tissue cultures to be grown and tested for pathogens in quarantine. The program will continue to check all importations of these crops for any new pathogens. When the program finds a new pathogen, APHIS collaborates with other scientists in the Agricultural Research Service or universities to characterize it and publish information about it. As a result of this collaboration, the program may adjust its testing protocols to enhance its ability to detect new pathogens.

### Cooperative Program Management

APHIS works with CBP to protect America's agricultural resources and food supply by inspecting international passenger baggage, cargo, and conveyances. To ensure the effectiveness of inspection policies, APHIS and CBP developed the Joint Agency Quality Assurance Plan, which includes port reviews. In 2012, APHIS and CBP conducted 10 quality assurance reviews at 10 ports of entry with one preclearance review in Vancouver British Columbia, Canada, and a follow-up review in Philadelphia, Pennsylvania. Follow-up reviews are conducted 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. These reviews revealed a need for greater emphasis on referring passengers for secondary inspections for agricultural items at airports and for motor vehicles at land border ports. The reviews have found that the program has improved cargo clearances and inspections as CBP Agriculture Specialists gain experience. In addition, the reviews identified discrepancies in the collection and reporting of operational data that resulted in the need for improvements. Further, the program improved on-the-job training for canine teams by using additional scents for the dog to react to that are specific to its port's operations.

### Pre-Clearance Inspections

APHIS conducts commodity pre-clearance programs in 28 countries to minimize pest and disease risks outside the United States and allow perishable products to reach markets promptly. In 2012, several countries expressed interest in considering irradiation treatments as a significant phytosanitary treatment for pre-cleared fruits and vegetables being sent to the United States. Typically, economic factors determine whether or not a foreign country will decide to use irradiation for preclearance. Although most of the countries that ship irradiated commodities have had steady export numbers over recent years, Mexico is one country that has increased the amount of commodities shipped over the last several years. Overall, APHIS has noted a slow and steady increase in the number of countries that use irradiation treatments. Irradiation allows for the treatment of delicate tropical fruits and increases the variety of these fruits available in the United States. It can also replace treatments that may have harmful effects on the environment, such as methyl bromide.

APHIS works with the U.S. Department of Defense and the Department of Homeland Security 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 2012, APHIS fulfilled this role by inspecting, training, and providing technical assistance visits to military personnel serving worldwide. Designated APHIS personnel delivered agricultural preclearance training and certification to military personnel, stateside and in forward deploy locations in the Middle East and Central Asia. 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.

### Smuggling Interdiction and Trade Compliance (SITC)

The APHIS SITC efforts aim to prevent the entry and distribution of prohibited and noncompliant products that may harbor exotic plant and animal pests and diseases. Through SITC, 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 2012, APHIS made 1,536 seizures in commerce locations, such as food/grocery/ethnic markets, swap meets, and other retail outlets. Those seizures totaled 354,487 pounds of prohibited and/or restricted plants and plant products, meat and meat products valued at approximately \$1,045,753. Of these products, 84,411 pounds, worth \$212,591, were directly linked to 80 Agency recalls. Items seized through these recalls included animal and plant products from various high-risk countries. APHIS continues to seek methods to enhance its ability to protect U.S. agricultural resources by preventing smuggling. In conjunction with inspections done with CBP, APHIS conducted 38 port-of-entry Special Operations that yielded additional agricultural seizures of prohibited plants and plant products as well as various high-risk animal products.

### 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 intercepted on ships in 2012 by CBP agriculture specialists, APHIS, CBP, and the Canada Food Inspection Service conducted increased outreach to the maritime shipping trade, and coordinated a joint US/Canada technical visit to Japan to address the risk to forest resources. Also in FY 2012, APHIS and the U.S. Forest Service visited Russia to review the certification and trapping programs. The program also continued discussions with officials in Korea and in China regarding AGM interceptions on ships.

### 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 2012, inspectors cleared more than 25,000 imported shipments containing 1.2 billion plant units (cuttings, whole plants, or other propagative materials) and approximately 600,000 kilograms of seeds. Through these inspections, they intercepted more than 2,000 reportable pests. In addition, the stations conducted more than 9,000 treatments remediating more than 10 million plant units and almost 3,000 kilograms of seed.

### Risk Analysis and Scientific Support

APHIS' Plant Epidemiology and Risk Analysis Laboratory (PERAL) develops pest risk analyses and epidemiological approaches to pest exclusion. In 2012, PERAL personnel completed 251 risk analyses associated with imports, exports, invasive pest threats, and programmatic requirements. This work included analyses to open, expand, or maintain export markets for 39 U.S. commodities. Program personnel also evaluated 65 new pests for potential risk to U.S. agriculture, and completed 30 risk analyses for imports covering 45 commodities and 21 countries.

### 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/Countries save up to 40 staff hours each month by allowing APHIS to handle the collection and remittance of the fees for certificates issued by the States/Countries on APHIS' behalf. Currently, 30 States and 20 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. In addition, the re-accreditation training required for certifying officials to maintain their ability to issue certificates was incorporated as an online module through PCIT in 2012. Having this training available online will save APHIS approximately \$1 million per year through reduced costs for personnel, travel, and shipping of training materials. The Agency is discussing with international counterparts the possibility of exchanging phytosanitary certificates electronically. Also in FY 2012, APHIS, State, and county officials issued more than 580,000 Federal export certificates for agricultural shipments. In addition, a feature was added to PCIT to help combat fraudulent certificates. This feature allows foreign governments to access the PCIT system and verify the legitimacy of a paper certificate they are presented.

## 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 is the most destructive cotton pest in North America and has cost cotton growers approximately \$13 billion since it entered the United States in the late 19<sup>th</sup> century. The USDA 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. The USDA began a PBW eradication program 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 2012 season, the industry produced approximately 17 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, one is free of BW, and a second had one field with some reproduction in FY 2012 but is now eradicated. However, the Lower Rio Grande Valley (LRGV) zone, south of a line that extends from McAllen to Brownsville, still contains BW populations. The same situation exists across the border in Tamaulipas State in Mexico. Until BW is eradicated in Tamaulipas, the LRGV will be subject to BW re-infestation due to migration from Mexico. Security concerns at the Mexican border have prevented cooperators from timely inspections of traps and treatment of infested fields in Tamaulipas. APHIS has worked with an International Technical Committee to develop strategies to eradicate BW from the LRGV zone and Tamaulipas. As a result of the Committee's recommendations, producers in Tamaulipas have increased late-season treatments and reduced late-season weevil populations. The impact of these increased treatments will not be recognized until the spring of 2013 when weevil move from overwintering habitats. By the spring of 2013, APHIS and cooperators expect to eradicate BW from all areas except the LRGV, which will require continued treatment until BW is eradicated from Tamaulipas.

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.

### 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, pest control strategies and regulatory requirements, and pest inspections. Nearly all rangeland in western States is located near rural communities where livestock production is a mainstay of the local economy. The value of rangeland forage is estimated to average \$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. The FCREP program prevents harmful crop and rangeland pests from expanding their distribution, causing greater damage, and impacting trade and commerce.

Through the FCREP program, APHIS cooperates with Federal, State, Tribal, and local agencies, organizations, and institutions to conduct survey and suppression activities in 17 western States to reduce grasshopper and Mormon cricket (GMC) infestations. 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 2012, APHIS conducted surveys in 16 States, and treated approximately 38,000 acres of rangeland, which protected rangeland forage and wildlife habitat on approximately 80,000 acres.

APHIS treated the largest Mormon cricket outbreaks in Utah, the largest grasshopper outbreaks in South Dakota, and smaller outbreaks of grasshopper treated in Arizona, North Dakota, Oregon, and Washington. In Utah, the program applied treatments on Federal and State lands. In South Dakota and Arizona, the program applied treatments on Tribal lands. The program treated Federal lands in North Dakota, Oregon, and Washington. Also in FY 2012, APHIS continued to implement predictive models to increase the efficiency of treatments. 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. In addition, the program helps these entities manage GMC damage on rangeland by providing population information, conducting treatments where possible, and providing technical assistance.

FCREP activities also prevented an estimated 10 additional States from becoming infested with imported fire ants (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. They infest more than 320 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 re-infestations; prevents the human-assisted spread of IFA on regulated articles; evaluates the efficacy of regulatory treatments for preventing IFA spread; and works with States, industry, and other Federal agencies to develop safe insecticides and biological control agents. In FY 2012 the program conducted 44 regulatory blitzes (concentrated efforts to inspect host materials in a certain area over a short period of time) to ensure that regulated articles leaving a quarantine area are treated according to APHIS regulations. These regulations, which require that host materials from infested areas be certified free of IFA, are the best method of preventing the pest's spread. APHIS coordinated the blitzes with Arizona, New Mexico, North Carolina, and Oklahoma (States on the leading edge of the infestation). 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 kill the ants. USDA's Agricultural Research Service continued testing additional fly species and developing rearing and release techniques. Since the spring of 2002, the program has conducted 133 releases involving four species of phorid flies, with several releases in each of the States/territory under Federal quarantine. Two fly species are established in the southeastern States and have spread throughout more than 60 percent of the regulated area. The program discontinued releases of *P. tricuspidis* in 2012 because it is now established in target areas and will cease rearing this species in 2013. Even though the program has established *P. curvatus* in many areas, a few releases of that species continued in 2012 to supplement current populations. Two additional species, *P. obtusus* and *P. cultellatus*, were released in 2012 and will be released in 2013. Reducing IFA populations will allow native ants to compete for resources, thus helping to restore ecological balance. Also in FY 2012, drought conditions prompted a great demand for hay to be shipped from infested to non-infested areas. The program took proper precautions and has not seen evidence of IFA infestations in the areas that received the hay. To minimize the probability of IFA movement with this hay, the program restricted the movement of hay that had been in direct contact with the ground or that had been stored.

The FCREP program is also concerned about diseases that impact wheat production. Karnal bunt (KB), first detected in the United States in 1996, is a major fungal disease of wheat. 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. 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 FY 2012, APHIS and cooperators reduced the number of wheat production acres regulated for KB from 233,000 to 223,000. All regulated acres are in portions of three counties in Arizona. As of November 1, 2012, 34 of 35 States that participated in the 2012 KB national survey had completed their surveys. All national survey samples to date

have been negative for KB demonstrating that the program's actions are successful in preventing the spread of the disease. The program also monitors the cleaning and disinfection of the equipment used to harvest, transport, or process wheat within a regulated area. In addition, APHIS works with State cooperators to collect wheat samples at harvest or from wheat storage facilities, and conducts regulatory activities to prevent the human-assisted movement of KB on regulated articles (i.e., nursery stock and farm equipment) to uninfested areas. APHIS has significantly increased the efficiency of the program by using high-speed optical sorting technology, substantially reducing the staff-time necessary to process samples and allowing uninfested wheat to more quickly enter into commerce. This has resulted in a 6 fold increase in sample processing efficiency and has reduced staffing by half. In 2012, the program closed operations in Texas and consolidated all operations in Arizona, resulting in increased efficiency and additional operational cost savings. Finally, the program certifies wheat exports to be free of KB, thereby reassuring trading partners about the safety of U.S. wheat exports, retaining export markets, and facilitating wheat movement into domestic and international markets.

Another concern for the program is witchweed, a parasitic plant that can significantly damage corn, sorghum, and sugarcane. U.S. corn and sorghum crops are worth more than \$50 billion annually. If witchweed were to spread throughout the Corn Belt, crop yields for corn and sorghum could decrease by 10 percent and trade of 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 region. The program projects that 1,953 acres will likely be infested at the end of the 2012 growing season. This represents a 10.8 percent increase from the 1,763 infested acres at the end of 2011. The increase can be attributed to a switch from the use of soil fumigants (Basimid and methyl bromide) to a more environmentally friendly application of alternative conventional herbicide treatments. This was necessary because a new company purchased the Basimid brand, and did not include witchweed use on the label. In addition, the program has determined that the label requirements that the Environmental Protection Agency has attached to the use of methyl bromide have rendered the product cost prohibitive. The change in methods may potentially prolong the timeframe needed to complete eradication by 3-5 years.

The program currently conducts witchweed eradication activities in North Carolina and South Carolina. These activities consist of eradicating infested acres, conducting post-eradication surveys, and treating any new infestations. In South Carolina, APHIS maintains primary responsibility for witchweed activities. An increase in corn acreage led to increased detections in new fields that had been idle for several years after being released from the program. The program detected witchweed at 14 sites in South Carolina, bringing a total of 112 acres back under quarantine. These fields will receive two applications of herbicide treatments in FY 2013 and beyond to eradicate the witchweed. At the end of 2012, all but 736 acres had been terminated from the program. These acres, which are located within two counties in South Carolina, are being surveyed periodically to ensure that witchweed has been eradicated. In addition, the program conducted surveys in areas with a history of witchweed (six South Carolina counties and five North Carolina counties). No witchweed detections were found in these areas. 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.

#### 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 safeguards 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 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. For example, in FY 2012 there were 39,350 instances of pests listed by 167 countries that are of quarantine significance, and negative data from surveys helped the United States to retain access to many foreign markets.

The Pest Detection program continues to develop commodity-based and resource-based surveys. In FY 2012, the program targeted 98 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, representing 79 percent of the target pests suggested for survey in the 2012 CAPS Survey Guidelines. Additionally, the program and its cooperators conducted 133 commodity- and taxon-based surveys in 52 states and territories that included priority pests of national concern, with an average of 6-7 pests per survey and 2-3 surveys per state.

## 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 PPMD program has focus areas which include methods development for Pest Exclusion and Detection Technology, Pest Identification, and Risk Mapping. Program employees also develop and implement 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 2012 annual performance target by developing or improving at least five quarantine treatments for commodities of trade. These treatments included validating sulfuryl fluoride treatment logs, an alternative to the use of methyl bromide – a gas form of treatment 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 cherries, thousand canker and ambrosia beetles in walnut wood, and flat mite and European grape vine moth in grapes. APHIS also continued to establish new and support existing irradiation treatment programs, including programs in Thailand and Mexico. As a result, trade increased and methyl bromide fumigations decreased in FY 2012.

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 2012, the program released two commodity-based digital resources that include multiple stand-alone tools: 1) *Citrus Resource – Citrus Cultivars, Citrus Diseases, and Citrus Pests* and 2) *California Central Valley Table Grapes Resource – Weed Disseminules and Spiders and their Egg Sacs*. APHIS delivered digital tools to field staff and APHIS partners for four major pest

groups (moths, beetles, fruit flies, and mites): 1) *Tortricids of Agricultural Importance*, 2) *Longicorn ID: Tool for Diagnosing Cerambycid Families, Subfamilies and Tribes*, 3) *Anastrepha and Toxotrypana*, and 4) *Flat Mites of the World*. In addition, the program delivered a major update and upgrade to its portal *ID Source: Your Gateway to Pest Identification. ID Source* that provides APHIS and its partners with easy access to internally-reviewed digital aids currently available on the World Wide Web. During FY 2012, design and development of two web-based resources (capsID and IDpic) were initiated by the program to provide diagnostic digital image support and survey/detection support to APHIS and its state cooperators.

In FY 2012, 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 19 target pests in the Cooperative Agricultural Pest Survey (CAPS) 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. Based on an external review of the NAPPFASST system, APHIS will continue to make improvements and revise the methodology utilized to generate the final risk maps. A tool to assist cooperators determine which pest is the greatest risk to their State or region was developed from CAPS maps' data using zonal statistics. The zonal statistics tool and a CAPS pest information matrix were made available on the CAPS resource and collaboration site. Global plant hardiness zones used for phytosanitary decision support were updated using more recent climate data.

In FY 2012, the APHIS Plant Epidemiology and Risk Analysis Laboratory (PERAL) completed 251 risk analyses associated with imports, exports, invasive pest threats, and programmatic requirements. Highlights of this work include analyses to open, expand, or maintain export markets for 39 U.S. commodities. PERAL also evaluated 65 new pests for potential risk to U.S. agriculture and completed 30 risk analyses for imports covering 45 commodities and 21 countries.

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 2012, the program partnered with APHIS State Plant Health offices, State departments of agriculture, USDA-Agricultural Research Service, United States Fish and Wildlife Service and universities in 28 States and territories and two Native American Tribes to evaluate and establish biological control agents for invasive plants, pests and diseases through more than 70 cooperative agreements. Some key program targets included emerald ash borer, Asian citrus psyllid, imported fire ant, brown marmorated stink bug, cactus moth, hemlock woolly adelgid, winter moth, and Russian knapweed.

In FY 2012, the program exceeded its performance measure target of 73 for the cumulative number of biological control projects that are developed, implemented, or transferred to States or others and is currently at 75. The program also exceeded its performance measure target of 18 for the cumulative number of released biological control agents that have become established and sustainable, with 22 biological control agents. Selected 2012 projects are highlighted below:

#### Winter Moth

APHIS continued to support cooperators at the University of Massachusetts who are working on a biological control agent for winter moth. The winter moth (*Operophtera brumata*), a leaf-feeding native to Europe, invaded eastern Massachusetts around 2000 and is causing widespread defoliation and tree death. A fly previously used to successfully suppress the moth in Canada has now been introduced into the United States and field assessments from FY 2012 indicated the fly has established itself at more than 10 sites and has begun to impact moth populations in Massachusetts and Rhode Island.

#### Air Potato

In FY 2012, APHIS initiated a collaborative effort with Florida to release biological control agents (*Lilioceris cheni*) against the invasive plant air potato (*Dioscorea bulbifera*). Air potato is altering native 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*. This effort follows a recommendation to release *L. cheni* issued by the Technical Advisory Group for the Biological Control Agents of Weeds in 2009 and a permit to release the agent issued in 2011 by APHIS.

## 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 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 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. Specialty crops are grown in all 50 States and they have a high value; two specialty crops alone—citrus and grapes—represent \$6 billion in revenues annually. Among the pests and diseases currently being addressed are the glassy-winged sharpshooter (GWSS), pale cyst nematode (PCN), a variety of citrus diseases, exotic fruit flies, and the European grapevine moth (EGVM).

The SCP program partners with affected industries, States, Tribes, and academic institutions to deliver domestic programs. APHIS also regulates interstate and international movement of potentially affected products to prevent long-distance pest and disease spread that is facilitated by human activity. Additionally, the program works with its counterparts in foreign countries to address pest risks offshore. For example, the SCP program partners with Mexico and Guatemala to mitigate the risk of exotic fruit flies entering the United States.

In FY 2012, APHIS continued to cooperate with the Texas Department of Agriculture, the Texas citrus industry, and Mexico to eradicate Mexican fruit fly, commonly known as Mexfly, a pest of more than 50 fruit types including citrus, mango and avocado, in the Lower Rio Grande Valley (LRGV). Through the use of the sterile insect technique, APHIS released millions of sterile Mexflies in the LRGV in Texas and across the international border into Mexico in this eradication effort. APHIS and its partners increased the capacity for sterile Mexfly production and release from 121 million flies per week in FY 2011 to 130 million flies per week in FY 2012, by renovating an older Medfly production facility to produce Mexflies. In addition, APHIS maintained sterile Mexfly emergence and release centers in Tamaulipas and Baja, Mexico. This enabled the program to release sterile Mexflies on the Mexican side of the border and protect citrus production in Texas and a variety of specialty crops in California. The program also maintains a trap line along the border of both California and Texas to provide early detection for the northward movement of exotic fruit flies entering from Mexico. This trap line enables APHIS to respond to any detection of approaching exotic fruit flies.

Overall, APHIS and the States' department of agriculture protected various commodities as part of the cooperative Fruit Fly Exclusion and Detection program in Florida, Texas, Arizona, and California in FY 2012. Through these efforts the program assured the safe and economical production and harvest of numerous specialty crops. For example, a fruit fly regulatory quarantine and control program implemented in California, eradicated the Oriental fruit fly in San Joaquin County and allowed for the harvest and shipping of sweet cherries valued at \$54 million. Additionally in Texas, a fruit fly regulatory quarantine and control program allowed the citrus industry, valued at \$27 million, to maintain domestic and foreign market access.

APHIS also provides national coordination and a forum for effective strategies designed to mitigate new and emerging threats when traditional regulatory approaches are not the best option. For example, the innovative cooperator partnerships of the GWSS – a program uniquely structured with significant industry input and

partnerships at the local and statewide levels – have allowed for a continuous improvement on research to combat the GWSS and Pierce’s disease (PD) vector-plant disease complex. GWSS significantly threatens many California crops, including grapes citrus, stone fruits, almonds, and alfalfa. Since the establishment of the effort, its research and control efforts have reduced GWSS populations without significantly impacting agricultural production.

In FY 2012, APHIS and its cooperators, including the California Department of Food and Agriculture (CDFA), county agricultural commissioners, universities, other state and local agencies, industry, and agricultural organizations throughout the state: 1) coordinated area-wide treatments, a critical element to the suppression of GWSS in infested agricultural areas; 2) performed research projects, such as developing Pierce’s disease resistant table and raisin grape cultivars with fruit quality equivalent to standards of present day cultivars; and 3) developed molecular markers for PD resistance. Additionally in FY 2012, to protect the grapes and wine industries, the program performed activities such as the urban rapid response program, which successfully eradicated GWSS in 15 different locations. Also, to protect the citrus industry, citrus growers voluntarily participated in six GWSS area-wide suppression programs in five counties, treating more than 26,000 acres.

Another example of cooperative partnerships is displayed through the EGVM program. APHIS works collaboratively with the CDFA, counties, extension service, and the industry to successfully work towards the eradication of EGVM. The program consists of intensive survey efforts to identify affected areas, regulatory compliance activities to prevent the artificial spread of the pest, and an outreach program to reach industry groups, affected growers, and residents. Affected growers are responsible for conducting suppression activities in their fields, with APHIS providing technical assistance and scientific support. In FY 2012, APHIS released Fresno, Mendocino, Merced, San Joaquin, and Sonoma counties from EGVM regulation. In December of FY 2013, APHIS removed the remaining areas of Nevada, Santa Clara, Santa Cruz, and Solano counties from the EGVM quarantine, as a result of no new EGVM detections during two years of surveillance, leaving only Napa County under quarantine. The removal of these counties from the EGVM quarantine will lift both the program and export restrictions on stone fruit and table grape growers, providing an estimated savings for producers of \$10 million a year in quarantine related expenses. This successful cooperative program has remained on target with its goal of ultimately eradicating EGVM from California and protecting the U.S. fresh grape exports, valued at \$833 million in 2012.

While Federal response activities take place in concentrated areas where the infestations occur, APHIS also protects all at-risk States producing specialty crops. Surveys for pale cyst nematode (PCN), a major pest of potato crops in temperate areas, protect other crops/products which may be associated or contaminated through soil. Survey efforts in Idaho provide assurance to trading partners concerned about this soil borne pest that the infestation is delimited, isolated, contained and, with the program elements in place, under control. After the initial detection of PCN in 2006, several trading partners, including Canada, Mexico, and Japan suspended the importation of potatoes and other host commodities shipped from Idaho. APHIS in cooperation with the Idaho State Department of Agriculture (ISDA) and industry, implemented delimiting surveys, instituted a regulatory framework, and treatment activities, to contain and suppress the PCN infestation. As a result, international trade of Idaho potatoes and other host commodities was restored. Without PCN survey throughout Idaho in FY 2012, Idaho potatoes, a widely recognized brand, could not be shipped interstate or internationally because of PCN concerns. Overall, PCN survey in Idaho maintains the stability of markets for Idaho potatoes and other crops and commodities which might be considered at risk for moving this pest.

The Citrus Health Response Program (CHRP) aims to improve the ability of the U.S. commercial citrus industry to produce, harvest, process, and ship healthy citrus fruit and plants in the United States and around the world. APHIS coordinates with the industry, and Federal, States, and local agencies to provide a national approach for identifying best management practices for citrus production, including grove inspection, regulatory oversight, and disease management, new detection methods and better scientific knowledge on the spread of citrus pest and diseases such as citrus canker, citrus greening, Asian citrus psyllid, citrus black spot, and sweet orange scab. In FY 2012, CHRP identified improved standards for implementing appropriate survey, diagnostic, and mitigation measures to reduce the proliferation and spread of citrus diseases of regulatory significance. APHIS’ long-term objective is to work

with the research community to develop and implement sustainable management strategies for these pests, with a particular emphasis on citrus greening.

## 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. 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 2012, APHIS continued eradication activities in Massachusetts, New York City, and Union and Middlesex Counties in New Jersey. In addition, the Agency began an eradication program in Clermont County, Ohio, which was supplemented with emergency funds. In Manhattan, New York, and New Jersey, APHIS contracted with professional tree climbers to assist with final confirmation surveys. The program continues to conduct final surveys in Long Island, New York. In Massachusetts and Ohio, APHIS and cooperators are continuing to delimit the infestations and remove host trees in infested areas. 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 2012, 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. Also in FY 2012, APHIS and cooperators modified survey and control protocols based on technical findings, thus reducing the funding required to eradicate the infestations. By the end of FY 2013, APHIS expects to declare ALB eradicated from Manhattan and Staten Island in New York City and from Middlesex and Union Counties in New Jersey. The program expects the infestation in and around Worcester, Massachusetts, to be delimited by FY 2014. By FY 2015, APHIS aims to declare ALB eradicated from Norfolk and Suffolk Counties in and around Boston, Massachusetts.

APHIS measures performance by tracking progress toward eradication. Through 2012, the program met its targets for FY 2012 and has completed 89 percent of the New Jersey program, 74 percent of the New York program, and 6 percent of the Massachusetts 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. The results are consistent with the program's targets.

Another forest pest of concern for the program is the EAB, which was first detected in Michigan in 2002 and has since spread into 17 additional States, an increase of three since the end of FY 2011. Even though the pest was detected in these three States in FY 2012, 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 agencies and stakeholder groups to mitigate the human-assisted and

natural spread of the pest. Because EAB has become widespread, APHIS shifted its strategy to focus on developing a biological control initiative designed to effectively manage the infestation instead of eradication. 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 for long-term EAB management. In FY 2012, the program focused on three parasitic wasps that could reduce EAB populations. In 2012, the program conducted trial releases of the wasps in Illinois, Indiana, Kentucky, Maryland, Michigan, Minnesota, Missouri, New York, Ohio, Pennsylvania, Tennessee, Virginia, Wisconsin, and West Virginia. In FY 2013, APHIS plans to release the biological control agents in all States that request them.

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 340,000 square miles. To prevent further artificial spread, the program regulates EAB host materials such as logs, firewood, and nursery stock. In 2012, 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 38 percent, exceeding the projected growth estimated at 7 percent. In addition, more detections outside of regulated areas were recorded in 2012 than 2011. There were a total of 19 detections in 2012, up from 7 in 2011. These results were likely due to improvements in the survey component of the program, including availability of improved detection tools and increased public awareness of EAB symptoms and reporting procedures for suspect trees, among other factors. In addition, APHIS and the U.S. Forest Service (USFS) worked to develop a computer based survey design tool 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 USFS 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 2012, APHIS and State cooperators continued to conduct EGM surveys to detect, delimit, and eradicate any isolated populations. During the year, the program added three new counties to the quarantine area (Ashland, Bayfield, and Clark Counties in Wisconsin).

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

##### 1. Wildlife Damage Management

APHIS' Wildlife Services 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 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, predators kill more than \$137 million worth of livestock each year. APHIS prevents and reduces livestock predation through education, technical assistance to producers, and management programs. These management programs consist of the lethal and non-lethal removal of predators, and assisting cooperators with research to control predators.

In FY 2012, the Wildlife Damage Management (WDM) program helped more than 8,500 livestock producers in the western United States. The WDM program helped protect approximately 4 million sheep and lambs, 3.6 million calves, and 500,000 goats from predation. These animals were valued at more than \$2.3 billion. In FY 2012, the Agency protected more than \$20 million worth of livestock from predation by coyotes, red fox, and black vultures in West Virginia alone. In Virginia, APHIS provided technical assistance to more than 3,000 people on coyote issues, provided assistance on 150 farms, and conducted 17 educational programs to instruct and inform citizens on livestock protection issues and abatement techniques.

APHIS wildlife disease biologists provided technical assistance, conducted surveillance, and maintained control of more than 70 wildlife diseases, pathogens, and syndromes. For example, APHIS conducted domestic disease surveillance activities for plague and tularemia surveillance (39 States); pseudorabies, swine brucellosis, classical swine fever, trichinella, toxoplasmosis, and swine influenza (35 States); rabies (19 States); chronic wasting disease (11 States); West Nile virus (7 States); bovine tuberculosis (3 States); E. coli and Hepatitis E virus surveillance in feral swine (24 States); parvovirus (33 States); and raccoon roundworm (16 States). The WDM program serves as an associate on the Food and Agriculture Organization's Scientific Task Force on Wildlife Diseases. In FY 2012, the WDM program worked with a U.S. Medical Research Unit in Kenya, and the Defense Threats Reduction Agency on emerging diseases, including African swine fever in Kenya, Uganda, and Ukraine. In addition, the WDM program worked with the Foreign Agricultural Service on wildlife disease projects in more than 20 other countries.

## 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 cooperation with the Centers for Disease Control and Prevention, APHIS continued to expand use of a rapid rabies diagnostic field procedure to test more than 52,000 animal samples resulting in the documentation of 953 new rabies cases and improved wildlife rabies control. In FY 2012, the WDM National Rabies Management Program distributed more than 7 million ORV baits. To increase the efficiency and cost effectiveness of the program, APHIS prioritized the distribution of baits in 15 States. In FY 2011, the WDM National Rabies Management program successfully conducted an oral rabies vaccine (ONRAB®) field trial to increase the rabies immunity of the raccoon population in these States. In FY 2012, the program expanded the trials to include four additional States. The program is currently conducting post-bait sampling and data analysis, and expects results by January 2013. If results are favorable, the program will likely expand field trials to include an additional State.

Wildlife strikes cost commercial aviation nearly \$700 million annually in the United States, and approximately \$1.2 billion worldwide. Since 1988 when APHIS started collecting data, bird and other wildlife strikes (such as deer and coyote) destroyed 94 aircraft in the United States, killing 55 people. In FY 2012, APHIS provided assistance to 785 airports and airbases nationwide to mitigate wildlife hazards. This included management programs at 90 domestic and international Department of Defense (DOD) airbases that reduced wildlife strikes to military aircraft. APHIS cooperators fund these efforts.

APHIS' Aviation Training and Operations Center (ATOC) provides high-quality training, standardization, and, most importantly, guidance for safe job performance. On average, APHIS trains approximately 34 Agency pilots and 10 to 15 contractor pilots per year. The program aims to provide pilots and crewmembers the ability to perform their assigned tasks safely with the best equipment available. Over the last two to three years, the ATOC has made various improvements involving employee safety in areas such as aircraft maintenance oversight, aviation safety

communication, aircraft avionics, aircraft tracking, and personal protection equipment (i.e. winter weather clothing, aircraft helmets).

### Property

In FY 2012, APHIS conducted beaver damage management activities in 39 States. In North Carolina, the Agency conducted more than 1,800 projects, reducing damage by an estimated \$11.6 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 1,163 properties and removed 1,506 dams in cooperation with State, county, and private entities, reducing damage by an estimated \$2.2 million. In Wisconsin, APHIS worked with the State, tribes, and the U.S. Forest Service to remove more than 700 dams and protect more than 1,500 miles of trout streams and economically important wild rice beds. APHIS similarly conducts statewide cooperatively funded management programs in Tennessee and Virginia.

### Natural Resources

Non-native, invasive animals can devastate ecosystems. APHIS' management efforts focus on eliminating the impacts of invasive species, including brown treesnakes (BTS), feral swine, and nutria.

BTS have eliminated most species of native birds, lizards, and bats in Guam, and cause economic losses through power outages. In FY 2012, APHIS continued to prevent BTS movement from Guam to other Pacific Islands, Hawaii, and the continental United States. The Agency intercepted approximately 23,000 BTS in Guam. APHIS continued using the oral BTS toxicant, acetaminophen, which significantly reduced snakes from forested areas located at or near exit ports.

Feral swine impact natural resources, animal and human health, crops and livestock, and native resources. Annually, feral swine cause an estimated \$1.5 billion in damage. Control activities to reduce disease threats can enhance the international trade of swine products. In FY 2012, the program completed 1,531 technical assistance projects to alleviate feral swine problems, and removed approximately 28,000 feral swine in 26 States.

Nutria are large semiaquatic invasive species that have damaged 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 coastal Chesapeake Bay marshland. Since 2002, in cooperation with Federal and State agencies and private landowners, APHIS has monitored and removed nutria from more than 132,000 acres of coastal marshland. Further, APHIS has prevented the reinfestation of this area, and marsh grasses and native muskrat populations are quickly recovering. The program removed nutria from an additional 28,500 acres in FY 2012. In FY 2013, the program will use newly developed, low population detection techniques on Virginia's eastern shore to determine if nutria populations have become established there. The nutria project is fully funded by cooperators.

## 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, and tribal governments, and private sector businesses. In FY 2012, NWRC conducted 337 studies and published 122 scientific studies in 68 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. In FY 2012, the California Department of Food and Agriculture requested and funded the development of economic models to estimate the amount of crop savings related to pest control measures in specific counties for selected crops, and quantified the number of jobs and the amount of revenue saved in each modeled county. NWRC developed the model to calculate the net benefit of employing pest control measures in California. The models indicated the value of bird control to avocado producers to be \$60 to \$196 per acre, and the net benefit of rodent control to be \$574 to \$1,117 per acre.
- Chemical rodenticides are effective at managing rodents that damage agriculture, impact native flora and fauna, or transmit diseases. In FY 2012, the NWRC developed models to more accurately estimate the toxicity of pesticides to rodents because of the concerns regarding the use of chemicals that may impact non-target birds. With financial assistance provided by the rodenticide manufacturing company, NWRC worked to reduce the accidental consumption of rodenticide baits by birds. In FY 2012, results showed that incorporating the non-lethal bird repellent *anthraquinone* into baits reduces consumption by non-target birds without affecting consumption by rodents.
- Scientific studies show that damage from blackbirds to the sunflower industry ranges between \$4 million and \$11 million annually in North Dakota, South Dakota, and Minnesota. In FY 2012, with funding assistance from cooperators, the NWRC researched the use of ultraviolet (UV) cues to help reduce costly repellents used in managing damage from blackbirds. The use of a UV-additive to the repellent, *anthraquinone*, irritates birds and could lengthen the time between the applications of crop repellents. Currently limitations show that birds can become accustomed to the UV cue when applied alone. In FY 2013, APHIS will research options to address this concern and determine the most effective concentration of the additive in combination with repellent.
- In FY 2012, NWRC developed a regional economic model to assess the economic impacts of beavers and the estimated annual savings resulting from beaver management programs in North Carolina and Mississippi to protect timber, crops, roads, culverts and bridges. APHIS conducts economic analyses to ensure that the benefit exceeds the cost of conducting the program. In North Carolina, the management program prevents the direct loss of \$8.5 million annually. Additional savings in terms of income and jobs saved were estimated to be \$3 million. In Mississippi, every dollar spent on APHIS' beaver management program saved between \$1 and \$38 in reduced timber damage.

European starlings consume cattle feed, increase feed spoilage, increase feeding costs, increase the incidence of *Salmonella* in dairy herds, and increase the number of dairies reporting Johne's disease in their herds. In FY 2012, NWRC completed a comprehensive economic assessment and model development of starling impacts to Pennsylvania dairies and estimated the benefits and costs associated with starling management. The results from this assessment indicate that feed loss costs Pennsylvania between \$4 and \$12 million in economic damage. By managing the starlings, APHIS can prevent this damage. The management program involves providing technical assistance to the resource owner or landowner regarding the application of typically nonlethal solutions such as habitat management and protection to reduce attractants and food/cover/roost and nest locations.

## Natural Resources

The WSMD program 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, degrade habitats and ecosystems,

and contaminate food sources for non-target animals. In FY 2012, APHIS researched new methods to control the spread of feral swine and wild horses.

- Feral swine are an invasive species whose populations have expanded to more than five million animals. These animals spread disease and damage property, crops, and natural resources. Current control options are limited, since there are no registered toxicants available for use on feral swine in the United States. In FY 2012, and in anticipation of registering a new toxicant, NWRC developed and evaluated species-specific delivery devices to distribute toxic baits to feral swine. APHIS further determined the proposed toxicant to be of minimal risk to other wildlife, allowing the product to be registered with the U.S. Environmental Protection Agency (EPA).
- Populations of wild horses and burros are increasing on many public lands, especially in the west, where their grazing is causing habitat degradation. Federal land management agencies have limited management options. Reproductive vaccines are one method to manage wildlife populations that could conflict with human activities, and where other control methods may not be appropriate. *GonaCon* is an immune-contraceptive vaccine developed by NWRC, and registered through the EPA, for use in female white-tailed deer, and potentially other mammals. In FY 2012, NWRC evaluated *GonaCon* for inhibiting reproduction in feral horses in Nevada and North Dakota. If approved, the product would be used to manage reproduction in wild horses and burros on U.S. Department of Interior properties.

#### 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.

- In FY 2012, NWRC continued funding research to develop passive lighting systems that alert birds to approaching aircraft and prevent bird-aircraft collisions. Passive lighting pulses the aircrafts on-board lights, which is discernible to birds, and enhances their detection of aircrafts. As a result of NWRC research, Quantas Airlines reported a 30 percent reduction in bird-aircraft collisions in their 737 fleet in FY 2012. NWRC also began consulting with Alaska Airlines to outfit their fleet with NWRC lighting systems in 2012.
- The United States has been using oral rabies vaccination (ORV) since the 1990s to control rabies in select terrestrial wildlife populations. Recent data indicates that, on average, only 30 percent of target animals develop rabies antibodies with the current vaccine. Therefore, NWRC has begun evaluating ONRAB®, an alternative to ORV ONRAB®, that has increased the antibody development rate to 50 percent in raccoons and skunks. Trials have also shown that additional wildlife species could be vaccinated, unlike with ORV. In FY 2013, APHIS will continue field trials of the use of ONRAB®, to control the spread of rabies.

#### Property

The WSMD program protects personal property from damage caused by animals and rodents. In FY 2012, NWRC assisted the U.S. Air Force by developing a method to prevent rodent invasion into secured nuclear missile silo sites. NWRC developed and tested rodent barriers to prevent ground squirrels from triggering sensors at nuclear missile sites, and undermining facility infrastructure. In FY 2013, NWRC will continue evaluating the field efficacy of the barriers 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) program provides investigative and enforcement support to the Agency's four regulatory programs, Agricultural Quarantine Inspection (AQI) activities, and Custom and Border Protection at the Department of Homeland Security. APHIS investigates alleged violations of Federal

statutes and regulations under its jurisdiction and pursues appropriate enforcement actions through administrative, civil, or criminal procedures.

In 2012, APHIS issued nearly 1,200 Official Warnings, collected \$1,248,634 in stipulated penalties, and obtained administrative orders assessing an additional \$858,538 in civil penalties. Highlights from each program are described below.

In collaboration with the Agency's animal health programs, the APHRE program initiated 188 cases, issued 82 Official Warnings, collected \$15,625 in stipulated penalties, and obtained administrative orders assessing an additional \$84,025 in civil penalties against persons for violations of laws aimed at protecting the health of American agriculture. In addition, APHIS pursued non-procurement debarment actions against two persons who owed substantial debts to the Federal government as the result of civil penalties assessed for violations of the Commercial Transportation of Equine to Slaughter Act.

In support of AQI activities at U.S. ports of entry, the APHRE program initiated more than 3,700 cases, issued 225 Official Warnings, collected \$770,253 in stipulated penalties, and obtained an administrative order assessing an additional \$325,000 in civil penalties against a prominent international express courier company with a history of chronic non-compliance with agricultural inspection requirements.

APHIS initiated 439 cases involving alleged violations related to the domestic handling of plants, issued 505 Official Warnings, and collected \$60,050 in stipulated penalties. In addition, APHIS played a critical role in supporting a criminal investigation by the Office of Inspector General and the U.S. Department of Justice, which led to the conviction of four persons who knowingly violated quarantine orders established to protect the health of the American citrus industry.

APHIS initiated 315 cases, issued 381 Official Warnings, collected \$402,706 in stipulated penalties, and obtained administrative orders assessing an additional \$449,513 in civil penalties for violations involving the welfare of animals. In 2012, APHIS reached a settlement with an animal exhibitor to pay a \$270,000 civil penalty, develop a compliance training program to promote the care of its elephants, and established a consent decision and order with an exhibitor that provided for the revocation of its license and ownership transfer of a large number of macaques to ensure humane care for the animals. APHIS established a consent decision and order for a repeat violator of the Horse Protection Act for permanent disqualification from participation in any horse shows, exhibitions, sales, or auctions, and the assessment of a \$150,000 civil penalty.

During 2012, APHIS' enforcement division employed a number of business process improvements (BPIs). APHIS improved the integration of animal and plant health programs into the enforcement process to promote timely resolution of policy and enforcement issues; implemented standardized regulatory correspondence templates using "Plain Language Guidelines" to reduce duplicative data entry and error rates, and to promote transparency with respect to the enforcement process; deployed an Electronic Certified Mail Application that reduces staff resource needs and costs associated with mailing regulatory correspondence; and launched a new information management system, enabling APHIS to better manage its investigative and enforcement case inventory. To further streamline its processes, APHIS developed criteria to focus investigative and enforcement resources on the highest priority cases involving the most egregious alleged violations that pose the greatest risk to animal and plant health.

As a result of these collective efforts, APHIS reduced its inventory of open investigations by 63 percent in FY 2012. Moreover, this decrease in inventory, coupled with the BPIs, has improved timeliness of completed investigations and enforcement actions, decreasing total case processing time by approximately 28 percent from an average of 646 days to an average of 468 days. By the end of FY 2013, the program anticipates reducing case resolution time by an additional 15-20 percent.

## 2. Biotechnology Regulatory Services

APHIS oversees a science-based regulatory framework for the importation, interstate movement, and field release of genetically engineered (GE) organisms that may pose a pest risk to plant health. APHIS requires a permit or notification for the introduction of GE organisms into the environment, and imposes conditions on the introduction to ensure they remain confined. Due to technological and scientific advancements in biotechnology, there are continual increases in the number of new GE crops, traits, and combinations. APHIS ensures regulatory compliance of the biotechnology community through field test site inspections, educational and outreach efforts to make regulated entities aware of the requirements, investigations of alleged non-compliance with the regulations, and audits of active companies. In FY 2012, APHIS issued 2,125 new permits and notifications, safely authorized approximately 11,602 field trials, and conducted 679 site inspections. Of those 679 site inspections, 583 of the site inspections have completed a thorough review process, and represent a 98 percent compliance rate.

The Agency also continued implementation of the Biotechnology Quality Management System (BQMS), a program that helps regulated entities develop processes and systems to enhance compliance with biotechnology regulatory requirements. During FY 2012, APHIS added two new participants to the BQMS program, bringing the current total to 21 enrolled participants. BQMS participants account for 85 percent of the field release sites overseen by APHIS. APHIS also held five biotechnology regulatory training workshops in an effort to strengthen compliance. BQMS and education and outreach efforts contribute to the Agency's high rate of compliance.

Once a developer can demonstrate that a GE crop does not pose a risk to plant health, they may petition APHIS to seek nonregulated status for their product. 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. 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 2012, APHIS evaluated and made six determinations of nonregulated status for herbicide tolerant/insect resistant cotton, three varieties of soybeans, drought tolerant corn, and an herbicide tolerant sugar beet. As of FY 2012, APHIS made a total of 93 determinations consisting of 156 plant lines.

The petition process has been a part of APHIS biotechnology regulations since 1994, and the regulations specify the length of time the Agency has to complete the review. During the past 10 years, the review process took between 3 to 5 years to complete, which resulted in more than 20 pending petitions at any given time. In FY 2012, APHIS identified and implemented innovative ways to improve the biotechnology petition process to significantly decrease the length and variability of the review process without compromising the quality of the decision-making. These improvements include: process streamlining, timeline standardization, implementation of new management and tracking tools, and enhanced use of public input in the process. In March 2012, APHIS announced the transition of the first nine petitions into the new process, with final determinations due in approximately 14 to 16 months. The improved process will result in the more timely availability of agricultural products to producers and growers.

In FY 2011, APHIS implemented a pilot project to improve its ability to create timely, high-quality National Environmental Protection Act (NEPA) documents. The pilot project involved using applicant funded environmental documents prepared by outside experts. In FY 2012, APHIS continued the pilot project by holding a NEPA workshop with project participants in September 2012. The workshop provided guidance to developers on preparing environmental reports to support petition requests. APHIS reviewed three environmental documents and published two environmental documents that were prepared by contractors as part of the pilot. This pilot project will conclude in April 2013 and will result in decisions about best practices for the preparation of environmental documents.

In 2007, APHIS began a partnership with the National Plant Board that allows State inspectors to conduct inspections of notification and permit field release sites, including industrial and pharmaceutical trials. In FY 2012, State inspectors conducted inspections in five States: Arkansas, Florida, Kansas, Minnesota, and North Carolina.

APHIS also shares notifications and applications for permits with Tribal government officials when regulated articles are proposed for release on Tribal lands. The partnership between the Agency and the States is critical to the successful implementation of regulations for certain GE organisms that may pose a risk to plant health. APHIS works closely with State departments of agriculture to ensure that they are aware of environmental releases taking place within their jurisdiction, to explain how the releases are performed and confined, and to allow them to request any additional conditions to mitigate plant pest risk.

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. In FY 2012, APHIS worked closely with Mexico and Canada towards regional harmonization of biotechnology regulatory policies and procedures in North America, and held individual bilateral discussions with China, Japan, and Korea to address regulatory issues. In coordination with the Foreign Agricultural Service, the Office of the United States Trade Representative, Department of State, the Food and Drug Administration, and the Environmental Protection Agency, APHIS worked on multilateral efforts to address low level presence with a group of 16 countries and in a related effort, with the Organization for Economic Cooperation and Development. In addition, APHIS provided training and information about USDA's biotechnology regulatory policies and procedures to Brazil, Canada, Chile, China, Colombia, Japan, Korea, Mexico, the Netherlands, Russia, Turkey, and Vietnam. APHIS also continued to participate in activities related to trade in biotechnology products under the Cartagena Protocol on Biosafety, an international treaty that governs the movement of living modified organisms resulting from modern biotechnology.

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

##### 1. Emergency Preparedness & Response

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.

##### Preparedness

APHIS continues to develop a new foot-and-mouth disease (FMD) response strategy that includes the use of the FMD vaccine as a tool to control and eradicate an outbreak. Prior to this initiative, APHIS' strategy was to depopulate entire herds – a technique that is economically unfeasible due to the challenges created by depopulating and disposing of thousands of animals. Further, this strategy places a heavy burden on the environment. As part of this new approach in 2012, APHIS worked with stakeholders to develop synchronized and integrated response strategies, as well as identifying a scientifically sound approach for a vaccine prioritizing strategy, that would be epidemiologically sound and appropriate for the production sector(s) involved in the outbreak.

Additionally, APHIS developed 21 preparedness product documents in the form of response plans, National Animal Health Emergency Management System guidelines, ready reference guides, industry manuals, and standard operating procedures. These documents aid stakeholders in improving their planning and responses capabilities to foreign animal disease incidents.

##### Emergency Response Planning and Test Exercises

In FY 2012, APHIS engaged State, Tribal, local governments, and industries in efforts to improve emergency preparedness and response capabilities through refining response plans. APHIS participated in 45 animal health or

all-hazards test exercises. This participation enables the Agency to determine areas of future improvement. For example, throughout 2012, APHIS worked collaboratively with other Federal government agencies and State government agencies to conduct a FMD Functional Exercise with the Federal Emergency Management Agency intended to clarify the roles and responsibilities within USDA and Federal interagency partners during a FMD outbreak. The end result demonstrated wide-spread competence in current plans and procedures and highlighted the intense resource demands that would occur during an FMD outbreak. APHIS also conducted a workshop on leveraging stockpile resources with the Division of the Strategic National Stockpile (DSNS) at the Centers for Disease Control and Prevention (CDC) in Atlanta, Georgia. The purpose of the workshop was for APHIS and DSNS personnel to discuss both programs' mechanisms and infrastructure that can be potentially shared to satisfy instructions in the Homeland Security Presidential Directive 9 and the findings of the GAO report "Homeland Security: Actions Needed to Improve Response to Potential Terrorist Attacks and Natural Disasters Affecting Food and Agriculture".

#### Foreign Animal Disease Investigations

During 2012, APHIS and State animal health partners conducted 548 foreign animal disease investigations. Some of the highlights of the investigations are as follows:

- Between December 1, 2011 and January 6, 2012, three separate incidents of suspicious nose and oral lesions were found in cattle entering the United States from Mexico through the port of Santa Teresa, New Mexico. APHIS collected, expeditiously shipped, and tested all samples to rule out the possibility of FMD. All samples were negative for FMD. However, the cattle tested positive for bovine papular stomatitis (BPS). BPS is a mild disease that presents clinical signs similar to FMD.
- Starting on April 23, 2012, APHIS began a total of 15 investigations of vesicular stomatitis virus (VSV) detected in horses with vesicular lesions in Colorado and New Mexico. VSV is a vector-borne disease that can affect horses, cows, and occasionally swine. The primary international trade impact anticipated from this detection is additional diagnostic testing requirements for live horse exports and equine semen being exported from VSV affected States.
- On April 24, 2012, USDA announced a fourth case of bovine spongiform encephalopathy (BSE) in the United States. Two offspring of the positive animal were designated as at-risk cattle. One was stillborn and the other was traced out of State and depopulated with no BSE detected. The carcass of the positive animal along with approximately 90 other carcasses being held at the renderer's transfer station were disposed of in a landfill in accordance with all Federal, State and local regulations. The animal did not enter the human or animal food chain. APHIS response effort to this case was lauded by the U.S. Cattlemen Association as the response aided greatly in preventing a negative impact on domestic cattle markets and U.S. beef exports.

#### 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 with the CDC or USDA. APHIS remains the USDA agency with the expertise and authority to review the biosafety and biocontainment restrictions of these select agents and toxins. APHIS monitors and tracks their movement by identifying and registering the entities or facilities that use them.

In 2012, there were 50 registered entities in the Select Agents Program, and 6 new applications for certificates of registration. APHIS received 118 requests for amendments and changes to certificates of registration made through CDC. The Agency was able to process 88 percent of these requests in 2012. APHIS received 359 requests for amendments from entities registered directly with APHIS regarding registrations, amendments, and renewals, and processed 80 percent of these requests. Lastly, the Agency issued 938 select agent import permits during 2012.

APHIS also collaborated with CDC to conduct 10 renewal inspections, 32 unannounced compliance inspections, 27 joint inspections and 5 inspections involving amendments. APHIS conducted one inspection for a new applicant and one inspection related to an investigation of potential wrongdoing. To address issues of noncompliance, APHIS issued corrective letters for minor violations and for more serious noncompliance issues, APHIS conducted joint inspections or investigations with CDC. Two entities had a significant history of non-compliance and were placed on program improvement plans to resolve issues.

In November 2011, APHIS and CDC developed and delivered a workshop in Knoxville, Tennessee, to provide additional details and guidance on the select agent regulatory requirements and provided a forum for more face-to-face interaction with the regulated community. APHIS also collaborated with CDC to respond to inquiries from the General Accountability Office on the program and the USDA Office of Inspector General on their audit of the APHIS select agent program.

### Capacity Building

The National Animal Health Emergency Response Corps (NAHERC) was formed in 2001 to provide an emergency reserve of veterinary professionals to assist Federal and State responders during an animal health emergency. NAHERC volunteers become temporary Federal employees when activated. As of September 2012, a total of 3,120 qualified members were enrolled (895 veterinarians, and 2,225 animal health technicians). Ongoing recruitment efforts include online advertising, direct mail campaigns, attending veterinary conferences/seminars, and networking with animal health professionals.

### Biosecurity

In an effort to obtain more information about plant pests, APHIS Exotic Pest Information Collection and Analysis (EPICA) collects, analyses, distributes, and archives newly emerging information about plant pests. In 2012, EPICA's subject matter experts gathered new pest information and produced 50 weekly notifications containing 224 unique plant pest and disease articles. In addition, the Offshore Pest Information System (OPIS) allows APHIS to systematically collect and report, analyze, and communicate information on offshore plant pests and diseases of concern to USDA. In 2012, 45 reports were submitted and evaluated in the OPIS system.

## 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

The goal of the National Center for Import and Export (NCIE) is to protect U.S. agriculture while facilitating safe trade of animals and animal products. The NCIE works closely with other Federal agencies, States, foreign governments, industry, and academia in carrying out the program's mission. APHIS animal health experts negotiate import and export animal health requirements that are founded on sound scientific principles and fair trading practices for animals and animal products. Moreover, APHIS sets specific 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 ensures that the risk of spreading animal diseases through imports is minimized. In FY 2012, APHIS completed two evaluations, which were published in the *Federal Register*. These evaluations include classifying Liechtenstein and Switzerland as low risk for classical swine fever and recognizing Japan as having regained foot-and-mouth disease free status. The new classifications further facilitated trade between the U.S. and the other countries. APHIS anticipates several evaluations to be completed in FY 2013. 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 2012, APHIS issued 9,096 import permit applications for live animals, animal products, organisms and vectors, and select agents. APHIS is also responsible for revising import regulations to ensure they are effective and based on current science. In March 2012, APHIS published a proposed rule that would streamline the importation of live bovine and bovine products with regard to bovine spongiform encephalopathy. The March 2012 rulemaking, commonly known as the Comprehensive Rule, provides a risk-based approach consistent with international animal health guidelines and scientific understanding.

To address concerns by U.S. trading partners regarding the length of time required to develop regulatory decisions for the importation of live animals and animal products, APHIS undertook a review of the rulemaking process. In FY 2012, APHIS reviewed the rulemaking process and identified steps in the process that could be improved. This began with the receipt of a regulatory work plan, included the close of a comment period, and ended with the entry of a rule or notice into clearance. As a result, APHIS has reduced the rulemaking process by 283 days compared to previous median timeframes.

#### Exports

APHIS estimated the value of new or maintained export markets for live animals, germplasm, and animal products at approximately \$2 billion for FY 2012. As part of the work to keep and maintain export markets, APHIS negotiates with importing countries to set conditions for various commodities that protect their country while also facilitating trade. During FY 2012, APHIS negotiated, or re-negotiated, 239 export protocols for animals and animal products: 46 protocols that opened new markets, 132 that expanded markets, and 61 that retained current markets. APHIS continued to increase cattle exports, reopen poultry exports from several States to Japan, and

expand the European market for U.S. pet food in FY 2012. APHIS also developed 25 information packages and questionnaire responses from various countries in an effort to maintain, expand, or open export markets.

### Lacey Act

In FY 2012, APHIS solicited public suggestions for improving the implementation of the Lacey Act amendments, which have been a significant challenge due to the substantial volume of products that could potentially be covered under the Act. The Agency collects an estimated 10,000 declarations per week, and approximately ten percent of these declarations are submitted on paper forms that require significant resources to analyze and store securely. In FY 2012, APHIS, together with the U.S. Fish and Wildlife Service, completed draft proposals on defining the two major exclusions from the Act: “common food crops” and “common cultivars.” When published, the rule will allow the exclusion of approximately 500,000 shipments from the Lacey Act declaration requirement. As a result, the rule will facilitate trade by reducing the number of declarations that need to be submitted by importers, collected by the Department of Homeland Security, and reviewed by APHIS.

## 2. Overseas Technical & Trade Operations

The Overseas Technical and Trade Operations (OTTO) program partners with foreign governments, regional and international organizations, and other stakeholders to (1) monitor and respond to emerging foreign agricultural pests and disease threats to the United States, (2) facilitate U.S. agricultural trade through the resolution of technical trade barriers, and (3) support 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. Technical experts work with counterparts on international animal and plant issues that may affect U.S. agriculture by establishing relationships with foreign regulators, which allow direct intervention on behalf of U.S. exporters subject to potential trade restrictions. 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 2012, APHIS successfully negotiated and resolved 207 SPS trade-related issues involving U.S. agricultural exports, with an estimated market value of \$2.56 billion, and intervened in 324 releases of U.S. cargo held up at foreign ports-of-entry, which prevented the rejection of shipments worth more than \$41 million.

For example, APHIS negotiated a six-month pilot program to reopen the Chinese market for U.S. logs, which facilitated more than \$1.5 million in U.S. log exports to China from Virginia and South Carolina, and \$730 million from all states in the first eleven months of 2012; facilitated \$300 million worth of live cattle exports to Turkey and Russia; buyers from Turkey, Russia, Canada, Mexico, Kazakhstan, and countries in South America and the Middle East increased their imports of live cattle to more than 113,000 breeding heifers in eight months; helped California producers ship stone fruit to Mexican markets; released six shipments of cherries and \$1.5 million of cotton held at Chinese ports ; and opened Australian markets to California table grapes. APHIS also opened the Finnish market for hay, straw, and pet food, and reached agreement with Denmark for exporting U.S. fish materials. Following the detection of a case of bovine spongiform encephalopathy (BSE) in the United States in FY 2012, APHIS experts retained markets for U.S. beef and bovine products in Japan, Korea, and other critical markets through providing timely technical information about measures the United States has taken to prevent BSE from spreading or from entering products meant for human consumption. Retaining markets involves intense efforts, constant communication and hosting delegations from trading partners which provide assurance about the safety of U.S. products. In this case, APHIS retained Japanese beef markets after the last BSE detection and worked with the U.S. Trade Representative and USDA’s Foreign Agricultural Service to ensure continued market expansion negotiations that raise the age of exported beef from 20 to 30 months. APHIS also negotiated the export of U.S. eggs to Mexico for processing, valued at \$13 million per year, and U.S. poultry exports to Kuwait and Turkey worth \$23 million annually.

Relationships with regulatory counterparts who make market access decisions are critical to new market access. APHIS officials build relationships through bilateral discussions, foreign regulator visits, and plant and animal health awareness trainings. In FY 2012, APHIS officials informed 635 foreign officials in 100 visits about the U.S. regulatory process.

APHIS participates in multilateral organizations promoting international standards for veterinary services, plant protection, and trade. Science-based standards set by the World Organizations for Animal Health (OIE) and the International Plant Protection Convention (IPPC) provide 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 animal and plant health standards guiding agricultural trade. Because of regulatory expertise, APHIS leads the negotiation of international standards on animal and plant health developed by the OIE and IPPC. APHIS also provides input to the WTO notification process, whereby foreign trading partners may comment on changes to regulations that affect trade. APHIS notified the WTO on 40 proposed animal and plant health regulations and commented on 45 notifications from foreign governments on regulations that could affect U.S. exporters.

To assist developing countries, APHIS cooperates with U.S. government entities, international organizations, the private sector, and universities, such as the Food and Agriculture Organization, The Pan-American FMD Center, and the Inter-American Institute for Cooperation on Agriculture. APHIS enhances diagnostic capabilities for the management of plant and animal health issues in developing trading partners. The program conducts cooperative animal disease eradication programs to detect and control outbreaks of global foreign animal diseases throughout Central America, South America, Hispaniola, and the Caribbean. In FY 2012, cooperative inspectors conducted surveillance on more than 20,000 farms and ranches, inspected more than 250,000 animals for foreign animal diseases such as foot-and-mouth disease, and trained more than 130 agricultural students, community leaders, and producers in Nicaragua and Costa Rica.

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 2012, APHIS developed partnerships with other Federal agencies to review 166 requests for subject matter expertise and training. Of that total, the Agency approved and completed 130 requests that supported critical Agency mission areas and goals. For example, APHIS veterinarians trained officials in former Soviet Union countries on epidemiology, trained officials in Central American countries and the Caribbean on diagnostic laboratory quality assurance, and coordinated foot-and-mouth disease control efforts in South Asia and the Middle East. APHIS completed more than 100 international technical assistance projects, including requests for technical specialists, formal training, and materials. APHIS officials held six training courses and co-sponsored a seventh course for international animal and plant health officials that increased awareness of the ability of the U.S. regulatory system to respond to animal and plant health issues.

Agricultural trade is a bright spot for the U.S. export market but is 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 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 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 (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. The Agency regulates animals used in research, exhibition, the wholesale pet trade, or transported in commerce. The AW program places primary importance on the quality of veterinary care provided to those animals. This is achieved by enforcing the AWA primarily through inspections of regulated facilities. To ensure that compliance with the AWA is continually maintained, all facilities that keep animals regulated under the Act must be licensed or registered with APHIS.

#### Pre-Licensing and Licensing Activities

APHIS conducts pre-licensing activities, including education and inspections of facilities, to ensure that potentially licensed entities are in compliance with AWA regulations and standards prior to the issuance of a license. APHIS, in cooperation with the Iowa State University, continued the development of a web-based training module for new applicants in FY 2012. The module is tailored to the type of licensed entity (i.e., breeder, exhibitor, etc.) and covers various aspects of the regulations with added description/examples of ways to meet the regulatory standards and is designed to improve overall compliance of regulated entities. In FY 2012, APHIS modified training modules for the pre-licensing program, marketed these modules to industry leaders and others through breeder publications and press releases, and released the modules to the public via the Iowa State University website. This approach provided additional avenues for individuals to receive information.

In FY 2012, APHIS conducted 1,158 inspections associated with pre-licensing activities. Once a license has been issued, APHIS performs unannounced inspections to verify continued compliance. In all, APHIS conducted approximately 11,142 inspections to determine the welfare of animals. If APHIS discovers violations during a compliance inspection, the Agency takes additional actions that include an increased frequency of unannounced inspections, and possible revocation of the facility's license. Overall substantial compliance with the AWA remained at 95 percent, with only 2 percent of licensees having significant repeat violations of the AWA.

In FY 2012, APHIS placed an emphasis on the inspection of facilities with a history of non-compliance. The Agency revised the inspection program to improve the quality and accuracy of inspections, as well as documentation collected and evidence collected during inspections. Furthermore, licensed entities with documented non-compliances are flagged as high-risk and scheduled for re-inspection within the proper timeframe. Inspectors conduct re-inspections for repeat non-compliances within 90 days to determine the welfare of the animals impacted by the non-compliances. Further improvements made include continual and timely training for inspectors, mainly through webinars, to ensure comprehensive inspections are conducted and that data being captured is accurately recorded. In FY 2012, APHIS developed 15 training sessions, with 9 more being made available in previously-recorded webinars. As a result of these efforts, APHIS successfully provided protection for more than two million animals in the regulated community.

### Enforcement Activities

Enforcement activities are essential to address issues where a licensee falls out of compliance. In FY 2012, APHIS provided approximately 400 licensees with letters of warning regarding their compliance with the AWA. Among other notable actions, APHIS' Investigative and Enforcement Services (IES) reached a settlement with an exhibitor who agreed to pay \$270,000 in civil penalties and develop a compliance training program to promote the care of its elephants, and in another instance issued a consent decision and order with an exhibitor that provided for the revocation of its license and ownership transfer of a large number of Macaques to ensure humane care for the animals.

This approach allows the Agency to address infractions in a timely manner, and improve the overall compliance of a facility before further action is needed. In cases where the health and well-being of an animal is of concern, or when a licensee can no longer care for the animals, APHIS may work with licensees to move the animals to another facility. For example, APHIS worked with the Wild Animal Orphanage (WAO) facility in San Antonio, Texas and 11 other cooperators to care for and relocate more than 300 animals, including tigers, lions, bears, and chimps. The WAO was closing due to a financial crisis and was also faced with the challenge of caring for and finding homes for the hundreds of animals that resided at the facility. This successful cooperative initiative was awarded the USDA Secretary's Honor Award for Excellence.

APHIS also initiated a business process improvement project to further improve the actions taken prior to a formal enforcement action. In doing so, APHIS was able to identify inefficiencies and determine where improvements could be made to optimize the inspection and pre-investigation enforcement process. The project included a review of the documentation of inspection findings, the collection of evidence, pre-investigation enforcement action options, and interactions between the AW program and APHIS' IES. As a result of the analysis of the process, APHIS has projected to reduce the number of non-compliances identified in newly licensed facilities by 50 percent and established facilities by 25 percent over the next three years, reduce the time it takes to resolve inspection findings by 20 percent for facilities requiring enforcement action, and increase the number of alleged violations that are resolved internally by the program by approximately 37 percent. APHIS will monitor changes made to processes to determine effectiveness and opportunities for further efficiencies in FY 2013.

### Outreach/Stakeholder Activities

APHIS' Center for Animal Welfare supports compliance efforts through education, training, outreach, and the development of partnerships. Furthermore, the Center serves as a national resource for policy development and analysis, training, science, and technology in support of the AWA. For example, the Center conducts educational workshops, scientific seminars, and listening sessions to convey critical and current animal welfare information, and also works with universities, industry, and animal interest groups. Examples of these efforts include:

- Collaborated with the Ohio Department of Agriculture, industry, and animal interest groups to evaluate the number of big cat dealers/exhibitors and owners in the State and the conditions for these animals. This information is being used to help develop new exotic animal laws, improving welfare for the animals and assuring public safety.
- Provided outreach and educational materials to state-level pet breeder associations. This includes publishing articles in newsletters, canine care workshops, newsletters for breeders, and articles for attending veterinarians. As a result, APHIS published newsletter articles in six states (Kansas, Iowa, Missouri, Oklahoma, North Dakota, and Nebraska) including an article describing the top seven noncompliant items seen at Class A breeder facilities.
- Collaborated with the National Marine Fisheries Service and the Marine Mammal Commission to coordinate inspection approaches for marine mammals protected under the AWA and the Marine Mammal

Protection Act. Combining visits saves resources, including travel and personnel, and serves stakeholders more efficiently.

### Regulatory Changes

In FY 2012, APHIS published a proposed rule to revise the definition of “retail pet store” in the AWA regulations to close a loophole that has, in some cases, threatened the health of pets sold sight unseen over the Internet and via phone- and mail-based businesses. The proposed rule would 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. Once finalized, APHIS will begin phasing in implementation of the rule, which will result in approximately 3,000-5,000 additional pet animal breeders applying for a USDA license. Prior to publication, APHIS hosted a series of public meetings, developed and distributed publications for professional and industry organizations and associations, attended related meetings, and developed and conducted training for staff. APHIS received over 210,000 comments on the proposed rule.

### Horse Protection

APHIS enforces the Horse Protection Act (HPA) of 1970, by prohibiting horses subjected to a cruel and abusive practice called *soring* from participating in shows, sales, exhibitions or auctions. *Soring* is a technique in which an individual trainer irritates or blisters a horse’s forelegs through the injection or application of chemicals or mechanical irritants. The technique is used by horse owners and trainers to change the gait of their horses to a desired, yet exaggerated, high-stepping one that allows riders to gain a competitive edge and improve their chances to win at shows.

APHIS’ presence at horse shows is positively correlated with improved compliance. Therefore, APHIS has increased its attendance at horse-related events by approximately 20 percent since FY 2008. Furthermore, due to heightened concerns of *soring* and recent enforcements actions, APHIS provided a greater level of oversight of this year’s events. In FY 2012, APHIS personnel attended 81 horse-related events nationally, more than double the level of attendance since 2009. The Tennessee Walking Horse National Celebration is the breed’s largest annual show. APHIS, along with Designated Qualified Persons<sup>1</sup>, inspected all 1,849 horses in attendance and found 166 violations, which is an approximate nine percent violation rate. This rate is slightly lower than the 9.5 percent violation rate from the 2011 Celebration, during which 2,143 horses were inspected and 203 violations were found. In order to promote efficiency of the Horse Protection Program, APHIS incorporated the employment of intermittent personnel in FY 2012, that has successfully allowed for attendance at more industry training, shows, exhibitions and outreach events, and the use of modern technology to detect *soring*.

APHIS uses a technique called gas chromatography/mass spectrometry to provide laboratory confirmation of suspected foreign substances applied to the legs. In FY 2012, APHIS analyzed approximately 500 samples in which 300 were positive. This is a substantial improvement from FY 2011, where 200 samples were analyzed all positive. In FY 2013, APHIS will expand testing to include drug testing via blood collection. This additional testing will allow APHIS to detect if *soring* techniques are being done internally to cause pain or act as a masking agent. APHIS also plans to implement iris scanning technology in order to identify horses that were previously found to have been *sored*.

In June 2012, the final rule was published in the *Federal Register* to revise the current HPA regulations, adding a mandated penalty protocol for all APHIS-certified Horse Industry Organizations (HIO’s) to consistently enforce 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 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

---

<sup>1</sup> A DQP is a person who may be appointed and delegated authority by the management of a horse show or sale to detect horses that are *sored*, and to otherwise inspect horses for the purpose of enforcing the HPA. A DQP must be licensed by a Horse Industry Organization that is certified by the Department.

to violate the HPA. Prior to the publication of the final rule, APHIS conducted outreach with stakeholders to ensure adequate knowledge of changes. Finally, APHIS conducted nine listening sessions across the United States to obtain public feedback regarding the enforcement of the HPA.

In 2012, APHIS maximized its efforts in penalizing individuals for violating the HPA. APHIS' Investigative and Enforcement Services issued 278 official warnings and obtained administrative orders assessing \$156,600 in civil penalties. Among other notable actions, APHIS reached a consent decision and order in which a repeat violator of the HPA agreed to a permanent disqualification from participating in any horse shows, exhibitions, sales, or auctions, and the assessment of \$150,000 in civil penalties which will be held in abeyance if he adheres to the provisions of the consent decision and does not violate the HPA in the future. In collaboration with the Office of Inspector General (OIG), APHIS issued 11 administrative complaints and USDA's administrative law judges and judicial officer issued 15 decisions and orders.

Fifteen new individuals were added to the HPA Federal Disqualification and Civil Penalty List making the current total of 25 individuals successfully prosecuted for violating the HPA. In collaboration with the OIG, in 2012, there were three criminal indictments that lead to confinement and probationary time for multiple individuals for violating the HPA.

## 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 2012 accomplishments listed below support these objectives.

- Availability – APHIS personnel supported internal and external stakeholders by providing optimal levels of service and improving customer service response times.
  - a. APHIS maintained 99.97 percent availability for its key computing systems, meeting the Agency target for infrastructure up-time.
  - b. APHIS maintained targeted response times for service-desk trouble tickets at 20.6 minutes.

- c. APHIS increased the secure patching of workstations by 3 percent to 95 percent exceeding the APHIS target.
- Security – APHIS completed the Certification and Accreditation for the Enterprise Infrastructure. This project renewed the security level accreditation for the core computing resources for all APHIS employees and cooperators.
- Firewall Upgrade – The Enterprise firewalls were upgraded and enhanced. This upgrade to secure access to the network allows for more efficient functionality without losing high levels of security, and retains our levels of security compliance.

## 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 2012, the program conducted eight trainings for the Agency including self-defense seminars, safety briefings and refreshers, 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 2012, the program's personnel investigated 156 workplace violence allegations, 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 Horse Protection Act (HPA) at horse shows. In FY 2012, the program provided security for APHIS employees enforcing regulation at horse shows in 13 States and five inspections related to the AWA. The program has ensured the safety of APHIS employees and successfully enforced the HPA.

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 2012, APHIS had 296 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

Giant African Land Snail

In FY 2012, APHIS obligated approximately \$1.5 million in contingency funds on Giant African Snail (GAS) eradication efforts in infested residential areas of Miami, Florida. GAS is one of the world’s most damaging types of snails because it can consume at least 500 types of plants including fruit and vegetable crops. GAS can also cause significant structural damage to buildings by eating plaster and stucco to find the calcium required to grow its large shell. The snail could cause the most damage to ornamental plants and nursery stock. According to the National Agricultural Statistics Service’s latest Census of Agriculture, Miami-Dade County ranks second among all counties in the United States for nursery sales, which were worth \$493 million in 2007. Of the more than 1,500 nurseries in Miami-Dade County, approximately 250 are in the immediate area affected by GAS; it has not, however, been found in agricultural production areas.

In FY 2012, APHIS, in partnership with the Florida Department of Agriculture and Consumer Services (FDACS), carried out extensive survey and eradication activities through removal and treatment of snails from infested areas. In addition, APHIS and FDACS created an extensive outreach campaign in the Miami area which included a helpline, publications, industry meetings, media interviews, newspaper advertisements, billboards, and social media networking sites, all of which alerted the public of a toll-free telephone number to report possible snail sightings. Due to the positive response from the social media networking sites such as Facebook and Twitter, increased detections have been reported. To date, 17 of the 20 known infestations were reported by the public.

APHIS continues to coordinate with the Centers for Disease Control and Prevention (CDC) regarding GAS and its potential public health risk. In October 2012, the CDC confirmed that four GAS collected in a regulated area of Miami were positive for rat lungworm (*Angiostrongylus cantonensis*), which can cause meningitis. This is a parasite of rats but is passed to snails when a snail eats infected rat droppings. However, meningitis in humans caused by GAS is rare and, to date, no suspect cases of meningitis have been reported in Miami-Dade County. APHIS has also conducted outreach with public health departments within Miami-Dade County and surrounding counties.

SUMMARY OF FY 2012 CONTINGENCY FUND RELEASES

Emergency/Activity	Releases from Contingency Fund in FY 2012	Obligations Against Contingency Fund in FY 2012
Giant African Land Snail	\$1,500,000	\$1,500,000
Total FY 2012 Contingency Transfers	\$1,500,000	\$1,500,000

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

1. Asian Longhorned Beetle

In FY 2012, APHIS spent approximately \$10.4 million in CCC funds on Asian longhorned beetle (ALB) eradication activities in Clermont County, Ohio, in response to an infestation found in June 2011. 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. The infestation dates back to at least 2005, before the adoption of the international regulations for solid wood packing materials in North America in 2006 (International Plant Protection Convention, International Standards for Phytosanitary Measures 15). These regulations mitigate the risk of further ALB introductions into the United States. To address the infestation in FY 2012, APHIS transferred funds through a cooperative agreement to the Ohio Department of Agriculture (ODA) to hire personnel to conduct delimiting survey activities. APHIS projects to complete delimitation by the end of 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. In addition, the program entered into a tree removal contract to remove trees in infested areas and a chemical treatment contract to treat exposed trees. As of October 2012, approximately 45 square miles contain infested trees and APHIS is regulating approximately 61 square miles. In addition, approximately 204,000 trees have been inspected with, 8,918 found infested and 8,781 infested trees removed. In FY 2013, the ODA will continue delimitation activities. In addition, the program will continue removing infested trees and replanting trees, as well as applying preventative treatments to healthy trees in Monroe Township and Stonelick Township.

## 2. Bovine Tuberculosis

During 2012, APHIS spent approximately \$1.6 million in CCC funding to support the bovine tuberculosis (TB) program. This funding supported indemnity payments for animals depopulated, and cooperative agreements with the States of California and Michigan.

### California

In September 2011, a TB-affected dairy herd was confirmed in California after an infected animal was identified through slaughter surveillance. As part of the epidemiological investigation, APHIS, in cooperation with the California Department of Agriculture, conducted 196 tracebacks to 2,246 cattle in two States (California and Arizona). One additional neighboring herd was identified as TB-affected during this investigation process. Due to the high prevalence rate of TB in the initial herd, whole herd depopulation was determined to be the most effective and efficient means for disease management. In June 2012 APHIS depopulated 3,320 cattle and provided the owner with Federal indemnity. The second herd is being managed under a test and removal plan. California remains classified as Modified Accredited Advanced.

### Michigan

In 2012, APHIS used CCC funding for cooperative agreements with the Michigan Department of Agriculture to conduct TB surveillance activities (including herd testing) and epidemiological investigations in the northeastern corner of the lower peninsula of Michigan. Two newly-detected TB-affected herds, one beef and one dairy herd were identified through ongoing surveillance testing in FY 2012. Both herds are currently under test-and-remove herd management plans. APHIS continues test-and-removal for a dairy herd discovered in 2004 (the herd was scheduled for quarantine release in 2009 but an infected animal was detected during the final herd test so the quarantine remains in effect) and two affected captive cervid herds detected in FY 2009, that remain under quarantine.

## 3. European Grapevine Moth

The European Grapevine Moth (EGVM) is a significant pest of grapes and other specialty crops including stone fruit. APHIS has worked collaboratively with California's Department of Food and Agriculture, counties, extension service, and the industry to successfully work towards the eradication of EGVM. The program consists of intensive survey efforts to identify affected areas, regulatory compliance activities to prevent the artificial spread of the pest, and an outreach program to coordinate with industry groups, affected growers, and residents. In FY 2012, APHIS spent approximately \$10.4 million in CCC funds on EGVM eradication activities in Fresno, Mendocino, Merced, Napa, Nevada, San Joaquin, Santa Clara, Solano, and Sonoma counties in California. As a result of successful eradication in FY 2012, APHIS released Fresno, Mendocino, Merced, San Joaquin, and Sonoma counties from EGVM regulation.

#### 4. Farm Bill

##### Plant Pest and Disease Management and Disaster Prevention (Section 10201) – FY 2012

Through this program, 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. The Food, Conservation, and Energy Act of 2008 specified that these funds be made available incrementally, starting with \$12 million in 2009, \$45 million 2010, and \$50 million in 2011 and thereafter.

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 2012.

APHIS funded 343 projects in the six goal areas through Section 10201 in FY 2012. Of the total \$50 million in funding available, the Agency provided \$25.8 million to 50 State departments of agriculture and 2 territories for 172 projects, \$11.7 million to academia for 100 projects, \$0.6 million to Tribes for 8 projects, and \$2.1 million for non-profits and private entities for 13 projects. These projects represent 85 percent of all projects funded to date and 80 percent of the FY 2012 funding. The remaining 20 percent of 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 surveys for pests of national significance such as Asian defoliating moths, plum pox virus, *Phytophthora ramorum*, grape pests (including the European Grapevine Moth), tomato pests (including *Tuta absoluta*), walnut twig beetle, and thousand cankers disease, and honey bee pests, including sub-sampling to help determine the cause of colony collapse disorder along with pesticide residue analyses. The program began and continued cooperative projects to analyze pathways 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 \$16.4 million to 155 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 survey 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 to enhance detection efforts at parcel facilities (such as Fedex). Between July 2011 and June 2012, the dogs alerted inspectors to the presence of unmarked agricultural goods in 2,925 packages from places like Hawaii and Florida containing 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 124 actionable pests, including scale insects, mealybugs, economically significant nematodes and others. Other projects in 2012 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 \$6.9 million for 12 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 2012, 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 \$6.2 million for 59 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. 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. The program provided \$2.5 million for 21 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. APHIS also supported an initiative to detect exotic forest pests as part of the Northeast Forest Pest Outreach and Survey Program. Since its inception in 2009, the number of States included in the initiative expanded from 9 to 18. The program supports a variety of activities to educate the public and industry partners, including declaring specific pest or general forest pest awareness months and obtaining Governor's Proclamations with activities promoted in the State to educate the public on what to look for and how to report suspicious sightings of the pests, delivering Train the Trainer workshops to the public and industry on specific signs/symptoms of pest infestation; enlisting volunteers to work with government officials conducting visual surveys for forest pests; and developing and implementing public service announcements and promoting the "Don't Move Firewood" message to citizens and businesses within the States. The National Invasive Species Council recognized this initiative with the "2012 Outstanding Invasive Species Outreach and Education Award" in February 2012. Overall, APHIS provided \$3.9 million for 43 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 and plum pox virus eradication in New York. The Agency also supported projects to develop strategies for mitigation and/or control of high risk pests. APHIS provided \$13.6 million for 53 projects in this goal area.

#### National Clean Plant Network (Section 10202)

The National Clean Plant Network (NCPN) is a program that 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 Food, Conservation, and Energy Act of 2008 authorized funding of \$5 million for the network each year for four years (2009-2012).

In FY 2012, APHIS used a cooperative application process to provide NCPN funds to qualified clean plant centers. This process allowed stakeholders to offer input into the program through pre-proposals, which are designed to help clean plant centers prioritize and harmonize their resourcing requests. As a result, APHIS entered into 19 cooperative agreements with clean plant centers. These include the University of Arkansas, Auburn University (Alabama), University of Arizona, University of California at Davis (both diagnostics and education/outreach programs), University of California at Riverside, Florida A&M University, Florida Department of Agriculture and Consumer Services (both diagnostics and budwood programs), University of Hawaii, Louisiana State University, Missouri State University, Cornell University (New York), North Carolina State University, USDA's Agricultural Research Service at Oregon State University, Oregon State University, Clemson University (South Carolina), Texas A&M University, and Washington State University. The clean plant centers that receive NCPN funding are using

the resources to: 1) diagnose harmful pathogens that cause disease in covered specialty crops; 2) apply therapeutic measures to eliminate these pests; 3) establish plantings of clean plant ‘starter’ material and make this material available to nurseries and growers; and 4) engage with nurseries and growers in education/outreach programs to communicate the economic value to industry of using clean nursery stock. These activities will result in clean plant centers making additional sources of healthy planting stock for fruit trees, grapes, citrus, berries, and hops available to industry while ensuring that nurseries and growers have access to clean plant material necessary to sustain their businesses, maintain productivity, and improve the quality of their products.

Over the past 4 years, the clean plant centers have tested more than 1,500 valuable plant accessions (the ‘starter’ material used to establish specialty crops) for pathogen infections, conducted more than 30,000 field diagnostic tests, and treated and cleaned nearly 1,000 plant accessions of destructive pathogens. NCPN centers now maintain nearly 4,500 accessions of clean plants in the national network of foundation plantings, providing approximately 200,000 clean buds and cuttings for propagation by nurseries to replenish farmers’ groves, vineyards, fields, and other plantings with clean plant materials.

In FY 2012, the program expanded the network to establish education/outreach components to ensure that all farmers, including small and mid-sized entities, are aware of the benefits of using clean planting stock and how best to obtain this material. NCPN has established communication plans and materials for use with nurseries and growers.

#### 5. Light Brown Apple Moth

Light Brown Apple Moth (LBAM) is an invasive pest that reproduces rapidly and can damage more than 2,000 types of plants and trees throughout the United States, including fruits, vegetables, nursery stock, and cut flowers. In FY 2012, APHIS spent approximately \$1.9 million in CCC funds on LBAM suppression and management activities in California. This cooperative regulatory program has lessened the risk of the moth’s spread into other States and to foreign trading partners; thereby maintaining both domestic and international trade for California agricultural producers.

In FY 2012, APHIS exempted 16 new agricultural products from the program interstate requirements. The exemption of these plant products lessened the burden on producers who are located within the LBAM regulated areas.

#### SUMMARY OF KEY FY 2012 CCC FUNDED EMERGENCY ACTIVITIES

	Emergency/Activity	Total Available in FY 2012 a/	Total Obligations in FY 2012
1	Asian Longhorned Beetle	14,991,438	\$10,385,391
2	Bovine Tuberculosis	4,080,895	1,606,496
3	European Grapevine Moth	10,857,160	10,364,431
4	Farm Bill	55,628,366	52,114,504
5	Light Brown Apple Moth	1,921,836	1,921,836
	Total	\$87,479,695	\$76,392,658

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:

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

2013 Estimate .....	\$3,220,000
Budget Estimate, 2014 .....	3,175,000
Change in Appropriation.....	<u>-45,000</u>

Summary of Increases and Decreases  
(Dollars in thousands)

	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2014</u>
	<u>Actual</u>	<u>Change</u>	<u>Change</u>	<u>Change</u>	<u>Estimated</u>
Discretionary Appropriations:					
Basic buildings and facilities repair, alterations, and preventive maintenance.....	\$3,529	-\$329	+\$20	-\$45	\$3,175
Total Appropriation or Change.....	<u>3,529</u>	<u>-329</u>	<u>+20</u>	<u>-45</u>	<u>3,175</u>

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

Program	<u>2011 Actual</u>		<u>2012 Actual</u>		<u>2013 Estimate</u>		<u>2014 Estimate</u>	
	Amount	SY	Amount	SY	Amount	SY	Amount	SY
Discretionary Appropriations:								
Buildings and Facilities.....	\$3,536	-	\$3,200	-	\$3,220	-	\$3,175	-
Rescission P.L. 112-10.....	-7	-	-	-	-	-	-	-
Total Appropriations.....	<u>3,529</u>	<u>-</u>	<u>3,200</u>	<u>-</u>	<u>3,220</u>	<u>-</u>	<u>3,175</u>	<u>-</u>
Balance available, SOY .....	6,750	-	1,469	-	1,046	-	966	-
Rescission of Prior Year Unobligated....	-629	-	-	-	-	-	-	-
Recoveries.....	36	-	10	-	-	-	-	-
Total Available.....	<u>9,687</u>	<u>-</u>	<u>4,679</u>	<u>-</u>	<u>4,266</u>	<u>-</u>	<u>4,141</u>	<u>-</u>
Balance available, EOY .....	<u>-1,469</u>	<u>-</u>	<u>-1,046</u>	<u>-</u>	<u>-966</u>	<u>-</u>	<u>-741</u>	<u>-</u>
Total Obligations.....	<u>8,218</u>	<u>-</u>	<u>3,633</u>	<u>-</u>	<u>3,300</u>	<u>-</u>	<u>3,400</u>	<u>-</u>

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

Program	<u>2011 Actual</u>		<u>2012 Actual</u>		<u>2013 Estimate</u>		<u>2014 Estimate</u>	
	Amount	SY	Amount	SY	Amount	SY	Amount	SY
Discretionary Obligations:								
Buildings and Facilities.....	\$8,218	-	\$3,633	-	\$3,300	-	\$3,400	-
Recoveries.....	-36	-	-10	-	-	-	-	-
Balance available, EOY .....	<u>1,469</u>	<u>-</u>	<u>1,046</u>	<u>-</u>	<u>966</u>	<u>-</u>	<u>741</u>	<u>-</u>
Total Available.....	<u>9,650</u>	<u>-</u>	<u>4,669</u>	<u>-</u>	<u>4,266</u>	<u>-</u>	<u>4,141</u>	<u>-</u>
Balance available, SOY .....	-6,750	-	-1,469	-	-1,046	-	-966	-
Rescission P.L. 112-10.....	7	-	-	-	-	-	-	-
Rescission of Prior Year Unobligated....	629	-	-	-	-	-	-	-
Total Appropriations.....	<u>3,536</u>	<u>-</u>	<u>3,200</u>	<u>-</u>	<u>3,220</u>	<u>-</u>	<u>3,175</u>	<u>-</u>

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Justification of Increases and Decreases  
Buildings and Facilities

A decrease of \$45,000 for the Buildings and Facilities program (\$3,220,000 in 2013).

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 goal of the program 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 potentially jeopardize human health and safety. 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 program has used available funds more efficiently in recent years through more 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.

Approximately 99 percent of the program funding supports indefinite delivery indefinite quantity (IDIQ) contracts and construction contracts. IDIQ 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 operating costs. FY 2014 priorities will include addressing health and safety needs at APHIS' National Wildlife Research Center field station in Gainesville, Florida, which include updating exhaust systems and fire alarm systems, removing hazardous materials such as asbestos containing materials, and implementing improvements to bring the facility into compliance with Americans with Disabilities Act requirements. The program will also conduct facility condition assessments at 10 APHIS facilities.

Decrease for minor changes (-\$25,000)

A \$25,000 decrease is requested for this line item related to minor programmatic changes.

Reduction in Agency-level operating expenses (-\$20,000)

A reduction of \$20,000 is requested for this line item related to Agency-level cost savings measures and operating efficiencies.

## ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Buildings and FacilitiesGeographic Breakdown of Obligations and Staff Years (SY)

(Dollars in thousands)

State/Territory	FY 2011 Actuals		FY 2012 Actuals		FY 2013 Estimate		FY 2014 Estimate	
	Amount	SY	Amount	SY	Amount	SY	Amount	SY
<u>United States:</u>								
Arizona.....	\$30	-	\$39	-	-	-	-	-
California.....	50	-	-	-	-	-	-	-
Colorado.....	572	-	-	-	-	-	-	-
Florida.....	175	-	25	-	\$3,200	-	\$2,980	-
Hawaii.....	200	-	47	-	10	-	-	-
Idaho.....	247	-	-	-	-	-	-	-
Iowa.....	66	-	-	-	-	-	-	-
Maryland.....	30	-	-	-	-	-	110	-
Massachusetts.....	5,053	-	46	-	-	-	-	-
Mississippi.....	60	-	-	-	-	-	20	-
Montana.....	10	-	-	-	-	-	-	-
Nevada.....	-	-	100	-	-	-	-	-
New York.....	527	-	3,095	-	-	-	-	-
North Carolina.....	-	-	58	-	-	-	-	-
Texas.....	618	-	140	-	50	-	12	-
Utah.....	40	-	-	-	-	-	-	-
Wyoming.....	-	-	18	-	40	-	-	-
Puerto Rico.....	-	-	-	-	-	-	28	-
Mexico.....	540	-	16	-	-	-	20	-
<u>Central America:</u>								
Panama.....	-	-	12	-	-	-	-	-
Guatemala.....	-	-	-	-	-	-	230	-
<u>Asia/Pacific:</u>								
Korea.....	-	-	37	-	-	-	-	-
<b>Total direct obligations</b>	<b>\$8,218</b>	<b>-</b>	<b>\$3,633</b>	<b>-</b>	<b>\$3,300</b>	<b>-</b>	<b>\$3,400</b>	<b>-</b>

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Buildings and Facilities

Classification by Objects  
(Dollars in thousands)

	2011	2012	2013	2014
	<u>Actual</u>	<u>Actual</u>	<u>Estimate</u>	<u>Estimate</u>
Other Objects:				
25 Other Services.....	\$8,213	\$3,533	\$3,300	\$3,400
26 Supplies and materials.....	2	-	-	-
32 Land & structure.....	-	100	-	-
43 Interest and Dividends.....	2	-	-	-
Total, other objects.....	<u>8,218</u>	<u>3,633</u>	<u>3,300</u>	<u>3,400</u>
Total direct obligations.....	<u>\$8,218</u>	<u>\$3,633</u>	<u>\$3,300</u>	<u>\$3,400</u>

## 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 \$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 the Agency's mission.

This program works to increase efficiency through more 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 the 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. 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 2012.

#### 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 2012, there are 57 active projects. In FY 2012, APHIS awarded 20 design/construction projects at a cost of approximately \$4.2 million and completed 34 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 2012, the FCI for the 44 facilities assessed was .21; that is, the cost to correct currently identified and anticipated deficiencies is 21 percent of the estimated replacement value for the 44 facilities. Of these 44 facilities, 32 scored above a .10 and 12 scored below a .10. The Agency strives to maintain an FCI below .10.

### New York Animal Import Center– Modernization, Newburg, New York

In FY 2012, APHIS continued making progress on the New York Animal Import Center modernization project. In FYs 2010 and 2011, the Agency completed the first two phases of the project, and improved the facility's FCI from .25 to .09 (a 64 percent improvement). APHIS awarded the Design-Build contract for the final Phase III in September 2012 for slightly more than \$5 million. Since FY 2007, APHIS has invested approximately \$12 million on the project from a combination of B&F and Veterinary Services user fee funding. Since the Agency awarded the Phase III contract, the contractor has been working on the design and construction of a new administration building.

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, natural, and other 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. The Agency manages and resolves sanitary (animal) and phytosanitary (plant) trade barriers. 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 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 addresses certain issues relating to the humane treatment and care of animals. Finally, APHIS ensures that biotechnology-derived agricultural products are safe for release in the environment.

APHIS has four strategic goals and eight strategic objectives that contribute to all of the Secretary’s priority goals.

**USDA Strategic Goal: Assist rural communities to create prosperity so they are self-sustaining, repopulating, and economically thriving**

Agency Strategic Goal	Agency Objectives	Programs that Contribute	Key Outcome
Support rural communities and the public, and promote and enforce animal welfare	Implement agricultural pest and disease management programs, including those in affected rural areas  Protect and promote animal welfare	Animal Welfare Programs, Wildlife Services Programs	Provide assistance and support to rural communities by minimizing production losses, maintaining market viability, protecting the public, and ensuring the humane care and treatment of animals

**Key Outcome:** Provide assistance and support to rural communities by minimizing production losses, maintaining market viability, protecting the public, and ensuring the humane care and treatment of animals.

**Key Performance Measures and Targets:**

APHIS strives to increase the viability of rural communities by providing local services, reducing damage to agricultural resources caused by wildlife, and protecting and promoting the welfare of animals covered under the Animal Welfare Act and Horse Protection Act as many of the regulated entities are located in rural areas. APHIS measures its progress in supporting rural communities through many means including progress made in managing rabies as a threat, and the percentage of regulated entities in compliance with the laws and regulations in the humane care and treatment of animals.

APHIS is engaged with the public every day to carry out activities that prevent, minimize, and/or manage damage that impacts agriculture, property, natural resources, and even threatens public health and safety. Without our assistance, the communities would experience greater impacts caused by the various threats. An example of such activities would be the National Rabies Management Program (NRMP). The NRMP supports the “One Health Initiative,” a worldwide strategy to recognize the linkage between human and animal health. APHIS is the lead Federal agency for conducting oral rabies vaccination (ORV) programs to protect public health, by working to eliminate and prevent the spread of rabies in wildlife. This program is conducted cooperatively with local, State, and Federal governments, universities, and other partners and has achieved efficiencies in recent years. In 2012,

APHIS continued working with the Centers for Disease Control and Prevention to expand the use of a rapid rabies diagnostic field procedure to test more than 52,000 animal samples, resulting in the documentation of 953 new rabies cases and improved wildlife rabies control.

APHIS' Animal Welfare program carries out activities designed to ensure the humane care and treatment of animals. These activities include inspection of certain establishments that handle animals intended for biomedical research, sold as pets at the wholesale level, transported in commerce, or used for exhibition purposes. Program personnel inspect licensed establishments to ensure compliance with the Animal Welfare Act (AWA). The program places emphasis on the inspection of facilities and records management, investigation of complaints, re-inspection of problem facilities, education of regulated entities, and training of inspectors. With proper oversight, we can promote the humane treatment of animals and the community businesses can remain in business.

In 2012, Animal Welfare program management initiated a project to improve the processes associated with conducting inspections and pre-investigation enforcement actions of licensed animal welfare entities. The goal of the project was to identify inefficiencies, determine where improvements could be made, and optimize successful existing processes. In doing so, the Agency reviewed documentation of inspection findings, the collection of evidence, pre-investigation enforcement action options, and interactions between the program staff and the Agency's Investigative and Enforcement Services staff. As a result APHIS is modifying processes to develop the most effective inspection and pre-investigation enforcement process necessary to identify, address, and deter violations of the AWA, while meeting the new challenges of constricting resources and expanding regulatory responsibilities. Ultimately, APHIS outlined changes to reduce the number of non-compliances identified during AWA inspections, reduce the time it takes to resolve inspection findings, and increase the number of alleged violations that are resolved internally.

<b>Performance Measure</b>	<b>2009 Actual</b>	<b>2010 Actual</b>	<b>2011 Actual</b>	<b>2012 Actual</b>	<b>2013 Target</b>	<b>2014 Target</b>
<u>Animal Welfare:</u> Percent of licensees inspected and registrants in substantial compliance of the Animal Welfare Act	99% in substantial compliance	95% in substantial compliance	98% in substantial compliance	95% in substantial compliance	91% in substantial compliance	96% in substantial compliance
<i>Animal Welfare Funding</i>	\$21,522	\$24,479	\$24,435	\$27,087	\$27,253	\$28,203
<u>Wildlife Damage Management- National Rabies Management Program:</u> Number of kilometers from which raccoon rabies has been eliminated	N/A	N/A	N/A	N/A	N/A	3,000 kilometers
<i>Wildlife Damage Management Funding</i>	\$76,047	\$78,937	\$72,058	\$72,500	\$72,944	\$85,428

Selected Past Accomplishments Toward Achievement of the Key Outcome:

- Distributed more than 7 million ORV baits – increased the efficiency and cost effectiveness of the program through prioritized distribution of these baits within the 15 impacted States
- Regulated entities maintained 95-99% substantial compliance with the Animal Welfare Act during 2007-2012 due to enforcement and education efforts

Selected Accomplishments Expected at the FY 2014 Proposed Resource Level:

- Increase the number of kilometers from which raccoon rabies has been eliminated from 0 to 3,000
- Reduce process time of AWA enforcement actions by 23 percent

**USDA 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**

Agency Strategic Goal	Agency Objectives	Programs that Contribute	Key Outcome
Protect forests, rangelands, and private lands	Reduce threats to forests and private working lands	Tree and Wood Pests	Ensure protection of forests and private working lands, as well as natural resources, by reducing threats

**Key Outcome 2:** Ensure protection of forests and private working lands, as well as natural resources, by reducing threats.

Key Performance Measures and Targets:

In cooperation with various Federal and state agencies, industry, and other partners, APHIS conducts plant health programs to prevent, control, or eliminate pests and diseases of concern to American agriculture and natural resources. Detecting and managing these pests and diseases protects and enhances agricultural products and natural resources in rural areas, including forests and private working lands. APHIS measures its progress by the reduction of damage to forests and private working lands from identified threats.

APHIS' Tree and Wood Pests program protects forests, private working lands, and natural resources from devastating pests such as the Asian longhorned beetle (ALB) and the gypsy moth. Numerous native hardwood tree species that are common throughout the United States are vulnerable to these pests. APHIS and cooperators 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. 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.

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 eradicated ALB from Chicago, Illinois; Islip, New York; and Jersey City, New Jersey. Currently, the program is addressing outbreaks in New York, New Jersey, Massachusetts, and Ohio. In Manhattan, New York, and New Jersey, APHIS is conducting final confirmation surveys. In Massachusetts and Ohio, APHIS and cooperators are continuing to delimit the infestations and remove host trees in infested areas. APHIS provides 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 2012, the program worked to examine new detection technologies, 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. Also in 2012, APHIS and cooperators modified survey and control protocols based on technical findings, thus reducing the funding required to eradicate the infestations.

Performance Measure	2009 Actual	2010 Actual	2011 Actual	2012 Actual	2013 Target	2014 Target
<u>Tree and Wood Pests – Asian Longhorned Beetle</u> : Number of trees detected with Asian longhorned beetle in: Massachusetts, Ohio (Ohio starting in FY 2012)	12,000 trees detected in MA	2,250 trees detected in MA	1,171 trees detected in MA	750 trees detected in MA; 4,200 trees detected in OH	400 trees detected in MA; 3,000 trees detected in OH	200 trees detected; in MA; 500 trees detected in OH
<u>Tree and Wood Pests – Asian Longhorned Beetle</u> : Percent of eradication program completed in: New Jersey, New York, Massachusetts, Ohio (Ohio starting in FY 2012)	N/A	79% (NJ) 56% (NY) 4% (MA) eradicated	89% (NJ) 74% (NY) 6% (MA) eradicated	95% (NJ) 63% (NY) 15% (MA) 1% (OH) eradicated	100% (NJ) 74% (NY) 8% (MA) 1% (OH) eradicated	100% (NJ) 78% (NY) 10% (MA) 3% (OH) eradicated
Percent of infestation detected in Ohio	N/A	N/A	N/A	23% detected	50% detected	67 % detected
<i>Tree and Wood Pests Funding*</i>	\$19,918	\$32,521	\$32,456	\$55,638*	\$55,979	\$48,290

\* Prior to 2012, funding for the Asian longhorned beetle program was separately identified within the Emerging Plant Pests line item. In 2012, the Agency changed to a new budget structure where Asian longhorned beetle is included in the Tree and Wood Pests line item and is no longer separately identified. Please also note that performance targets for the Ohio outbreak are based on the emergency funds made available in 2012, in addition to appropriated funding.

Selected Past Accomplishments Toward Achievement of the Key Outcome:

- Eradicated ALB in Chicago, Illinois, and Hudson County, New Jersey, in FY 2008
- Eradicated ALB in Islip, Long Island, in FY 2011
- Increased the percentage of the ALB eradication program completed in New Jersey from 89 percent in FY 2011 to 95 percent in FY 2012
- Through FY 2012, the program has completed 63 percent of the New York program and 15 percent of the Massachusetts program

Selected Accomplishments Expected at the FY 2014 Proposed Resource Level:

- By the end of FY 2013, APHIS expects to declare ALB eradicated from Manhattan and Staten Island in New York City and from Middlesex and Union Counties in New Jersey
- The program expects the infestation in and around Worcester, Massachusetts, to be delimited by FY 2014
- By FY 2014, APHIS aims to declare ALB eradicated from Norfolk and Suffolk Counties in and around Boston, Massachusetts

**USDA Strategic Goal: Help America promote agricultural production and biotechnology exports as America works to increase food security**

Agency Strategic Goal	Agency Objectives	Programs that Contribute	Key Outcome
Expand opportunities to develop and trade safe agricultural products, including biotechnology derived agricultural products	<p>Enhance the regulatory framework that allows for the safe development of genetically engineered organisms</p> <p>Facilitate safe agricultural trade through international standard setting and effective management of sanitary and phytosanitary (SPS) issues</p>	Agriculture Import/Export, Biotechnology Regulatory Services, Safe Trade and International Technical Assistance Programs	Facilitate agricultural trade and the development of biotechnology products through the use of a rigorous regulatory system, thereby providing agricultural producers with additional options for production and assisting them with exporting their products

**Key Outcome 3:** Facilitate agricultural trade and the development of biotechnology products through the use of a rigorous regulatory system, thereby providing agricultural producers with additional options for production and assisting them with exporting their products.

Key Performance Measures and Targets:

Increased safe agricultural trade due to continued trade facilitation and greater acceptance of biotechnology products both domestically and internationally

American agricultural resources and expertise are significant to increasing global security by promoting capacity building activities and technology and science-based solutions in other countries. For many crops, a substantial portion of domestic production is bound for overseas markets. APHIS partners with other Federal agencies, foreign governments, international organizations, states, Tribal governments, and stakeholders to facilitate U.S. agricultural trade and APHIS supports the development of science-based regulatory systems around the world. APHIS measures progress by tracking the value of retained, expanded, and new markets for U.S. agricultural products.

A vital component to greater global acceptance of safe agricultural products, including biotechnology products, is having a regulatory system that ensures the safe use of those products in agricultural systems and the environment. The United States is a world leader in assessing the safety of agricultural biotechnology products. APHIS helps American farmers and ranchers use biotechnology and other emergent technologies to enhance food security around the world and find export markets for their products. APHIS oversees a science-based regulatory system to address the importation, interstate movement, and field release of genetically engineered (GE) organisms that may pose a risk to plant health, and ensures regulatory compliance of the biotechnology community through inspections, education and outreach, investigations and audits. Once a developer can demonstrate that a GE crop does not pose a risk to plant health, they may petition APHIS to seek nonregulated status for their product. These activities help ensure that producers have options to choose from when looking for crop varieties that will fit their needs. 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. Additionally, APHIS works with the Environmental Protection Agency and the Food and Drug Administration to ensure that GE products produced for commercial use pose no significant risk to consumers or the environment. APHIS works with international partners to enhance coordination of regulatory approaches, provides capacity building assistance to developing countries for the regulation of GE crops, and facilitates the review and acceptance of GE products at home and in foreign markets. 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.

APHIS also partners with USDA's Foreign Agricultural Service and other Federal agencies, regional and international organizations, and other stakeholders to facilitate U.S. agricultural trade through the resolution of

technical trade barriers and support 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.

Looking forward, agricultural trade is a bright spot for the U.S. export market. APHIS has taken steps to improve its environmental review processes for petitions for nonregulated status. These improvements will implement innovative ways to significantly decrease the length and variability of the petition review process. Additionally, APHIS is monitoring shifts in global trade trends and is aligning overseas officials to critical areas.

<b>Performance Measure</b>	<b>2009 Actual</b>	<b>2010 Actual</b>	<b>2011 Actual</b>	<b>2012 Actual</b>	<b>2013 Target</b>	<b>2014 Target</b>
<u>Biotechnology Regulatory Services:</u> Cumulative number of determinations of nonregulated status in the <i>Federal Register</i> for genetically engineered organisms found safe by USDA for use in the environment	78*	81	87	93	99	108
<i>Biotechnology Regulatory Services Funding (in thousands)</i>	\$12,877	\$13,050	\$13,037	\$18,135	\$18,246	\$18,215
Value of expanded and retained markets, new market access, and trade facilitated (in billions)	\$0.855 billion	\$2.4 billion	\$1.68 billion	\$2.0 billion	\$1.8 billion	\$1.8 billion
<i>Overseas Technical and Trade Operations Funding (in thousands)</i>	\$19,725	\$20,156	\$20,136	\$20,104	\$20,227	\$19,785

\* USDA adjusted figures for FYs 2008 and 2009 after discovering that a previous deregulation was accounted for in the wrong fiscal year.

Selected Past Accomplishments Toward Achievement of the Key Outcome::

- Issued six determinations for nonregulated status, bringing the cumulative total to 93 determinations
- Improved the review process for petitions for nonregulated status
- Negotiated 150 SPS trade-related issues involving U.S. agricultural exports worth \$2 billion

Selected Accomplishments Expected at the FY 2014 Proposed Resource Level:

- Increase the number of biotechnology plant lines reviewed and found safe for use in the environment
- Continued support of the President's National Export Initiative to double exports by the end of 2014

**USDA Strategic Goal 4: Ensure that all of America’s children have access to safe, nutritious, and balanced meals**

Agency Strategic Goal	Agency Objectives	Programs that Contribute	Key Outcome
Minimize and prevent damage to the U.S. food supply caused by plant and animal pests and diseases	<p>Monitor the health status of U.S. agricultural resources</p> <p>Develop and implement programs to address plant and animal pests and diseases of concern</p> <p>Provide diagnostics and technical support to enhance pest and disease programs, including emergency response capabilities for these pests and diseases</p>	<p>Animal Health Programs, Plant Health Programs, Emergency Management Programs, Animal and Plant Health Regulatory Services, Agency Management Programs</p>	<p>Provide a secure agriculture production system and healthy food supply to consumers by defending against plant and animal pests and diseases</p>

**Key Outcome 4:** Provide a secure agriculture production system and healthy food supply to consumers by defending against plant and animal pests and diseases.

Key Performance Measures and Targets:

APHIS programs minimize damage to agriculture and help to ensure that all Americans have access to safe and nutritious food. These programs focus on safe agricultural products, both plant and animal. APHIS provides monitoring and surveillance, control, and eradication programs for many pests and diseases that can negatively affect our crops and herds, and potentially enter food products. The Agency also manages programs to protect our herds, as well as for programs that protect food-producing plants from pests and diseases. By preventing the entry and establishment of pests and diseases, the Agency helps keep fresh food accessible, minimizes production losses, and creates consumer confidence in agricultural products. A key component of the safeguarding system is the early detection and rapid response to pests and diseases should they reach the United States, which prevents their spread.

APHIS uses surveillance data to track the prevalence of pests and diseases in U.S. agriculture. Recently, APHIS has worked on several statistical and epidemiological methods to increase the efficiency of animal health surveillance without sacrificing confidence of industry and trading partners in our surveillance system. These efficiency methods include: using statistics to determine surveillance levels needed to achieve the objectives of disease detection for each animal species and given disease; using targeted surveillance focusing on animals with a higher probability of disease; leveraging historical data; combining surveillance streams; integrating disease testing where one sample is tested for multiple diseases; and applying benefit-cost analysis to measure the value of the information received from the dollars spent. By applying these methods, APHIS has significantly reduced sample collection needed.

In 2012, APHIS continued working with States to transition to the new national brucellosis slaughter surveillance plan designed to increase the efficiency of surveillance. Under the new strategy, APHIS tested approximately 3 million slaughter surveillance samples in 2012, providing a 95 percent confidence that brucellosis would be detected in as few as one infected animal per million animals. Program efficiencies realized include: 1) focusing surveillance sample collection at 15 slaughter surveillance establishments in 13 States, providing the highest probability of detecting brucellosis and maintaining geographical representation for our national cattle herd and, 2) consolidating laboratory testing of surveillance samples to nine laboratories, minimizing sample shipping and testing costs and maximizing laboratory capacity.

In addition to increasing surveillance efficiency in brucellosis, APHIS conducted comprehensive surveillance for pseudorabies virus, swine brucellosis, classical swine fever, and swine influenza virus within the Swine Health

program. The comprehensive surveillance system allows the Agency to conduct surveillance for multiple diseases while using multiple high risk sample streams to target sampling. This approach allowed APHIS to maintain the same level of surveillance, target those samples with highest risk, and reduce surveillance costs. The Swine Health program collected surveillance data through diagnostic laboratory samples, samples collected at slaughter, on-farm samples, in markets and samples of feral swine. There were no significant outbreaks of animal diseases in 2012.

APHIS also conducts plant health programs to prevent and control pest and disease outbreaks, such as the European grapevine moth (EGVM). EGVM, a significant pest of grapes, was initially discovered in major grape production areas of northern California in 2010. The pest damages grape production when larvae feed on the flowers and berries; subsequent fungal infection causes further damage. High population densities of EGVM can destroy entire vineyards, resulting in a total loss of grapes at harvest. Other potential impacts include reduced availability of fresh and processed commodities, a decreased number of export markets for the grape and stone fruit industry, and increased costs to both the producers and consumers.

Many of the detrimental impacts have been avoided due to the rapid response to the initial discovery of the pest. APHIS, State, County, and University cooperators continue to conduct survey and regulatory activities to prevent the artificial spread of the pest, as well as education and outreach efforts to educate industry groups, affected growers, and residents. Affected growers are responsible for conducting treatments to suppress EGVM populations in their vineyards, orchards, and fields while APHIS and its cooperators conduct treatments in residential and riparian areas. Although new EGVM detections occurred in Napa County in 2012, detections overall have been reduced from 100,665 moths in 2010 to 77 in 2012. The Agency will continue survey, regulatory, and grower-led suppression efforts in Napa County and hopes to eliminate the population entirely within several years.

<b>Performance Measure</b>	<b>2009 Actual</b>	<b>2010 Actual</b>	<b>2011 Actual</b>	<b>2012 Actual</b>	<b>2013 Target</b>	<b>2014 Target</b>
Value of damage prevented and mitigated annually as a result of selected plant and animal health monitoring and surveillance efforts	\$1.05 billion	\$1.07 billion	\$1.11 billion	\$1.19 billion	\$1.26 billion	\$1.32 billion
<u>Animal Health:</u> Number of foreign animal diseases that spread beyond the original area of introduction and cause severe economic and environmental damage	0 foreign animal diseases					
<i>Animal Health Funding*</i>	\$129,180	\$121,667	\$118,035	\$290,579	\$292,358	\$281,134
<u>Specialty Crop Pests-European Grapevine Moth:</u> Number of acres regulated	N/A	116,480 acres regulated	1,322,000 acres regulated	661,000 acres regulated	85,000 acres regulated	12,500 acres regulated
<i>European Grapevine Moth Funding (includes emergency funding and appropriated funding)</i>	N/A	\$8,413	\$18,806	\$10,500	\$2,500	\$3,672

\* Prior to 2012, funding for surveillance activities was separately identified within the Animal Health Monitoring and Surveillance line item. In 2012, the Agency changed to a new budget structure where these funds are included in the various Animal Health commodity line items and are no longer separately identified.

Selected Past Accomplishments Toward Achievement of the Key Outcome:

- Reduced the number of slaughter surveillance samples for brucellosis by 55 percent
- Program efforts reduced detections of European grapevine moths by more than 99 percent between 2010 and 2011
- Released 9 of the 10 counties that were quarantined for European grapevine moth

Selected Accomplishments Expected at the FY 2014 Proposed Resource Level:

- Continue the effective surveillance for foreign animal diseases
- Continue regulatory and surveillance activities to eliminate the European grapevine moth from Napa County, the remaining affected area

ANIMAL AND PLANT HEALTH INSPECTION SERVICE

Strategic Goal Funding Matrix  
(On basis of appropriation)  
(Dollars in thousands)

Program / Program Items	2011 Actual	2012 Actual	2013 Estimate	Increase or Decrease	2014 Estimate
<b>Department Strategic Goal: Assist rural communities to create prosperity so they are self-sustaining, repopulating, and economically thriving.</b>					
Animal Welfare.....	\$24,435	27,087	\$27,253	\$950	\$28,203
Staff Years.....	219	224	218	-	218
Horse Protection.....	499	696	700	+193	893
Staff Years.....	5	5	5	+3	8
Wildlife Damage Management.....	72,058	72,500	72,944	+12,484	85,428
Staff Years.....	534	534	531	+84	615
Wildlife Services Methods Development.....	17,078	18,000	18,110	-25	18,085
Staff Years.....	164	164	163	-1	162
Total Cost, Strategic Goal.....	<u>114,070</u>	<u>118,283</u>	<u>119,007</u>	<u>+13,602</u>	<u>132,609</u>
Staff Years, Strategic Goal.....	<u>922</u>	<u>927</u>	<u>917</u>	<u>+86</u>	<u>1,003</u>
<b>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.</b>					
Tree & Wood Pests.....	74,994	55,638	55,979	-7,689	48,290
Staff Years.....	376	321	319	-7	312
Total Cost, Strategic Goal.....	<u>74,994</u>	<u>55,638</u>	<u>55,979</u>	<u>-7,689</u>	<u>48,290</u>
Staff Years, Strategic Goal.....	<u>376</u>	<u>321</u>	<u>319</u>	<u>-7</u>	<u>312</u>
<b>Department Strategic Goal: Help America promote agricultural production and biotechnology exports as America works to increase food security.</b>					
Agriculture Import/Export.....	12,579	13,354	13,436	+745	14,181
Staff Years.....	92	92	92	-	92
Biotechnology Regulatory Services.....	13,037	18,135	18,246	-31	18,215
Staff Years.....	81	92	90	-	90
Overseas Technical & Trade Operations.....	20,136	20,104	20,227	-442	19,785
Staff Years.....	73	73	73	+3	76
Total Cost, Strategic Goal.....	<u>45,752</u>	<u>51,593</u>	<u>51,909</u>	<u>+272</u>	<u>52,181</u>
Staff Years, Strategic Goal.....	<u>246</u>	<u>257</u>	<u>255</u>	<u>+3</u>	<u>258</u>
<b>Department Strategic Goal: Ensure that all of America's children have access to safe, nutritious, and balanced meals.</b>					
Agricultural Quarantine Inspection (Appropriated).....	25,948	27,500	27,668	-2,370	25,298
Staff Years.....	364	364	362	-19	343
Animal and Plant Health Regulatory Enforcement.....	15,455	16,275	16,375	-25	16,350
Staff Years.....	142	142	142	-	142
Animal Health Technical Services.....	29,550	32,500	32,699	+5,192	37,891
Staff Years.....	64	64	64	-	64
APHIS Info. Technology Infrastructure.....	4,465	4,335	4,362	-27	4,335
Staff Years.....	-	-	-	-	-
Aquatic Animal Health.....	5,422	2,261	2,275	-3	2,272
Staff Years.....	22	22	22	-	22
Avian Health.....	50,090	52,000	52,318	-2,478	49,840
Staff Years.....	191	196	194	-	194
Cattle Health.....	109,594	99,000	99,606	-7,829	91,777
Staff Years.....	585	570	570	-24	546
Contingency Fund.....	2,054	1,000	1,006	+501	1,507
Staff Years.....	-	15	15	-	15
Cotton Pests.....	20,958	17,848	17,957	-9,013	8,944

Program / Program Items	2011 Actual	2012 Actual	2013 Estimate	Increase or Decrease	2014 Estimate
Staff Years.....	61	61	61	-5	56
Emergency Preparedness & Response.....	19,707	17,000	17,104	-59	17,045
Staff Years.....	92	91	89	+2	91
Equine and Cervid Health <sup>a/</sup> .....	17,881	5,050	5,081	-1,346	3,735
Staff Years.....	38	24	24	-7	17
Field Crop & Rangeland Ecosystems Pests.....	11,296	9,068	9,123	-246	8,877
Staff Years.....	60	60	58	-	58
National Veterinary Stockpile.....	3,561	2,750	2,767	+956	3,723
Staff Years.....	1	1	1	-	1
Pest Detection.....	26,702	27,500	27,668	-94	27,574
Staff Years.....	145	145	145	-	145
Physical/Operational Security.....	5,714	5,365	5,398	-33	5,365
Staff Years.....	-	-	-	-	-
Plant Protection Methods Development.....	21,230	20,600	20,726	-53	20,673
Staff Years.....	140	140	140	-	140
Sheep and Goat Health <sup>a/</sup> .....	18,945	16,950	17,054	-2,795	14,259
Staff Years.....	109	109	109	-6	103
Speciality Crop Pests.....	150,079	153,950	154,891	-7,472	147,419
Staff Years.....	700	700	698	-13	685
Swine Health.....	25,547	23,000	23,141	-2,748	20,393
Staff Years.....	156	127	127	-21	106
Veterinary Biologics.....	16,424	16,457	16,558	-45	16,513
Staff Years.....	108	108	108	+1	109
Veterinary Diagnostics.....	32,309	31,611	31,804	-96	31,708
Staff Years.....	190	190	190	-	190
Zoonotic Disease Management.....	10,447	9,000	9,055	-32	9,023
Staff Years.....	45	45	45	-	45
Buildings & Facilities.....	3,529	3,200	3,220	-45	3,175
Staff Years.....	-	-	-	-	-
Congressionally Undesignated Funding.....	5,076	-	-	-	-
Staff Years.....	-	-	-	-	-
Total Cost, Strategic Goal.....	631,983	594,220	597,856	-30,160	567,696
Staff Years, Strategic Goal.....	3,213	3,174	3,164	-92	3,072
Subtotal, Appropriated Salaries and Expenses .....	863,270	816,534	821,531	-23,930	797,601
Subtotal, Buildings & Facilities.....	3,529	3,200	3,220	-45	3,175
Total Cost, All Strategic Goals .....	866,799	819,734	824,751	-23,975	800,776
Total Staff Years, All Strategic Goals .....	4,757	4,679	4,655	-10	4,645

a/ In 2013, APHIS requested to separate the current Equine, Cervid, and Small Ruminant Health line item into two line items: Sheep and Goat Health, and Equine and Cervid Health. These two commodity groups have differing industry practices and share few disease concerns. The figures used above in this exhibit in 2011 – 2012 are for comparability purposes only. The appropriations for the Equine, Cervid and Small Ruminant Health line item in 2011 was \$36,826,000 and in 2012 it was \$22,000,000.

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	2011	2012	2013	2014
Animal Welfare.....	\$20,037	\$22,211	\$22,347	\$23,126
Horse Protection.....	409	571	574	732
Wildlife Damage Management.....	59,088	59,450	59,814	70,051
Wildlife Services Methods Development.....	14,004	14,760	14,850	14,830
Program Operational Costs.....	11,407	11,828	11,901	13,261
Indirect Costs.....	9,126	9,463	9,521	10,609
<b>Total Discretionary Costs for Strategic Goal 1.....</b>	<b>114,070</b>	<b>118,283</b>	<b>119,007</b>	<b>132,609</b>
FTEs.....	922	927	917	1,003
Performance Measure: Animal Welfare: Percent of licensees inspected and registrants in substantial compliance of the Animal Welfare Act	98%	95%	91%	96%
<i>Animal Welfare Funding</i>	24,435	27,087	27,253	28,203

**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.....	61,495	45,623	45,903	39,598
Program Operational Costs.....	7,499	5,564	5,598	4,829
Indirect Costs.....	6,000	4,451	4,478	3,863
<b>Total Discretionary Costs for Strategic Goal 2.....</b>	<b>74,994</b>	<b>55,638</b>	<b>55,979</b>	<b>48,290</b>
FTEs.....	376	321	319	312
Performance Measure: Tree and Wood Pests – Asian Longhorned Beetle: Number of trees in Massachusetts detected with Asian longhorned beetle	1,171	750/4,200	400/3,000	200/500
Performance Measure: Tree and Wood Pests – Asian Longhorned Beetle: Percent of eradication program completed in NJ/NY/MA	89% (NJ) 74% (NY) 6% (MA)	95% (NJ) 63% (NY) 15% (MA)	100% (NJ) 74% (NY) 8% (MA) 1% (OH)	100% (NJ) 78% (NY) 10% (MA) 3% (OH)
<i>Tree and Wood Pests – Asian Longhorned Beetle Funding<sup>1</sup></i>	32,456	55,638	55,979	48,290

**Department Strategic Goal: Help America promote agricultural production and biotechnology exports as America works to increase food security.**

Agriculture Import/Export.....	10,315	10,950	11,018	11,628
Biotechnology Regulatory Services.....	10,690	14,871	14,962	14,936
Overseas Technical & Trade Operations.....	16,512	16,485	16,586	16,224
Program Operational Costs.....	4,575	5,159	5,191	5,218
Indirect Costs.....	3,660	4,127	4,153	4,174
<b>Total Discretionary Costs for Strategic Goal 3.....</b>	<b>45,752</b>	<b>51,593</b>	<b>51,909</b>	<b>52,181</b>
FTEs.....	246	257	255	258

Performance Measure:	Biotechnology Regulatory Services: Cumulative number of genetically engineered plant lines reviewed by USDA and found safe for use in the environment	87	93	99	108
	<i>Biotechnology Regulatory Services Funding</i>	13,037	18,135	18,246	18,215

**Department Strategic Goal :**

**Ensure that all of America's children have access to safe, nutritious, and balanced meals.**

Agricultural Quarantine Inspection (Appropriated).....	\$21,277	\$22,550	\$22,688	\$20,744
Animal and Plant Health Regulatory Enforcement.....	12,673	13,346	13,428	13,407
Animal Health Technical Services.....	24,231	26,650	26,813	31,071
APHIS Info. Technology Infrastructure.....	3,661	3,555	3,577	3,555
Aquatic Animal Health.....	4,446	1,854	1,866	1,863
Avian Health.....	41,074	42,640	42,901	40,869
Cattle Health.....	89,867	81,180	81,677	75,257
Contingency Fund.....	1,684	820	825	1,236
Cotton Pests.....	17,186	14,635	14,725	7,334
Emergency Preparedness & Response.....	16,160	13,940	14,025	13,977
Equine and Cervid Health.....	14,662	4,141	4,166	3,063
Field Crop & Rangeland Ecosystems Pests.....	9,263	7,436	7,481	7,279
National Veterinary Stockpile.....	2,920	2,255	2,269	3,053
Pest Detection.....	21,896	22,550	22,688	22,611
Physical/Operational Security.....	4,685	4,399	4,426	4,399
Plant Protection Methods Development.....	17,409	16,892	16,995	16,952
Speciality Crop Pests.....	123,065	126,239	127,011	120,884
Sheep and Goat Health.....	15,535	13,899	13,984	11,692
Swine Health.....	20,949	18,860	18,976	16,722
Veterinary Biologics.....	13,468	13,495	13,578	13,541
Veterinary Diagnostics.....	26,493	25,921	26,079	26,001
Zoonotic Disease Management.....	8,567	7,380	7,425	7,399
Buildings & Facilities.....	3,529	3,200	3,220	3,175
Congressional Unidentified Funding.....	5,076	-	-	-
Program Operational Costs.....	62,338	59,102	59,464	56,452
Indirect Costs.....	49,870	47,282	47,571	45,162
Total Discretionary Costs for Strategic Goal 4.....	631,983	594,220	597,856	567,696
FTEs.....	3,213	3,174	3,164	3,072

Program/Programs Items - Mandatory	FY 2011	FY 2012	FY 2013	FY 2014
Farm Bill: 10202 - National Clean Plant Network.....	5,000	5,000	-	-
Farm Bill: 10201 - Plant Pest & Disease Mgt. & Disaster Prevention.....	50,000	50,000	50,000	50,000
Trust Funds.....	9,418	10,186	9,000	9,000
Program Operational Costs.....	-	-	-	-
Indirect Costs.....	-	-	-	-
Total Mandatory Costs for Strategic Goal 4.....	64,418	65,186	59,000	59,000
FTEs.....	165	165	165	165

Performance Measure:	Animal Health: Number of foreign animal diseases that spread beyond the original area of introduction and cause severe economic and environmental damage	-	-	-	-
	<i>Animal Health Funding</i> <sup>2</sup>	118,035	290,579	292,358	281,134
	Subtotal, Salaries & Expenses Discretionary.....	863,270	816,534	821,531	797,601
	Subtotal, Buildings & Facilities.....	3,529	3,200	3,220	3,175
	Total Discretionary Request.....	866,799	819,734	824,751	800,776
	FTEs.....	4,757	4,679	4,655	4,645

<sup>1</sup> The original structure funding for the Asian longhorned beetle program was separately identified within the Emerging Plant Pests line item. In the new structure, Asian longhorned beetle is included in the Tree and Wood Pests line item, and is no longer separately identified.

<sup>2</sup> In the original structure funding for surveillance activities was separately identified within the Animal Health Monitoring and Surveillance line item. In the new structure, these funds are included in the various Animal Health commodity line items and is no longer separately identified.