2026 USDA EXPLANATORY NOTES - ANIMAL AND PLANT HEALTH INSPECTION SERVICE

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PREFACE

This publication summarizes the fiscal year (FY) 2026 Budget for the U.S. Department of Agriculture (USDA). Throughout this publication any reference to the "Budget" is in regard to the 2026 Budget, unless otherwise noted. All references to years refer to fiscal year, except where specifically noted. The budgetary tables throughout this document show actual amounts for 2023 and 2024, Full-Year Continuing Resolution levels for 2025, and the President's Budget request for 2026. Amounts for 2025 estimated levels include: non-enacted amounts such as Full-Time Equivalent levels, fleet levels, information technology investment levels, recovery levels, transfers in and out, balances available end of year, and obligation levels.

Throughout this publication, the "2018 Farm Bill" is used to refer to the Agriculture Improvement Act of 2018. Most programs funded by the 2018 Farm Bill are funded through 2025, as extended by the American Relief Act, 2025 (P.L. 118-158, Division D). Amounts shown in 2025 and 2026 for most Farm Bill programs reflect those confirmed in the baseline.

Pursuant to the Balanced Budget and Emergency Deficit Control Act of 1985, sequestration is included in the numbers for mandatory programs in 2023, 2024, 2025 and 2026.

In tables throughout this document, amounts equal to zero (0) are displayed as dashes (-). Amounts less than 0.5 and greater than zero are rounded and shown as a zero (0). This display treatment is used to prevent the masking of non-zero amounts that do not round up to one (1).

AGENCY-WIDE

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 safeguard the health, welfare, and value of American agriculture and natural resources.

APHIS, together with its stakeholders, protects the health of animal and plant resources to ensure abundant agricultural products and services for U.S. customers, and to facilitate their movement in the global marketplace to benefit rural communities and all Americans. As part of this mission, APHIS ensures that biotechnology-derived agricultural products do not inadvertently introduce plant pests or diseases and are available to American farmers to enhance production of food and fiber for the world. APHIS guards 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 bioterrorism, invasive species, diseases of wildlife and livestock, and conflicts between humans and wildlife. The Agency helps to resolve sanitary (animal) and phytosanitary (plant) trade barriers, as well as enforces Federal laws pertaining to the humane treatment of certain animals. Finally, APHIS plays a significant role in helping to detect and prevent the spread of zoonotic diseases that threaten to move from animals to humans.

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

Safeguarding and Emergency Preparedness/Response

APHIS monitors animal and plant health domestically. APHIS also monitors disease situations throughout the world and uses this information to set effective agricultural import policies to prevent the introduction of foreign animal and plant pests and diseases. APHIS and the U.S. Department of Homeland Security cooperate to ensure that these policies are enforced at U.S. ports of entry. These policies prevent the entry of many invasive pests and diseases, including those that impact crops, pollinators, woodlands, and livestock. 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. APHIS certifies animal and animal products, plants and plant products, for export to other countries and regulates imports of designated endangered plant species.

Should a pest or disease enter the United States, APHIS works cooperatively with other Federal, State, and industry partners to conduct animal and plant health monitoring programs to rapidly 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 outbreaks to determine the origin of animal and plant pests and diseases and the most appropriate response actions to take including the development of tools and technologies to help manage these pests. APHIS also actively engages State, Tribal, and local governments, and industries to advance their emergency preparedness and response capabilities.

APHIS develops methods to control animals and pests that are detrimental to agriculture, wildlife, and public safety through its Wildlife Services program. The Agency's regulatory structure brings the benefits of genetic research to the marketplace; while ensuring they do not pose a plant pest risk. APHIS also conducts diagnostic laboratory activities that support the Agency's veterinary disease prevention, detection, control, eradication, and response programs.

Safe Trade and International Technical Assistance

Sanitary (animal) and phytosanitary (plant) (SPS) measures implemented by U.S. trading partners 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. 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 animal and plant pests and diseases while meeting obligations under the World Trade Organization's 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, exhibitions, and sale as pets, and monitoring of certain horse shows.

Statutory Authorities

General:	
7 U.S.C. 1633	Talmadge-Aiken Act (cooperation with States)
7 U.S.C. 7759	User Fees (for export certification of plants)
21 U.S.C. 136-136a	User Fees
31 U.S.C. 9701	User Fees (offsetting collections and miscellaneous receipts)
7 U.S.C. 3291(a)	Authority to provide technical assistance and training
7 U.S.C. 5623	Agricultural Trade Act of 1978 (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. 8301-8322	Animal Health Protection Act
7 U.S.C. 7501 note	American Rescue Plan Act (COVID surveillance)
49 U.S.C. 80502	28-Hour Law (feed, water, and rest for animals)
19 U.S.C. 1202	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. 398	Section 101(d) of the Organic Act of l944
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 Foot-and-Mouth 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 and 8411	Title II, Subtitles B and C of the Public Health Security and Bioterrorism Preparedness and Response 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. 1551-1610	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. 7760	Terminal Inspection 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	Title II, Subtitle B of the Public Health Security and Bioterrorism Preparedness and Response Act of 2002
39 U.S.C. 3015	Alien Species Prevention and Enforcement Act of 1992
Wildlife Services:	
7 U.S.C. 8351	Control of predatory and other wild animals Act of 1931

7 U.S.C. 8353	Control of nuisance mammals and birds and those constituting reservoirs of zoonotic disease
7 U.S.C. 8501-8507	Brown Tree Snake Control and Eradication Act of 2004
Animal Welfare:	
7 U.S.C. 2131-2159	Animal Welfare Act
15 U.S.C. 1821-1831	Horse Protection Act

Staffing and Offices

There were 6,017 permanent full-time employees as of September 30, 2024. Of the total, 833 full-time employees were located at the Riverdale, Maryland and Washington D.C headquarters and through Hubs located in Fort Collins, CO, Minneapolis, MN, and Raleigh, NC. APHIS conducts much of its work in cooperation with State and local agencies, private groups, and foreign governments. APHIS performs work in field offices located in all 50 States, Guam, Puerto Rico, Virgin Islands, Mexico, Central America, South America, the Caribbean, Western Europe, Asia, and Africa.

OIG AND GAO REPORTS

Table APHIS-1. Closed, Implemented OIG Reports

ID	Date	Title	Result
33601-0001-21	10/17/2019	Plant Pest and Disease Management and Disaster Prevention Program	Recommendation 1 – Office of Inspector General (OIG) recommended APHIS should develop, implement, and document controls to accurately track Plant Pest Disease Management (PPDM) projects and related obligations/disbursements. Include in these controls documented procedures to explain how APHIS: consolidates PPDM data from different systems; tracks obligations/disbursements for all projects from approval through closeout; matches financial data to specific projects or records PPDM expenditures not attributed to a specific project; reconciles financial data with Financial Management Modernization Initiative; and resolves any discrepancies. APHIS provided evidence that it implemented and documented processes, decision memos to document Rapid Response funding decisions and assigned project numbers. Documentation of PPDM program processes and workflows of related systems, Work Breakdown Structure codes that directly correlate to the assigned project numbers including Rapid Response funding decisions. Closed By Management 12/06/2023. Recommendation 3 – OIG

ID	Date	Title	Result
			recommended APHIS develop and implement a plan of action for Plant Protection and Quarantine (PPQ) to mitigate the risks posed by cooperators with an elevated risk level for both active and future agreements. The plan should span the lifecycle of the agreement process including risk as a factor to consider in the application process, additions of special measures into the award agreement, and review activities to be conducted through the completion of the award. APHIS provided evidence that PPQ implemented a plan of action to mitigate the risks posed by cooperators with an elevated risk level for both active and future agreements. Closed By Management 01/22/2024. Recommendation 4 – OIG recommended APHIS develop and implement a process to create performance goals and measures for PPDM and assess annually whether the program meets these goals. APHIS provided evidence Plant Pest and Disease Management and Disaster Prevention Program (PDMDPP) developed and implemented a process to create PPDM performance goals and measures through the Decision Memo Process to Create Performance Measures for PDMDPP. Closed By Management 01/22/2024.
33601-0003-41	04/24/2020	Cattle Health Program Disease Incident Response	Recommendation 1 - Analyze the three risks for which APHIS has not begun mitigating actions by estimating the risks' significance by considering the magnitude of impact, likelihood of occurrence, and the nature of the risks. APHIS developed copies of new policies that provide the results of its analyses to the Office of the Chief Financial Officer (OCFO) that considered the magnitude of impact, likelihood of occurrence, and the nature of the three risks. Provided OCFO with a copy of the Animal Disease Traceability Program Assessment 2023. Closed By Management 12/04/2023.

ID	Date	Title	Result
			Recommendation 2 - Based on the results of Recommendation 1, determine what actions are necessary to mitigate the risks. APHIS provided a copy of the Regulatory Identification Number per the federal register and a copy of its new traceability rule as stipulated in the Animal Disease Traceability Program Assessment 2023. Closed By Management 12/05/2023. Recommendation 5 - Based on the results of the reconciliation performed in Recommendation 4, determine whether APHIS complied with relevant appropriation act provisions and, as necessary, obtain an Office of the General Counsel (OGC) opinion on any potential unauthorized reprogramming and Antideficiency Act violations. APHIS provided OGC's opinion regarding any potential unauthorized reprogramming and Antideficiency Act violations. Closed By Management 02/22/2024. Recommendation 9- Provide area offices with guidance that includes the specific documentation area offices are required to maintain for the Cattle Health Program tuberculosis and brucellosis indemnity payments to ensure adequate support is readily available for review. APHIS provided copies of the Standard Operating Procedures for Tuberculosis Indemnity (Cattle and Bison) and Standard Operating Procedures for Brucellosis Indemnity (Cattle and Bison). Closed By Management 02/28/2024.
33801-0001-31	04/05/2022	Animal and Plant Health Inspection Service Wildlife Services' Role in Administering the Mexican Wolf Recovery Program	Recommendation 1 - Develop and implement agency policy that clearly describes photograph support requirements for depredation reports. APHIS developed and implemented agency policy that clearly described the requirements for photograph support for depredation reports. Closed by Management 12/31/2023. Recommendation 2 - Establish and provide training to depredation

ID	Date	Title	Result
			investigators and reviewers on the agency policy that includes the detailed photograph requirements. APHIS established and provided depredation training to investigators and reviewers on the policy developed to address Recommendation 2, that included detailed photograph requirements. Closed By Management 12/31/2023. Recommendation 3 - Submit a formal request to the Mexican Wolf Executive Committee to review and make any applicable updates to the Standard Operating Procedure. APHIS provided a copy of an email to the Executive Committee which demonstrated APHIS agreed upon procedures were completed. Closed By Management 09/11/2023.
50601-0001-32	11/22/2013	Controls Over APHIS' Introduction of Genetically Engineered Organisms	Recommendation 8 - Incorporate compliance reporting and tracking of all incidents in the information system being developed. APHIS developed a record layout, showing that the agency incorporated compliance reporting and tracking of all incidents into the new system and a copy of the APHIS Biotechnology Regulatory Services Compliance Reporting and Tracking System Record Layout. Closed by Management 12/5/2023.

Table APHIS-2. Closed, Implemented GAO Reports

ID	Date	Title	Results
JC 104489	8/21/2020	Working Dogs: Federal Agencies Need to Better Address Health and Welfare	Recommendation 3 – The Secretary of Agriculture should direct all the USDA agencies with federally managed working dog programs to revise their policies, as necessary, to ensure that they address all the 18 issues GAO identified as important to the health and welfare of working dogs. In May 2023, APHIS issued an updated standard operating procedures manual for their National Detector Dog Training Center that addresses the issue important to the health and welfare of working dogs that the agency previously did not address. In

ID	Date	Title	Results
			September 2023, USDA's Forest Service updated two sections of the Forest Service Manual related to 1) law enforcement equipment and 2) law enforcement suitability requirements, training, and standards to address all issues important to the health and welfare of working dogs that the agency previously did not address. Closed By Management 02/12/2024.

AVAILABLE FUNDS AND FTES

Table APHIS-3. Available Funds and FTEs (thousands of dollars, FTEs)

Item	2023 Actual	FTEs	2024 Actual	FTEs	2025 Estimated	FTEs	2026 Estimated	FTEs
Salaries and Expenses:								
Discretionary Appropriations	$1,566,649	5,100	$2,304,310	5,181	$1,839,697	5,300	$1,147,750	5,021
Mandatory Appropriations	547,099	1,353	610,976	1,405	429,549	1,418	467,745	1,418
Buildings and Facilities:								
Discretionary Appropriations	3,175	-	1,000	-	1,000	-	1,000	-
Trust Funds:								
Mandatory Appropriations	9,259	50	14,407	50	15,051	50	14,500	50
Total Discretionary Appropriations	1,569,824	5,100	2,305,310	5,181	1,840,697	5,300	1,148,750	5,021
Total Mandatory Appropriations	556,358	1,403	625,384	1,455	444,600	1,468	482,245	1,468
Total Adjusted Appropriation	2,126,182	6,503	2,930,694	6,636	2,285,296	6,768	1,630,995	6,489
Balance Available, SOY	1,567,112	1,645	1,376,571	1,306	1,633,382	1,287	1,507,858	1,448
Rescinded Balances	-15,631	-	-5,000	-	-5,000	-	-	-
Recoveries, Other	21,977	-	68,462	-	-	-	-	-
Total Available	3,699,641	8,148	4,370,727	7,942	3,913,678	8,055	3,138,853	7,937
Lapsing Balances	-1,846	-890	-1,830	-477	-	-	-	-701
Transferred Balances	-201,425	-	-312,076	-	-	-	-	-
Balance Available, EOY	-1,376,571	-1,281	-1,633,382	-1,287	-1,507,858	-1,448	-912,628	-2,094
Total Obligations, APHIS	2,119,799	5,977	2,423,439	6,178	2,405,820	6,607	2,226,225	5,142
Other USDA:								
Agricultural Marketing Service	31,265	63	29,788	46	29,000	46	26,000	35
Agricultural Research Service	30,797	103	40,688	60	40,000	60	38,000	40
Departmental Administration	119	1	-	-	-	-	-	-
Farm Production and Conservation Business	88	-	53	-	50	-	-	-
Food Safety and Inspection Service	19	-	21	-	20	-	-	-
Foreign Agricultural Service	4,472	9	3,734	11	3,700	11	3,700	10
Forest Service	837	9	1,597	12	1,600	12	1,600	11
National Appeals Division	6	-	6	-	6	-	-	-
National Institute of Food and Agriculture	360	3	213	1	210	1	-	-
Natural Resources Conservation Service	74	1	550	5	550	5	550	5
Office of Budget and Program Analysis	56	1	173	1	170	1	-	-
Office of the Chief Financial Officer	1,250	-	977	1	980	1	-	-
Office of the Chief Information Officer	1,657	1	609	-	600	-	-	-
Office of Partnerships and Public Engagement	149	1	-	-	-	-	-	-
Office of the Secretary	201	-	90	-	90	-	-	-
Rural Development	-	-	790	2	790	2	-	-
Total, Other USDA	71,349	191	79,289	139	77,766	139	69,850	101
Total, Agriculture Available	3,770,990	8,338	4,450,016	8,081	3,991,444	8,194	3,208,703	8,038
Other Federal Funds:								
DOD, U.S. Air Force	15,148	139	19,170	163	19,000	164	19,000	165
DOD, Air National Guard	5,986	55	6,691	57	6,700	58	6,700	54
DOD, U.S. Navy	8,540	78	10,649	91	10,000	92	10,000	88
DOD, U.S. Marine Corps	1,936	18	1,290	11	1,300	11	1,300	9
DOD, U.S. Army	2,507	21	2,571	22	2,600	22	2,600	20
DOD, U.S. Army Corp of Engineers	1,995	18	2,240	19	2,250	19	2,250	17
DOD, Defense Threat Reduction Agency	91	-	33	-	30	-	30	-
Department of Energy	340	3	447	3	500	3	500	1

Item	2023 Actual	FTEs	2024 Actual	FTEs	2025 Estimated	FTEs	2026 Estimated	FTEs
Department of Health and Human Services	54	-	536	1	500	1	500	-
DHS: for Coast Guard and other services and support	1,130	4	621	3	600	3	600	2
Federal Emergency Management Agency	149	-	50	-	50	-	50	-
National Aeronautics and Space Administration	521	5	521	5	521	5	521	4
USDOI, Bureau of Land Management & Reclamation: Office of Insular Affairs	2,011	18	2,028	17	2,030	18	2,030	15
USDOI, Bureau of Land Management & Reclamation: for administrative and technical support	1,089	8	1,241	6	1,250	6	1,250	5
USDOI, Fish and Wildlife Services: for natural resources and endangered species	2,840	26	2,767	24	2,700	24	2,700	18
USDOT: Federal Aviation Administration	1,371	13	815	7	800	7	800	7
Department of Veterans Affairs for miscellaneous services	27	-	29	-	30	-	30	-
Environmental Protection Agency	1,873	17	2,399	20	2,400	20	406	10
GSA: for miscellaneous services	3	-	4	-	4	-	4	-
Other Federal Funds	534	1	248	7	250	7	250	-
Total, Other Federal	48,143	422	54,350	456	53,515	460	53,515	456
Non-Federal Funds:								
Funds from organizations, states, and local entities for wildlife, plant, and animal services support	71,939	657	80,964	657	81,000	664	83,910	635
Import-Export User Fees	45,251	311	49,766	320	50,761	323	49,761	305
Phytosanitary Certificate User Fees	14,855	133	20,192	140	20,596	145	19,596	135
Reimbursable Overtime	12,046	84	12,636	84	12,888	85	12,888	80
Veterinary Diagnostics User Fees	8,231	49	7,742	49	7,897	49	7,897	45
Other User Fees	15	-	4		-		-	
Total, Non-Federal	152,337	1,234	171,304	1,250	173,143	1,266	173,143	1,200
Total Available, APHIS	3,971,471	9,994	4,675,670	9,787	4,218,102	9,920	3,443,277	9,652

*This table assumes a reduced 2026 FTE baseline due to 2025 voluntary staff separations and administrative cost efficiencies.

PERMANENT POSITIONS BY GRADE AND FTES

Table APHIS-4. Permanent Positions by Grade and FTEs (thousands of dollars, FTEs)

Item	2023 Actual HQ	2023 Actual Field	2023 Actual Total	2024 Estimated HQ	2024 Estimated Field	2024 Estimated Total	2025 Estimated HQ	2025 Estimated Field	2025 Estimated Total	2026 Estimated HQ	2026 Estimated Field	2026 Estimated Total
SES	31	9	40	27	11	38	27	11	38	27	8	35
SL	-	-	-	2	4	6	2	4	6	2	4	6
GS-15	72	84	156	68	101	169	68	101	169	43	74	117
GS-14	254	510	764	219	594	813	219	594	813	142	481	623
GS-13	211	772	983	189	804	993	189	804	993	90	642	732
GS-12	109	960	1,069	121	976	1,097	121	976	1,097	58	788	846
GS-11	90	805	895	84	768	852	84	768	852	53	643	696
GS-10	-	15	15	-	16	16	-	16	16	-	14	14
GS-9	60	500	560	49	557	606	49	557	606	23	449	472
GS-8	6	225	231	5	236	241	5	236	241	2	204	206
GS-7	28	628	656	28	627	655	28	627	655	12	416	428
GS-6	10	185	195	11	186	197	11	186	197	5	69	74
GS-5	6	87	93	6	94	100	6	94	100	2	4	6
GS-4	12	18	30	13	41	54	13	41	54	11	24	35
GS-3	1	3	4	1	-	1	1	-	1	1	-	1
Other Graded	14	138	152	10	169	179	10	169	179	10	106	116
Ungraded	-	-	-	-	-	-	-	-	-	-	-	-
Total Permanent	904	4,939	5,843	833	5,184	6,017	833	5,184	6,017	481	3,926	4,407
Total Perm. FT EOY	904	4,939	5,843	833	5,184	6,017	833	5,184	6,017	481	3,926	4,407
FTE*	1,252	6,572	7,824	1,283	6,741	8,024	1,355	7,117	8,472	1,097	5,759	6,856

*In addition to these numbers above, there are temporary positions as well.

*This table assumes a reduced 2026 FTE baseline due to 2025 voluntary staff separations and administrative cost efficiencies.

VEHICLE FLEET

Motor Vehicle Fleet

APHIS uses vehicles to deliver mission critical services. The Agency's veterinarians, animal health technicians, inspectors, plant protection and quarantine officers, wildlife biologists, and other technical personnel use motor vehicles in their daily responsibilities. This includes traveling for employees to conduct field visits, travel to the airports and field stations, and attend meetings, conferences, and training. The vehicles are used by the local offices to make short trips as required; some of them are driven within airports and quarantine areas where they cannot leave the facility.

APHIS has replaced some of the passenger vehicles with SUVs or light-duty trucks. The number of passenger vehicles has decreased in recent years.

Replacement Criteria

APHIS replaces vehicles in accordance with Title 41, CFR § 102–34.270 and the Agriculture Property Management Regulation Advisory 20-01, Vehicle Allocation Methodology Guidance for Vehicle Utilization Criteria and Lifecycle Model, dated October 1, 2019. Agency programs replace and retire vehicles using data on utilization, age, condition, and funding availability. For agency-owned vehicles, passenger vehicles must have mileage of at least 60,000 or three years of age. For GSA leased vehicles, passenger vehicles must have mileage at least 60,000 or five years of age. In addition, both owned and leased vehicles must be driven at least 7,500 miles annually or have 80 days of use in a fiscal year. The vehicles not meeting the USDA utilization criteria are required to be justified by the programs for review and approval. Justifications are based on mission requirements and vehicle reassignments. The programs are required to complete the USDA Lifecycle Model to perform an owning versus leasing analysis to determine the most cost-effective option to acquire the vehicles. The lifecycle model is used as a tool to document all owned and leased acquisitions.

Reductions to Fleet

The annual reporting of APHIS' vehicle inventory has remained under the 2018 based line number of 4,595 since 2019, and through 2024, due to vehicle production challenges and supply chain issues. The limited vehicle availability and uncertainty of vehicle production contribute to longer vehicle delivery times. The vehicles ordered in one fiscal year are not generally received and accounted for until the next fiscal year. Due to this reason, APHIS' fleet reported in the Federal Automotive Statistical Tool (FAST) system has been decreasing but will increase once all the vehicles ordered are delivered. In 2025 and 2026, APHIS' fleet will expand to meet mission requirements, but it will stay within the vehicle inventory-based line number.

Table APHIS-5. Size, Composition, and Annual Costs of Motor Vehicle Fleet

Item	Sedans and Station Wagons	Vans	SUVs	Light Trucks 4X2	Light Trucks 4X4	Medium Duty Vehicles	Buses	Heavy Duty Vehicles	Total Vehicles	Annual Operating Costs
2018 End of Year Operating Inventory	**246**	**118**	**955**	**272**	**2,092**	**896**	**-**	**16**	**4,595**	**$19,465,575**
2023 End of Year Operating Inventory	**148**	**83**	**852**	**223**	**2,123**	**925**	**-**	**15**	**4,369**	**22,473,221**
2024 Actual Acquisitions.....	5	4	98	15	381	239	-	-	742	
2024 Actual Disposals	24	10	109	50	396	163	-	2	754	
2024 End of Year Operating Inventory	**129**	**77**	**841**	**188**	**2,108**	**1,001**	**-**	**13**	**4,357**	**24,058,342**
2025 Planned Acquisitions	18	20	151	44	376	144	-	2	755	
2025 Planned Disposals.....	17	13	85	37	284	79	-	2	517	
2025 End of Year Operating Inventory	**130**	**84**	**907**	**195**	**2,200**	**1,066**	**-**	**13**	**4,595**	**27,650,820**
2026 Planned Acquisitions	26	22	75	29	267	68	-	-	487	
2026 Planned Disposals.....	26	22	75	29	267	68	-	-	487	
2026 End of Year Operating Inventory	**130**	**84**	**907**	**195**	**2,200**	**1,066**	**-**	**13**	**4,595**	**30,534,968**

Table APHIS-6. Statement of Proposed Acquisition of Passenger Motor Vehicles

Fiscal Year	Net Active Fleet, SOY	Disposals	Replacements	Additions	Total Acquisitions	Net Active Fleet, EOY
2023	159	13	2	-	2	148
2024	148	24	5	-	5	129
2025	129	17	17	1	18	130
2026	130	26	26	-	26	130

Aircraft

APHIS uses aircraft to conduct mission critical activities such as aerial resource and surveillance surveys, aerial application tests, equipment demonstration and testing, implementation of methods for the control and/or eradication of destructive plant pests or wildlife to reduce damage to agricultural crops and protect livestock, oral rabies vaccination bait distribution, among others.

The annual appropriations act provides APHIS with authority to purchase, replace, operate, and maintain aircraft. The Agency replaces aircraft when necessary to maintain fleet safety and efficient operating conditions.

The APHIS aircraft fleet consists of 88 aircraft, of which 6 operational and 2 non-operational aircraft are used for domestic plant pest and disease management programs and are all owned. Of the remaining 80 aircraft used to support various wildlife damage management programs, 75 are owned, 3 are borrowed from State cooperators, and 2 are rented. Of the 75 aircraft owned, 4 are non-operational. APHIS retains certain non-operational aircraft for parts. APHIS is working to acquire 8 additional helicopters modify aircraft acquired from the Department of Defense which require modification prior to operational use at the approximate cost of $200K per aircraft. These aircraft are being used to retire legacy Vietnam war era aircraft currently in the fleet.

SHARED FUNDING PROJECTS

Table APHIS-7. Shared Funding Projects (thousands of dollars)

Item	2023 Actual	2024 Estimated	2025 Estimated	2026 Estimated
Working Capital Fund:				
Administrative Services:				
AskUSDA Contact Center	$928	$1,379	$1,320	$1,320
Fleet Charge Card Service	-	-	192	178
General Counsel Legal Compliance	-	-	122	1,510
Material Management Service Center	1,081	939	1,122	1,148
Mail and Reproduction Management Division	353	379	411	417
Integrated Procurement Systems	1,711	1,447	1,005	1,003
Procurement Operations Division	121	163	140	166
Human Resources Enterprise System Management	137	933	1,040	1,046
Subtotal	4,331	5,240	5,352	6,788
Communications:				
Creative Media & Broadcast Center	5,673	4,586	2,375	1,570
Finance and Management:				
Personnel and Document Security	385	444	474	474
National Finance Center	2,338	2,545	2,406	2,414
Financial Shared Services	10,316	11,509	11,101	11,121
Internal Control Support Services	99	160	173	173
Subtotal	13,138	14,658	14,154	14,182
Information Technology:				
Client Experience Center	31,544	29,423	30,339	33,683
Departmental Administration Information Technology Office	77	306	264	264
Digital Infrastructure Services Center	18,563	16,513	10,576	10,163
Enterprise Cybersecurity Services	2,482	4,627	4,617	4,617
Enterprise Data and Analytics Services	2,688	3,564	1,758	1,748
Enterprise Network Services	6,718	12,862	12,440	11,694
Subtotal	62,072	67,295	59,994	62,169
Correspondence Management Services				
Office of the Executive Secretariat	416	435	218	171
Total, Working Capital Fund	85,630	92,214	82,093	84,880
Department-Wide Shared Cost Programs:				
Advisory Committee Liaison Services	5	9	11	11
Agency Partnership Outreach	578	586	637	637
Diversity, Equity, Inclusion and Accessibility	157	208	47	0
Employee Experience	270	296	238	238
Medical Service	28	26	19	19
National Capital Region Interpreting Services	136	158	180	180
Office of Customer Experience	252	239	256	256
Physical Security	356	375	490	490
Security Detail	395	426	674	674
Security Operations	548	594	627	627
Talent Group	285	264	281	281
TARGET Center	130	129	134	134
Total, Department-Wide Reimbursable Programs	3,140	3,310	3,594	3,547
E-Gov:				
E-Rulemaking	47	36	48	44
Geospatial LOB	13	13	13	13
Budget Formulation & Execution LOB	7	7	7	7
Financial Management LOB	13	14	14	14
HR Management LOB	23	23	23	23
Integrated Acquisition Environment	49	63	61	63
Total, E-Gov	152	156	166	164
Agency Total	88,922	95,680	85,853	88,591

ADVERTISING EXPENDITURES

Table APHIS-8. Advertising Expenditures (thousands of dollars)

Item	2024 Actual # of Contracts	2024 Actual $ Obligated	2025 Est. # of Contracts	2025 Est. $ Obligated	2026 Est. # of Contracts	2026 Est. $ Obligated
Total Contracts for Advertising Services.....	6	$3,715	4	$3,336	3	$3,004
Contracts for Advertising Services to Socially and Economically Disadvantaged Small Businesses	-	-	-	-	-	-
Contracts for Advertising Services to Women-Owned and Minority-Owned Small Businesses .	-	-	-	-	-	-

ACCOUNT 1: SALARIES AND EXPENSES

APPROPRIATION LANGUAGE

The appropriations language follows (new language underscored):

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), $1,147,750,000, of which $250,000, 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 $15,500,000, to remain available until expended, shall be used for the cotton pests program, including for cost share purposes or for debt retirement for active eradication zones; of which $40,000,000, to remain available until expended, shall be for Animal Health Technical Services; of which $35,500,000, to remain available until expended, shall be for agricultural quarantine and inspection services; of which $3,500,000 shall be for activities under the authority of the Horse Protection Act of 1970, as amended (15 U.S.C. 1831); of which $65,000,000, to remain available until expended, shall be used to support avian health; of which $9,000,000, to remain available until expended, shall be for information technology infrastructure; of which $217,339,000, to remain available until expended, shall be for specialty crop pests, of which $8,500,000, to remain available until September 30, 2026, shall be for one-time control and management and associated activities directly related to the multiple-agency response to citrus greening; of which, $9,026,000, to remain available until expended, shall be for field crop and rangeland ecosystem pests; of which $21,000,000, to remain available until expended, shall be for zoonotic disease management; of which $44,250,000, to remain available until expended, shall be for emergency preparedness and response; of which $58,650,000, to remain available until expended, shall be for tree and wood pests; of which $6,000,000, 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 $2,500,000, 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; of which $24,527,000, to remain available until expended, shall be used to carry out the science program and transition activities for the National Bio and Agro-defense Facility located in Manhattan, Kansas: *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 purchase, replacement, operation, and maintenance of aircraft: *Provided further*, That in addition, in emergencies which threaten any segment of the agricultural production industry of the United States, 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 2026, 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 service.

LEAD-OFF TABULAR STATEMENT

Table APHIS-9. Lead-Off Tabular Statement (In dollars)

Item	Amount
Enacted, 2025	$1,147,750,000
Change in Appropriation	-
Budget Estimate, 2026	1,147,750,000

PROJECT STATEMENTS

Table APHIS-10. Project Statement on Basis of Appropriations (thousands of dollars, FTEs)

Item	2023 Actual	FTEs	2024 Estimated	FTEs	2025 Estimated	FTEs	2026 Estimated	FTEs	Inc. or Dec.	FTE Inc. or Dec.	Chg Key
Discretionary Appropriations:											
Safeguarding and Emergency Preparedness/Response											
Animal Health Technical Services	$39,183	151	$40,000	151	$40,000	151	$40,000	151	-	-	
Aquatic Animal Health	5,000	18	4,500	18	4,500	18	4,500	18	-	-	
Avian Health	64,930	238	65,000	238	65,000	238	65,000	238	-	-	
Cattle Health	111,771	493	111,000	493	111,000	493	111,000	493	-	-	
Equine, Cervid & Small Ruminant Health	35,319	116	35,000	116	35,000	116	27,508	116	-$7,492	-	(1)
National Veterinary Stockpile	6,500	6	6,000	6	6,000	6	6,000	6	-	-	
Swine Health	26,044	142	26,500	143	26,500	143	26,500	143	-	-	
Veterinary Biologics	21,479	126	21,000	123	21,000	123	21,000	123	-	-	
Veterinary Diagnostics	63,777	196	63,000	193	63,000	193	63,000	193	-	-	
Zoonotic Disease Management	21,567	62	21,000	62	21,000	62	21,000	62	-	-	
Subtotal, Animal Health	395,570	1,548	393,000	1,543	393,000	1,543	385,508	1,543	-7,492	-	
Agricultural Quarantine Inspection (Appropriated)	35,541	367	35,500	367	35,500	367	35,500	367	-	-	
Cotton Pests	15,450	49	15,500	49	15,500	49	15,500	49	-	-	
Field Crop & Rangeland Ecosystems Pests	14,986	77	12,000	77	12,000	77	9,026	77	-2,974	-	(2)
Pest Detection	29,075	186	29,000	186	29,000	186	29,000	186	-	-	
Plant Protection Methods Development	22,557	130	21,500	130	21,500	130	21,500	130	-	-	
Specialty Crop Pests	216,117	796	215,000	796	215,000	796	217,339	796	+2,339	-	(3)
Tree & Wood Pests	62,562	292	59,000	292	59,000	292	58,650	292	-350	-	(4)
Subtotal, Plant Health	396,288	1,897	387,500	1,897	387,500	1,897	386,515	1,897	-985	-	
Wildlife Damage Management	121,957	623	122,500	623	122,500	623	126,227	628	+3,727	+5	(5)
Wildlife Services Methods Development	26,244	126	25,500	126	25,500	126	25,500	126	-	-	
Subtotal, Wildlife Services	148,201	749	148,000	749	148,000	749	151,727	754	+3,727	+5	
Animal & Plant Health Regulatory Enforcement	18,722	120	18,500	118	18,500	118	18,500	118	-	-	
Biotechnology Regulatory Services	19,691	93	19,500	92	19,500	92	19,500	92	-	-	
Subtotal, Regulatory Services	38,413	213	38,000	210	38,000	210	38,000	210	-	-	
Contingency Fund	514	5	250	3	250	3	250	3	-	-	
Emergency Preparedness & Response	44,067	197	44,500	197	44,500	197	44,250	197	-250	-	(6)
Subtotal, Emergency Management	44,581	202	44,750	200	44,750	200	44,500	200	-250	-	
Subtotal Safeguarding and Emergency Preparedness/Response	1,023,053	4,609	1,011,250	4,599	1,011,250	4,599	1,006,250	4,604	-5,000	+5	
Safe Trade and International Technical Assistance											
Agriculture Import/Export	19,292	84	18,750	81	18,750	81	18,750	81	-	-	
Overseas Technical & Trade Operations	25,572	57	25,500	57	25,500	57	25,500	57	-	-	
Subtotal, Safe Trade and International Technical Assistance	44,864	141	44,250	138	44,250	138	44,250	138	-	-	
Animal Welfare											
Animal Welfare	37,506	260	37,250	259	37,250	259	37,250	259	-	-	
Horse Protection	4,096	21	3,500	16	3,500	16	3,500	16	-	-	

Item	2023 Actual	FTEs	2024 Estimated	FTEs	2025 Estimated	FTEs	2026 Estimated	FTEs	Inc. or Dec.	FTE Inc. or Dec.	Chg Key
Subtotal, Animal Welfare	41,602	281	40,750	275	40,750	275	40,750	275	-	-	
Agency Wide Programs											
APHIS Information Technology Infrastructure	4,251	-	4,000	-	4,000	-	9,000	-	+5,000	-	(7)
Physical/Operational Security	5,182	4	5,000	4	5,000	4	5,000	4	-	-	
Rental and DHS Security Payments	42,567	-	42,500	-	42,500	-	42,500	-	-	-	
Subtotal, Agency Management	52,000	4	51,500	4	51,500	4	56,500	4	+5,000	-	
Congressionally Direct Spending	9,552	-	14,276	-	-	-	-	-	-	-	
Working Capital Funds	-1,000	-	-	-	-	-	-	-	-	-	
Commodity Credit Corporation	396,578	65	1,142,284	165	691,947	284	-	-	-691,947	-284	
Subtotal	1,566,649	5,100	2,304,310	5,181	1,839,697	5,300	1,147,750	5,021	-691,947	-279	
Mandatory Appropriations:											
Farm Bill, Section 7721	75,000	26	75,000	26	75,000	26	75,000	26	-	-	
Farm Bill, Section 2408	-	-	7,500	52	-	-	-	-	-	-	
Farm Bill, Section 12101	30,000	2	30,000	2	30,000	2	30,000	2	-	-	
Sequester P.L. 113-6…Farm Bill	-5,985	-	-5,985	-	-5,985	-	-5,985	-	-	-	
Agricultural Quarantine Inspection User Fees:											
Total Collections	778,813	1,325	867,292	1,325	1,056,000	1,390	1,159,000	1,390	+103,000	-	
Less: Transfer to DHS	-312,575	-	-360,152	-	-712,299	-	-784,399	-	-72,100	-	
Sequester P.L. 113-6 …AQI	-44,346	-	-47,025	-	-60,192	-	-66,063	-	-5,871	-	
Sequester Restored…AQI User Fees	26,192	-	44,346	-	47,025	-	60,192	-	+13,167	-	
Trust Funds	8,785	50	12,931	50	14,500	50	14,500	50	-	-	
Foreign Service National Separation Liability Trust	474	-	1,477	-	551	-	-	-	-551	-	
Subtotal	556,358	1,403	625,384	1,455	444,600	1,468	482,245	1,468	+37,645	-	
Supplemental Appropriations:											
AQI User Fees General Provision 2102	125,000	-	-	-	-	-	-	-	-	-	
Less: Transfer to DHS	-125,000	-	-	-	-	-	-	-	-	-	
Subtotal	-	-	-	-	-	-	-	-	-	-	
Total Adjusted Appropriations	2,123,007	6,503	2,929,694	6,636	2,284,296	6,768	1,629,995	6,489	-654,301	-279	
Add back:											
Transfers In and Out, Rescissions	41,997	-65	-782,132	-165	20,352	-	784,399	-	+764,047	-	
Sequestration	24,139	-	8,664	-	19,152	-	11,856	-	-7,296	-	
Total Appropriation	2,189,143	6,438	2,156,226	6,471	2,323,801	6,768	2,426,250	6,489	+102,449	-279	
Transfers In:											
Commodity Credit Corporation	396,578	65	1,142,284	165	129,201	-	-	-	-691,947	-	
Transfers From AMS					562,746						
Total Transfers In	396,578	65	1,142,284	165	691,947	-	-	-	-691,947	-	
Transfers Out:											
Working Capital Funds	-1,000	-	-	-	-	-	-	-	-	-	
Transfer to DHS	-437,575	-	-360,152	-	-712,299	-	-784,399	-	-72,100	-	
Total Transfers Out	-438,575	-	-360,152	-	-712,299	-	-784,399	-	-72,100	-	
Rescission	-	-	-	-	-	-	-	-	-	-	
Sequestration	-24,139	-	-8,664	-	-19,152	-	-11,856	-	+7,296	-	

Item	2023 Actual	FTEs	2024 Estimated	FTEs	2025 Estimated	FTEs	2026 Estimated	FTEs	Inc. or Dec.	FTE Inc. or Dec.	Chg Key
Recoveries, Othe	21,408	-	68,227	-	-	-	-	-	-	-	
Rescinded Balances	-15,631	-	-5,000	-	-5,000	-	-	-	+5,000	-	
Balance Available, SOY	1,538,026	1,645	1,348,372	1,306	1,606,140	1,287	1,480,616	1,448	-125,524	+161	
Total Available	3,666,810	8,148	4,341,292	7,942	3,885,436	8,055	3,110,611	7,937	-774,825	-118	
Lapsing Balances	-1,846	-890	-1,830	-477	-	-	-	-701	-	701	
Transferred Balances	-201,425	-	-312,076	-	-	-	-	-	-	-	
Balance Available, EOY	-1,348,372	-1,281	-1,606,140	-1,287	-1,480,616	-1,448	-885,386	-2,094	+595,230	-646	
Total Obligations	2,115,167	5,977	2,421,246	6,178	2,404,820	6,607	2,225,225	5,142	-179,595	1,465	

Table APHIS-11. Project Statement on Basis of Obligations (thousands of dollars, FTEs)

Item	2023 Actual	FTEs	2024 Estimated	FTEs	2025 Estimated	FTEs	2026 Estimated	FTEs	Inc. or Dec.	FTE Inc. or Dec.
Discretionary Obligations:										
Safeguarding and Emergency Preparedness/Response										
Animal Health Technical Services	$40,681	115	$38,958	125	$43,993	151	$39,000	110	-$4,993	-41
Aquatic Animal Health	4,983	16	4,490	18	4,500	18	4,500	13	-	-5
Avian Health	62,216	241	59,222	238	*	238	60,000	174	+816	-64
Cattle Health	112,335	476	110,981	477	110,981	493	111,000	357	+19	-136
Equine, Cervid & Small Ruminant Health	35,275	116	34,983	116	*	116	27,508	85	-7,492	-31
National Veterinary Stockpile	6,929	6	6,409	6	5,879	6	6,000	4	+121	-2
Swine Health	25,990	123	26,469	128	26,500	143	26,500	105	-	-38
Veterinary Biologics	21,389	98	20,926	100	21,000	123	21,000	90	-	-33
Veterinary Diagnostics	58,228	147	68,228	158	60,038	193	63,000	141	+2,962	-52
Zoonotic Disease Management	22,858	62	17,441	62	*	62	21,000	45	-4,995	-17
Subtotal, Animal Health	390,884	1,400	388,107	1,428	272,892	1,543	379,508	1,124	-13,562	-419
Agricultural Quarantine Inspection (Appropriated)	35,417	365	33,385	367	37,115	367	35,500	268	-1,615	-99
Cotton Pests	16,199	23	15,875	22	14,942	49	15,500	36	+558	-13
Field Crop & Rangeland Ecosystems Pests	14,218	50	14,464	56	*	77	9,026	56	-1,727	-21
Pest Detection	28,942	140	28,981	124	29,000	186	29,000	136	-	-50
Plant Protection Methods Development	22,329	96	21,475	98	21,500	130	21,500	95	-	-35
Specialty Crop Pests	224,144	707	218,902	778	222,919	796	217,339	582	-5,580	-214
Tree & Wood Pests	63,404	233	61,272	254	*	292	59,650	213	+1,397	-79
Subtotal, Plant Health	404,654	1,614	394,355	1,699	325,457	1,897	387,515	1,386	-6,967	-511
Wildlife Damage Management	120,595	590	121,652	599	124,982	623	126,227	459	+1,245	-164
Wildlife Services Methods Development	25,449	102	25,314	103	24,849	126	25,500	92	+651	-34
Subtotal, Wildlife Services	146,044	692	146,966	702	149,831	749	151,727	551	+1,896	-198
Animal & Plant Health Regulatory Enforcement	18,674	106	18,456	106	18,500	118	18,500	86	-	-32
Biotechnology Regulatory Services	19,544	88	19,389	89	19,500	92	19,500	67	-	-25
Subtotal, Regulatory Services	38,218	194	37,845	195	38,000	210	38,000	153	-	-57
Emergency Preparedness & Response	43,733	200	43,657	203	*	197	47,250	144	-373	-53
Subtotal, Emergency Management	43,733	200	43,657	203		197	47,250	197	-373	-53
Subtotal Safeguarding and Emergency Preparedness/Response	1,023,532	4,100	1,010,930	4,227	786,199	4,596	1,004,000	4,601	-19,006	+5
Safe Trade and International Technical Assistance										
Agriculture Import/Export	19,184	75	18,719	76	18,750	81	18,750	59	-	-22
Overseas Technical & Trade Operations	25,488	56	25,294	57	25,500	57	25,500	42	-	-15
Subtotal Safe Trade and International Technical Assistance	44,672	131	44,013	133	44,250	138	44,250	101	-	-37
Animal Welfare										
Animal Welfare	37,379	193	37,086	200	37,250	259	37,250	189	-	-70

Item	2023 Actual	FTEs	2024 Estimated	FTEs	2025 Estimated	FTEs	2026 Estimated	FTEs	Inc. or Dec.	FTE Inc. or Dec.
Horse Protection	4,010	14	3,462	14	3,500	16	3,500	12	-	-4
Subtotal, Animal Welfare	41,390	207	40,548	214	40,750	275	40,750	201	-	-74
Agency Wide Programs										
APHIS Information Technology Infrastructure	4,462	-	3,069	-	4,933	-	9,000	-	+4,067	-
Physical/Operational Security	5,106	4	4,677	3	5,000	4	5,000	3	-	-1
Rental and DHS Security Payments	42,511	-	42,463	-	*	-	42,500	-	-	-
Subtotal, Agency Management	52,080	4	50,209	3	9,933	4	56,500	3	+4,067	-1
Congressionally Direct Spending	9,552	-	14,268	-	-	-	-		-	-
General Provision 775 – Cogongrass	1,758	-	-	-	1,359	-	-		-1,359	-
Subtotal Discretionary Obligations	$1,172,984	4,442	$1,159,968	4,577	$882,491	5,013	$1,145,500	3,663	-16,298	-1,350
Mandatory Obligations:										
Farm Bill, Section 7721	70,128	20	70,653	20	70,725	26	70,725	26	-	-
Farm Bill, Section 2408	12,419	47	7,499	24	-	-	-	-	-	-
Farm Bill, Section 12101	39,226	7	29,566	8	29,125	3	30,000	2	+875	-1
Agricultural Quarantine Inspection User Fees	248,678	1,192	267,470	1,232	300,000	1,390	315,000	1,290	+15,000	-100
Trust Funds	9,734	31	13,288	37	14,000	50	14,000	50	-	-
Foreign Service National Separation Liability Trust	474	-	1,582	-	551	-	-	-	-551	-
Subtotal Mand Obligations	380,659	1,297	390,058	1,321	414,400	1,469	429,725	1,368	+15,325	-101
Supplemental Obligations:										
American Rescue Plan	245,577	58	15,871	24	3,569	-	-	-	-3,569	-
USMCA Lacey Act	1,371	-	-	-	-	-	-	-	-	-
Subtotal Supp Obligations	246,949	58	15,871	24.00	3,569	-	-	-	-3,569	-
Other Obligations:										
Commodity Credit Corporation (CCC)	314,568	180	855,349	256	825,000	125	650,000	111	-175,000	-14
Homeland Security, HUB Relocation & Department	6	-	-	-	52	-	-	-	-52	-
Subtotal Other Obligations	314,574	180	855,349	256	825,052	125	+650,000	+111	-175,052	-14
Add back:										
Lapsing Balances	1,846	890	1,830	477	-	-	-	-	-	-
Balances Available, EOY:										
Discretionary								-	-	-
Animal Health Technical Services	5,696	46	6,993	46	3,000	46	4,000	87	+1,000	+41
Avian Health	15,421	27	22,184	27	28,000	27	33,000	91	+5,000	+64
Cattle Health	1,706	-	1,481	-	1,500	-	1,500	-	-	-
Equine Cervid & Small Ruminant Health	500	-	500	-	500	-	500	-	-	-
National Veterinary Stockpile	2,219	3	1,879	3	2,000	3	2,000	5	-	+2
Veterinary Diagnostics	44,248	-	35,038	-	33,000	-	33,000	-	-	-
Zoonotic Disease Management	6,081	-	9,995	-	5,000	-	5,000	17	-	+17
Emergency Preparedness & Response	17,981	12	19,123	6	16,000	6	13,000	59	-3,000	+53
Agricultural Quarantine Inspection (Appropriated)	-	-	2,115	-	500	-	500	-		-
Cotton Pests	764	11	442	11	1,000	11	1,000	24	-	+13
Field Crop & Rangeland Ecosystems Pests	4,110	61	1,753	61	3,000	61	3,000	82	-	+21
Specialty Crop Pests	26,932	218	27,919	218	20,000	218	20,000	432	-	+214

Item	2023 Actual	FTEs	2024 Estimated	FTEs	2025 Estimated	FTEs	2026 Estimated	FTEs	Inc. or Dec.	FTE Inc. or Dec.
Tree & Wood Pests	3,506	82	2,253	82	3,000	82	2,000	161	-1,000	+79
Wildlife Damage Management	5,768	-	6,482	-	4,000	-	4,000	-	-	-
Wildlife Services Methods Development	1,224	-	1,349	-	2,000	-	2,000	-	-	-
Contingency Funds	3,900	30	4,150	33	4,400	36	4,650	39	+250	+3
APHIS Information Technology Infrastructure	140	-	1,133	-	200	-	200	-	-	-
Commodity Credit Corporation (CCC)	875,972	389	1,196,565	298	1,063,512	457	413,512	346	-650,000	-111
General Provision 775 – Cogongrass	-	-	1,357	-	-	-	-		-	-
General Provision 797 – Cogongrass	-	-	2	-	-	-	-		-	-
H1N1 Supplemental	-	-	52	-	-	-	-		-	-
Mandatory								-	-	-
Agricultural Quarantine Inspection User Fees	317,874	378	244,930	471	275,464	471	329,194	721	+53,730	+250
American Rescue Plan Act	74	-	3,569	-	-	-	-	-	-	-
Farm Bill Section 12101	5,921	9	6,835	3	6,000	2	4,290	2	-1,710	-
Trust Funds	8,333	15	8,041	28	8,541	28	9,041	28	+500	-
Total Bal. Available, EOY	1,348,372	1,281	1,606,140	1,287	1,480,616	1,448	+885,386	+2,094	-595,230	+646
Total Available	3,465,385	8,148	4,029,216	7,942	1,480,616	8,055	+3,110,611	+7,937	-774,825	-118
Less:										
Rescission	-	-	-	-	-	-	-	-	-	-
Total Transfers In	-396,578	-65	-1,142,284	-165	-691,947	-	-	-	+691,947	-
Total Transfers Out	438,575	-	360,152	-	712,299	-	784,399	-	+72,100	-
Transferred Balances	201,425	-	312,076	-	-	-				
Sequestration	24,139	-	8,664	-	19,152	-	11,856	-	-7,296	-
Recoveries, Other	-21,408	-	-68,227	-	-	-	-	-	-	-
Rescinded Balances	15,631	-	5,000	-	5,000	-	-	-	-5,000	-
Balance Available, SOY	-1,538,026	-1,645	-1,348,372	-1,306	-1,606,140	-1,287	-1,480,616	-1,448	+125,524	-161

**Obligations not able to be determined this time.*

JUSTIFICATION OF CHANGES

In pursuit of streamlining workforce efforts, facilities, and other government efficiencies, APHIS has reduced staffing numbers by over 1,000 employees in the exhibits included in the Budget. This information reflects the best understanding for the Agency as of April 2025, recognizing that many details remain to be determined.

(1) Equine, Cervid, and Small Ruminant Health: a decrease of $7,492,000 ($35,000,000 and 116 FTE available in 2025).

The Equine, Cervid, and Small Ruminant Health (ECSRH) program protects health and improves the quality, productivity, and economic viability of the equine, cervid, sheep, and goat industries. APHIS activities include monitoring, surveillance, investigation, response, and disease prevention and preparedness to address animal health issues. The Agency's monitoring and surveillance activities detect foreign, emerging, zoonotic, and domestic diseases that could substantially impact the economy. APHIS also works with domestic and international trading partners to facilitate safe trade in equine, cervids, and small ruminants and their products, and ensure that diseases of trade concern are reported to the World Organisation for Animal Health when detected. The ECSRH program conducts disease surveillance and monitoring activities for the following diseases: bovine tuberculosis (TB), chronic wasting disease (CWD), vesicular stomatitis virus, contagious equine metritis, equine infectious anemia, equine piroplasmosis, Eastern equine encephalitis, West Nile virus, and scrapie.

Scrapie is a fatal, degenerative disease affecting the central nervous system of sheep and goats. Infected flocks can experience significant production losses. The National Scrapie Eradication Program focuses on improving the health of domestic sheep and goats, reducing scrapie-associated economic losses, and increasing international marketing opportunities. Regulatory scrapie slaughter surveillance efforts, which began in 2003, were designed to identify scrapie-infected flocks and herds by sampling animals at slaughter. Since the surveillance program began, the program has collected approximately 773,000 samples at slaughter.

APHIS works with State agencies to encourage cervid owners to certify their herds by meeting the requirements in the CWD Herd Certification Program (HCP) Standards. APHIS' voluntary national CWD HCP helps States, Tribes, and the cervid industry control CWD in farmed cervids by allowing the interstate movement only from certified herds. Currently, 28 States participate in the national CWD HCP. APHIS determines the use of Federal indemnity payments within the CWD program on a case-by-case basis. APHIS also coordinates a voluntary cervid TB herd accreditation program.

In 2024, APHIS made approximately $12 million available for cooperative agreements with States and Tribal governments to further develop and implement CWD surveillance, testing, management, and response activities, including the further development and evaluation of techniques and strategies to prevent or control CWD in farmed and wild cervid populations. APHIS funded cooperative agreements with 30 States, 12 universities, and 10 Tribes and Tribal Organizations for CWD projects in 2024.

APHIS collaborates with the Federal, State, and industry partners to protect the equine industry from disease, improve the health of our domestic herd, and protect human health. These activities improve trade and facilitate equine movement, which are vital to maintaining the industry's economic value. APHIS also provides veterinary support and consultation to the U.S. Department of the Interior's Bureau of Land Management Wild Horse and Burro Program through an interagency cooperative agreement. APHIS coordinates with States and industry to develop national disease control strategies, and provide oversight, coordination, and implementation of appropriate policies to mitigate the risks posed by equine diseases of concern. APHIS provides expertise and helps develop the equine industry's National Equine Health Plan. This plan functions as a roadmap for owners, veterinarians, and industry

organizations to coordinate with State and Federal animal health officials to recognize, prevent, control, and respond to equine diseases.

Overall, base funding for the ECSRH program currently supports salaries and benefits, contracts and agreements, equipment, and other normal operating costs such as supplies, rent, and travel to conduct program activities.

A) A decrease of $6,992,000 and 0 FTE for chronic wasting disease projects.

At the direction of Congress, APHIS has facilitated the distribution of funds to further develop and implement CWD surveillance, testing, management, and response activities, including development and evaluation of techniques and strategies to prevent or control CWD in wild and farmed cervids. In recent years, the agency has been unable to fully utilize the funding. Therefore, the Agency proposed to reduce funding in 2026 by $6.992 million. APHIS will continue to use information gathered from previously funded projects to improve the prevention or control of the disease spread in wild and farmed cervid populations. At the proposed funding level, APHIS will continue to fund the highest priority proposals that address CWD research, management, and response activities in farmed and wild cervids.

B) A decrease of $500,000 for Eastern equine encephalitis.

Eastern Equine Encephalitis (EEE) is a highly fatal mosquito-borne viral disease that affects the central nervous system of equids. APHIS provides funding to impacted northeastern States for EEE surveillance, testing, prevention, and research. In recent years, States have struggled to fully spend the funding provided due to a variety of factors including lack of interest and participation from industry and a discrepancy in regulatory authority from the State departments of agriculture. At the proposed funding level, States would be responsible for fully funding these activities.

(2) Field Crop and Rangeland Ecosystem Pests: A decrease of $2,974,000 ($12,000,000 and 77 FTE available in 2025).

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 doing so, it facilitates safe international trade and domestic commerce, preserves economic opportunities for U.S. farmers and ranchers, and fosters healthy ecosystems in rangelands and other areas. APHIS conducts survey and suppression activities in western States to reduce grasshopper and Mormon cricket (GMC) infestations that could cause significant economic losses for livestock producers by requiring them to buy supplemental feed or sell their livestock at reduced prices. APHIS 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 Carolina and South Carolina to protect U.S. corn production. This program directly protects more than 230,000 acres of wheat and corn (based on APHIS analysis). It indirectly protects all U.S. wheat and corn production, valued at more than $86.6 billion in calendar year 2023 (National Agricultural Statistics Service, Crop Values 2023 Summary), from the spread of KB and witchweed.

When grasshopper populations reach outbreak levels, they can decimate grasslands. APHIS' GMC program monitors and protects 661 million acres of rangeland each year. A 2012 University of Wyoming study found that healthy rangeland provides forage value worth $6.7 billion and overall benefits ranging from $10.7 to $21.2 billion. Each year, APHIS conducts surveys in western States for GMC, collecting data at 20,270 survey points in 2024, to determine where potential outbreaks could occur and where treatments might be necessary.

The program also addresses witchweed, a parasitic plant that can significantly damage corn, sorghum, and sugarcane. If witchweed were to spread throughout the Corn Belt, crop yields for corn and sorghum could decrease by 10 percent and trade in commodities from these areas could be negatively impacted.

APHIS' IFA program works to prevent human-assisted spread of this pest by requiring treatment of materials capable of harboring IFA, such as nursery stock and hay, are treated before leaving infested areas. The economic impact if IFA reached all suitable habitats in the United States where the pest could become established would be greater than $10.6 billion per year (Economic Evaluation of the Regulatory Program for Imported Fire Ants, APHIS, March 2018). APHIS will continue conducting annual surveys and other activities to manage these pests in 2026.

APHIS coordinates an annual voluntary survey of the grain delivered to elevators to check for KB across the country and conducts regulatory activities to prevent the spread of the disease from the remaining infested areas in Arizona. Based on the program's quarantine and survey data, APHIS issues export certificates that are required by countries importing U.S. wheat. These certificates demonstrate to trading partners the safety of U.S. wheat exports, retaining export markets and facilitating wheat movement into international markets. If KB funding was eliminated, the disease could enter the grain market system and directly impact 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 all or portions of 4 States to 5,832 acres in Arizona since 1996 (with 36,982 acres removed from quarantine in 2024). APHIS will continue survey and regulatory activities aimed at keeping KB from causing damage and/or trade disruptions in 2026.

Overall, base funding for the FCREP program currently supports salaries and benefits, cooperative agreements, and programmatic contracts. Other funding supports normal operating expenses such as rent, utilities, travel, supplies, and equipment to conduct program activities.

A) A decrease of $1,000,000 to eliminate funding for cogongrass.

Cogongrass is an invasive perennial weed that is a prolific seed producer and forms an extensive rhizome network underground. The wind-dispersed seeds are easily spread along rights of way encouraging population expansion. Cogongrass invades pine plantations and is believed to create chemical interference that decreases pine production. Controlling this weed is difficult because its rhizomes are drought, fire, and herbicide tolerant. APHIS provides funding to Alabama, Georgia, Mississippi, and South Carolina to address cogongrass. Cogongrass management falls outside the APHIS core mission of protecting U.S. agricultural health and is already supported by the U.S. Forest Service. Accordingly, APHIS proposes to eliminate this funding.

B) A decrease of $1,000,000 to eliminate funding for Roseau cane.

Roseau cane is an important grass species in wetland areas of the lower Mississippi Delta in Louisiana. The plant's root system provides wildlife habitat, protects the interior from storm surges, and protects riverbanks from erosion, which impacts the Mississippi River navigation channel. APHIS provides funding through cooperative agreements with Louisiana State University and the Agricultural Research Service to conduct long-term, multi-disciplinary work determining what factors are causing the Roseau cane decline. While Roseau cane is an important grass species in the lower Mississippi Delta and helps protect the Mississippi River navigation channel, it falls outside APHIS' core mission of protecting U.S. agricultural health. Accordingly, APHIS proposes to eliminate this funding.

C) A decrease of $679,000 to reduce funding for imported fire ants.

Imported fire ants (IFA) infest more than 374 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) which are all under a partial or full State quarantine. It is not possible to prevent IFA's natural spread. Current Federal regulations are designed to prevent long-distance spread of IFA through regulated items such as nursery stock. APHIS proposes to reduce funding for state cooperative agreements and focus on inspecting equipment and hay pathways, as approved treatments already address nursery stock, a key pathway for pest spread.

D) A decrease of $295,000 to reduce funding for witchweed.

Witchweed is a parasitic plant that can significantly damage corn, sorghum, and sugarcane. APHIS provides funding to combat witchweed infestations in North Carolina and South Carolina to protect more than 90 million acres of U.S. corn production. At the proposed funding level, APHIS will continue conducting surveys and control activities in these States at a reduced rate to address witchweed infestations.

(3) Specialty Crop Pests: An increase of $2,339,000 ($215,000,000 and 796 FTE available in 2025).

The Specialty Crop Pests (SCP) program protects U.S. farmers and producers of 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 prevent or mitigate impacts from invasive pests of Federal regulatory significance. These efforts promote the ability of U.S. farmers and producers to export their products; prevent damage to specialty crop production; protect natural resources, including forests and residential landscapes; and contribute to global food security. Specialty crops are of high value and are grown in all 50 States. APHIS' SCP program directly protected specialty crop production worth more than $12.7 billion in calendar year 2023 and indirectly protected additional specialty crop production valued at nearly $7.7 billion by preventing the spread of these damaging pests and diseases to new areas (APHIS internal analysis based on National Agricultural Statistics Service data). APHIS is currently using SCP resources to address the following pests and diseases: exotic fruit flies, a variety of citrus pests and diseases, pale cyst nematode (PCN), navel orangeworm (NOW), European grapevine moth (EGVM), glassy-winged sharpshooter (GWSS), *Phytophtora ramorum*, and spotted lanternfly (SLF), among others.

The SCP program partners with affected industries, States, Tribes, academic institutions, and other Federal agencies to deliver domestic programs. Additionally, the program works with its counterparts in foreign countries to address pest risks offshore. For example, the SCP program works with Mexico, Guatemala, and Belize to mitigate the risk of exotic fruit flies entering the United States. The program has kept the United States free of Mediterranean fruit fly (Medfly) and Mexican fruit fly (Mexfly) for many years by conducting preventive releases of sterile insects to disrupt normal population growth in at-risk areas; detecting and responding to outbreaks when they occur; maintaining a barrier against the natural spread of the Medfly in Mexico and Central America; and developing advanced methods for survey and control. Medfly has a host list that includes 300 cultivated and wild fruits. The Mexfly also has a wide-ranging host list and presents a particular threat to the Texas citrus industry due to its proximity to infested areas in Mexico. Increasingly, tephritid fruit flies of the genus Bactrocera pose a threat, with several outbreaks of the Oriental fruit fly (the most commonly intercepted *Bactrocera* species in the United States) over the past decade and outbreaks of two similar species in the United States—tau fruit fly and Queensland fruit fly in 2023. APHIS and cooperators maintain 160,000 fruit fly traps in vulnerable areas of the United States to ensure that such introductions of exotic fruit flies are quickly detected, enabling fast and effective response efforts. In 2025, APHIS is addressing outbreaks of exotic fruit flies in Texas, California and increased Medfly detections in

Mexico and Guatemala as well as continued risks in Florida and other vulnerable areas. Without the program's efforts to detect and eradicate these outbreaks when they occur, many important crops would become impossible to grow due to fruit fly infestations. APHIS will continue activities to prevent, detect and respond to any outbreaks that occur in 2026.

APHIS also works with citrus producing States and industry groups to support industry's ability to grow and market U.S. citrus despite the presence of devastating diseases such as citrus greening, also known as Huanglongbing (HLB). Through the Citrus Health Response Program, APHIS supports cooperators in citrus-producing States with on-the-ground operations, such as surveys, regulatory inspections, and outreach to affected growers and the public, as well as methods development activities. APHIS conducts inspections of Florida citrus shipments destined for export to the European Union and other countries, allowing citrus producers to take advantage of export opportunities. APHIS also conducts survey and treatment activities for citrus pests and diseases in Mexico, working to coordinate the timing of treatments for pests such as Asian citrus psyllid along both sides of the U.S. border to maximize the effectiveness of pest suppression activities. Because of the ongoing threat that HLB poses, APHIS, other Federal agencies, State partners, and the citrus industry have worked together on the HLB Multi-Agency Coordination (MAC) group since 2013, to identify and implement tools to combat the disease. By funding work to bridge the gap between research and field deployment, the HLB MAC Group speeds implementation of practical tools that can aid the citrus industry to combat HLB. Since 2019, the HLB MAC group has initiated a grower-collaborative approach that brings researchers and growers together to generate data that will serve as the foundation for grower-specific guidance on best management practices for HLB. The solutions found through this effort will continue to help citrus growers manage the disease while research into long-term solutions for HLB continues. APHIS will continue to address HLB and other citrus diseases in 2026.

Federal response activities take place in concentrated areas where the infestations occur (e.g., PCN in Idaho or exotic fruit fly outbreaks in areas of California, Florida, or Texas), but also work to protect all at-risk States producing specialty crops. For example, while the SCP program works to address the PCN in Idaho, it also conducts nationwide surveys for the pest to demonstrate to trading partners that potato-producing areas outside of the quarantined area are not affected by PCN, protecting fresh potato export markets worth nearly $340 million in 2023 (Foreign Agricultural Service Global Agricultural Trade System Database). The program also addressed plum pox virus (PPV), a devastating viral disease of stone fruit, in Michigan, New York, and Pennsylvania. USDA declared the United States free of PPV in October 2019. APHIS has completed surveys for PPV and will maintain PPV-preparedness by ensuring that the United States has certified laboratories and diagnosticians for rapid response activities, protecting more than 1 million acres of stone fruit across the United States. Without the SCP program, trading partners might not accept a variety of U.S. fruits and vegetables. The value of trade in specialty crops that could potentially be disrupted without the SCP program was $3.8 billion in 2023, according to an internal APHIS report using data from the Foreign Agricultural Service's Global Agricultural Trade System.

Through the SCP program, APHIS also addresses SLF, a serious pest of grapes, apples, hops, walnut trees, and other hardwood trees. APHIS and cooperators are using an area-wide strategy that includes expanded surveillance, control, and outreach activities for this pest. Agricultural producers across the country are concerned about the pest's spread. There is a strong correlation between new SLF populations and major transportation pathways, such as railroads and interstate corridors. APHIS conducts targeted treatments and, in some areas, removes SLF's preferred host plant, tree of heaven, from transportation hubs with the aim of reducing the risk of SLF spreading to new areas. APHIS and cooperators also continue to conduct treatments on the leading edge of the infestation and to eradicate isolated infestations. SLF is particularly damaging in vineyards and preventing it from spreading to new areas and continuing to develop new treatment methods will protect grape production across the country.

U.S grape production was worth approximately $6.8 billion in calendar year 2023 (NASS Noncitrus Fruits and Nuts Summary, May 2024).

APHIS partnered with the State of California and grape growers to eradicate EGVM and continues to prevent the spread of GWSS into other grape-producing areas. APHIS declared the eradication of EGVM in 2016, after an intensive, 7-year cooperative effort. The program conducted three additional years of post-eradication surveys, ending in 2019. With EGVM eradicated, APHIS expanded the surveys in 2024, using a multi-lure trap that targets four grape pests in addition to EGVM as well as monitor California grape-growing areas for SLF, to ensure the pest would be detected early if it is introduced. The GWSS program began in 2000, to limit the spread of GWSS, a vector of Pierce's disease, which is deadly to grapevines and costly to growers and the industry. Through survey, treatment, and inspection, the program has restricted GWSS to southern California, protecting over half of the grape growing acreage in California. APHIS will continue working with partners in California to prevent the spread of GWSS in 2026 and is expanding EGVM surveys to include additional pests in California.

APHIS partnered with tree nut industries, as well as Arizona and California State cooperators, to develop sterile insect technology to address NOW, a serious pest of pistachios, almonds, and walnuts. In 2024, APHIS produced and released 750,000 sterile NOW over pistachio and almond orchards participating in an area-wide program targeting NOW. APHIS and its partners' goal is to integrate and expand SIT with other integrated pest management strategies available to producers. In 2026, APHIS will continue working with cooperators and producers to manage NOW and help protect nut production worth approximately $6.9 billion for the 2023/2024 season (Economic Research Service Fruit and Tree Nut Yearbook Tables).

Overall, base SCP program funding currently supports salaries and benefits, cooperative agreements, as well as other normal operating expenses such as supplies, equipment, and rent, to support program activities.

A) An increase of $2,339,000 for fruit fly exclusion and detection activities.

APHIS mitigates the risk of exotic fruit flies through a combination of early detection, rapid response to outbreaks, and prevention of fruit fly establishment through the release of sterile insects that mate with wild flies and prevent normal population growth as well as international activities in Mexico and Central America aimed at stopping the natural, northward spread of Medfly and Mexfly. The program has domestic operations in Texas, California, Florida, and New York and detection networks in other States with environments and host material suitable for fruit flies, and international operations in Belize, Guatemala, and Mexico. APHIS suppresses fruit fly populations in these countries to reduce pressure on the United States and has sterile fruit fly production facilities that provide sterile insects for U.S. and international operations. In Guatemala, the program produces more than 1 billion sterile flies per week for release in the United States and locally in the program area. This large program continues to face both cost increases and heightened risks. APHIS continues to address unprecedented outbreaks in California, Texas, and internationally in Guatemala and Mexico that threatens to move northward without action to eradicate it. This funding will support increasing costs and activities in the domestic program, including addressing higher risks that led to the unusually large number of outbreaks in Texas and California. Without additional funding, the program will have to reduce surveillance and sterile insect release, resulting in risk of outbreaks not being prevented or delayed detection, which would allow them to grow larger and more expensive to control.

(4) Tree and Wood Pests: A decrease of $350,000 ($59,000,000 and 292 FTE available in 2025).

America's forests are valuable resources that provide jobs and recreation opportunities and create habitat for wildlife. Through the Tree and Wood Pests (TWP) program, APHIS addresses

devastating pests such as the Asian longhorned beetle (ALB), emerald ash borer (EAB), spongy moth, formerly referred to as European gypsy moth (EGM), and flighted spongy moth complex formerly referred to as Asian gypsy moth. Numerous native hardwood tree species that are common throughout U.S. forests and urban landscapes are hosts to these pests. When forest pests like ALB kill large numbers of trees in urban and suburban areas, they can cause tremendous, wide-ranging impacts to communities, landscapes, and commerce. In addition, exports of forest products such as logs and timber could be at risk due to trade restrictions put in place by other countries.

Nationwide, APHIS programs protect 596 million acres of forested land by preventing the spread of damaging pests. Without Federal funding, forest pests would spread more rapidly throughout the United States, and responding to newly introduced pests would become increasingly difficult. The value of forest products that APHIS protects is over $200 billion (U.S. Forest Service 2024).

APHIS cooperates with State and local agencies and organizations in 48 States to conduct various activities to manage and, when feasible, eradicate forest pests. These activities include conducting surveys, 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.

In 2026, APHIS will continue addressing ALB outbreaks in Massachusetts, New York, Ohio, and South Carolina, and continue pursuing biological control options as a long-term EAB management strategy. In addition, APHIS, alongside the Forest Service and the EGM Slow-the-Spread Foundation, continues its work to slow the spread of EGM and eradicate isolated populations, keeping this pest from becoming a larger issue.

Overall, base funding for the TWP program currently supports salary and benefits, contracts, and cooperative agreements, as well as other normal operating expenses such as rent, supplies, travel, and equipment to conduct program activities.

A) A decrease of $200,000 to reduce funding for emerald ash borer.

Emerald ash borer (EAB) has been detected in 35 States and the District of Columbia. Following the deregulation of EAB in 2019, APHIS has focused on producing and releasing biological control agents as a long-term management strategy. At the proposed funding level, APHIS will continue to produce the biological control agents and interested States will assume the release of these biological control agents.

B) A decrease of $150,000 to reduce funding for spongy moth.

Spongy moth is established in all or parts of 20 northeastern, mid-Atlantic, and Midwestern States, as well as the District of Columbia. APHIS and State cooperators conduct regulatory activities and public outreach in the quarantine area to prevent the human-assisted spread of the pest and establishment of spongy moth populations in non-quarantine areas. Spongy moth also spread naturally into areas bordering the quarantined zone. APHIS and State partners monitor the transition zone along the 1,200-mile-long border of the quarantine area to ensure that newly infested areas are inspected through trapping and added to the quarantined zone and regulated effectively. At the proposed funding level, APHIS will partially lower spongy moth survey frequencies and pest identification support.

(5) Wildlife Damage Management: An increase of $3,727,000 and 5 FTE ($122,500,000 and 623 FTE available in 2025).

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 livestock from predators, manages damage from invasive species, such as feral swine and brown tree snakes; conducts a national rabies management program; and manages damage, conflicts, and diseases caused by various wildlife species, such as beavers, double-crested cormorants, and other migratory birds. APHIS conducts these activities under the authority of the Animal Damage Control Act, which allows the Agency to control mammals and birds that are a nuisance or serve as reservoirs for zoonotic diseases. These activities benefit farmers, ranchers, other private landowners, businesses, and Federal, State, Tribal, county, and city government entities. APHIS carries out these activities with appropriated funding the Agency receives as well as funding from Federal, State, and local cooperators.

APHIS protects resources and safeguards human health and safety from wildlife damage by providing both technical and direct control assistance upon request. For example, the Agency will provide assistance if a rancher is experiencing predators killing their cattle and sheep, or if a farmer is having trouble with fish-eating birds damaging their catfish and other aquaculture crops. This assistance could include providing advice, information, recommendations, and materials (and in some cases the necessary equipment) to the producer, farmer, or rancher to resolve the wildlife-caused damage themselves. APHIS also maintains specially trained staff around the nation to provide direct control assistance, which can be necessary when the problem cannot be resolved through technical assistance alone. APHIS implements integrated approaches, consisting of multiple and varied methods, to protect resources from economically devastating damages caused by wildlife and invasive species.

APHIS' wildlife disease biologists provide technical assistance, conduct surveillance, and actively assist in the monitoring of 30 wildlife diseases, pathogens, and syndromes, as well as collaborate with domestic and international academic and research institutions regarding wildlife disease surveillance. Ongoing surveillance of avian influenza in wild bird populations and diseases in feral swine is critical to manage and determine threats to the U.S. poultry and swine industries, respectively.

In 2024, APHIS was directed to spend $500,000 to increase activities related to the management of feral swine; $500,000 to manage wildlife livestock conflict, particularly as it pertains to sheep and goats in western States; and $500,000 to manage invasive catfish in the Chesapeake Bay. APHIS was only provided an additional $543,000 to conduct these activities. APHIS subsequently reduced funding available for other damage management activities to comply with the 2024 directives.

Overall, base funding for the WDM program currently supports salary and benefits, supplies, and equipment, as well as other normal operating expenses such as rent, security, and travel, to conduct program activities.

A) An increase of $3,727,000 and 5 FTE for the National Rabies Management Program.

APHIS' National Rabies Management Program controls and eliminates rabies virus variants in terrestrial carnivore populations using oral rabies vaccination (ORV) baits. APHIS is the lead Federal agency, working cooperatively with Federal, State, universities, and other partners to prevent the spread and reduce the prevalence of rabies in specific wildlife populations. Each year, APHIS and cooperators distribute ORV baits to immunize target wildlife populations within control zones to prevent rabies spread. When a breach in an ORV zone occurs, APHIS and its partners respond to prevent the spread into new areas and to eliminate the local outbreak. When this occurs, APHIS increases ORV bait density and distribution for three consecutive years to restore the integrity of the ORV zone preventing spread. APHIS has been able to support breaches in recent years, however, APHIS is experiencing increased operating costs (e.g., bait, aircraft, fuel), depletion of the ORV bait stockpile, and greater occurrences of rabies cases beyond ORV zones making it difficult to operate at the current funding level. With this additional investment, APHIS will be able to

cover increased operating costs and maintain a sufficient stockpile of ORV baits, ensuring rapid response to rabies cases and management of the ORV zone.

B) A redirection of $500,000 for wildlife damage management activities.

The 2024 Appropriations Act directed APHIS to increase activities by $500,000 related to invasive catfish in the Chesapeake Bay. In 2026, APHIS will use this funding to address the higher priority programs supported by the Wildlife Damage Management line item.

(6) Emergency Preparedness and Response program: A decrease of $250,000 ($44,500,000 and 197 FTE available in 2025).

The Emergency Preparedness and Response (EPR) program improves APHIS' capability to prevent, prepare for, respond to, and recover from animal health emergencies. This program's goal is to respond to animal health events within 24 hours from the time APHIS determines that a federal emergency response is needed to manage an agricultural outbreak. It develops strategies, policies, and procedures for incident management and response coordination that meet national and international standards. The program participates in joint Federal, State, and local animal health and all-hazards exercises to improve response capabilities. In addition, this program works with major commodity groups to ensure the continuous movement of livestock products during animal health emergencies. The EPR program funds activities that enable APHIS to achieve a high state of readiness and be able to respond rapidly and effectively to emergencies, thus lessening the impact of those events on producers, consumers, taxpayers, and the economy. Also, through this program, APHIS and the Centers for Disease Control and Prevention (CDC) jointly manage the Federal Select Agent Program (FSAP), which oversees the possession, use, and transfer of biological select agents and toxins that have the potential to pose a severe threat to public, animal, or plant health, or to animal or plant products.

The EPR program provides national leadership and regional coordinators in the 10 Federal Emergency Management Agency (FEMA) regions for Emergency Support Function #11: Agriculture and Natural Resources. These coordinators work with local, State, Tribal, Territorial, Insular Area Governments, and other Federal agencies to prepare for and respond to emergency incidents and disasters. In addition, APHIS provides support to FEMA for the care of pets and service animals during disasters. The EPR program also maintains the Response Information System dispatchers, who coordinate the delivery of emergency resources, as well as the APHIS security coordinator program and the Voluntary Emergency Ready Response Corps program, continuity planning, and Geographic Information System capability during incidents. The program also aids the Agency response efforts for animal diseases, natural disasters, hazardous spills, and wildfires.

In 2024, APHIS continued a Ready Response Corps pilot program to expand its emergency response capacity and alleviate the strain on the Agency's workforce during animal disease emergencies. The Ready Response Corps is designed to bolster APHIS' ability to address animal disease threats while continuing to achieve its mission. Highly trained professionals will deploy and support national level response in areas where large livestock and poultry operations exist, allowing for increased response capacity and close collaboration with State animal health officials and industry partners.

APHIS' National Preparedness and Incident Coordination Center (NPIC) develops animal health emergency management guidelines to protect U.S. animal agriculture through collaborative, science- and risk-based strategies. These guidelines are based on the National Incident Management System and National Response Framework. APHIS sustains its animal health readiness capacity by maintaining 5 Incident Management Teams (IMT) of approximately 30 volunteer first-responders per team. At any time, one of these teams is ready to deploy anywhere to respond rapidly to animal health disease events in support of incident management. IMT members participate in training and workshops on the Incident Command

System, animal disease, and information technology. Many of these trainings and workshops are hosted by the NPIC National Training and Exercise Program (NTEP). The NTEP improves preparedness, mitigation, and response to animal disease emergencies and is informed by priorities of APHIS' stakeholders. It creates dynamic, real-world learning scenarios to build response capabilities of emergency responders and maintain response readiness.

APHIS and the CDC jointly administer the select agents and toxins regulations as the FSAP. Any individual or entity possessing, using, or transferring select agents or toxins must register with APHIS if the agent affects plant or animal health, or the CDC if it affects human health. Facilities must meet biosafety requirements to ensure the safety and security of select agents. APHIS and CDC inspect facilities that possess, use, or transfer select agents to ensure regulatory compliance. APHIS' Division of Agricultural Select Agents and Toxins (DASAT) ensures that registered facilities promptly address non-compliances, and DASAT takes corrective actions. DASAT also works with the Federal Bureau of Investigation, which conducts security risk assessments to evaluate individuals requesting access to select agents and toxins. In addition, FSAP is coordinating with representatives from APHIS and the Agricultural Research Service overseeing the stand-up of the National Bio and Agro-Defense Facility in Kansas to provide guidance on the select agent registration process. DASAT also supports entities during hazardous events to ensure the safety and security of select agents and toxins.

Overall, base funding for Emergency Preparedness and Response the program supports salaries and benefits, equipment, contracts, and agreements, as well as other normal operating costs, such as travel and supplies to conduct program activities.

A) A decrease of $250,000 for the AgDiscovery program.

APHIS' AgDiscovery program partners with universities to provide secondary school students with educational opportunities to explore careers in plant and animal science, wildlife management, and agribusiness. In 2022, APHIS received funding to expand this outreach program. APHIS proposes to eliminate this funding from the Emergency Preparedness and Response line item.

(7) APHIS Information Technology Infrastructure: An increase of $5,000,000 ($4,000,000 available in 2025).

The APHIS Information Technology Infrastructure (AITI) program provides funding for the hardware, software (including licensing and support costs), and telecommunications infrastructure that gives the agency automation tools, secure Internet access, and access to mission-critical programs and applications. Funding for this program supports the stable and secure information infrastructure for those mission-critical requirements and the day-to-day business of APHIS, to include interactions with the public, emergency services, and scientific operations. The AITI priorities are to continually improve sharing of information across the Agency and Federal partners; improve coordination and accessibility of information by the public and other stakeholders; sustain automated processes and electronic resources available to enable APHIS employees to provide day-to-day services; support automation and data needed to meet emergency response requirements; and improve APHIS' cyber-security posture.

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.

In support of the Federal Information Technology Acquisition Reform Act and the USDA Data Center Optimization Initiative, APHIS completed migration of all business applications from on-

site data centers to remote cloud services as of April 2019. This migration decreased the Agency's carbon footprint by using a more energy efficient infrastructure, improved data management, increased the speed of application development, and improved cost control measures.

APHIS continues to review the security posture for the APHIS Enterprise Infrastructure workstations, servers, network components, and major applications on an annual basis to ensure all systems are kept current with the latest security patches and system security configurations. In 2022-2024, the AITI program maintained the current version of National Institute of Standards and Technology and Federal Information Security Management Act testing standards and supported audits and inspections on all High Value Assets that dramatically improved the agency's security posture by reducing vulnerabilities. In addition, the APHIS IT security monitoring system continues to track and mitigate malicious attempt of intrusion by foreign actors as well as the improper use of personally identifiable information data stored on APHIS systems, helping to protect confidential information that could potentially identify a specific individual. In addition to protecting our systems from malicious access, accessibility to IT tools is vital to the operations of the Agency, thus the AITI program helps to sustain important identity management services.

In 2026, AITI will continue to maintain its 99.99 percent (less than one hour a year) availability for its key computing systems ensuring increased access to the public and other stakeholders. In addition, AITI will continue to improve its cybersecurity posture, enhance the customer experience by supporting modernization of critical systems, and support data management standards that improve our ability to rapidly detect and respond to animal and plant emergencies working together with other Federal and Industry partners.

Overall, AITI expenditures fund day-to-day operations for the Agency's IT infrastructure, including software license renewals and support, as well as other normal operating costs, such as supplies and equipment.

A) An increase of $5,000,000 for Scientific Computing and Artificial Intelligence.

APHIS is proposing an increase of $5,000,000 to build on initial investments addressing challenges with outdated technology at laboratories and other facilities; continue installing a shared high-performance computing (HPC) environment to manage laboratory data; and initiate the implementation of artificial intelligence technology within APHIS. Newer technologies, such as artificial intelligence, are critical to address emergency outbreak response efforts. For example, these technologies make genomic data readily available for time sensitive diagnostic testing and allow the Agency to analyze large and more complex data sets in real time to support emergency response efforts.

At the increased funding level, APHIS will continue investments in innovative capabilities, such as the next generation HPC environment, network services for scientific instrumentation at APHIS facilities throughout the country, access to high-speed government and commercial research networks, high-capacity data management for large volume scientific data, and artificial intelligence. These investments are critical to meeting scientific requirements; collaborating with government, universities, and commercial sector partners; and supporting early warning systems that make APHIS a critical partner in safeguarding American agriculture. This additional funding will allow APHIS to quickly scale up needed computing resources during times of peak usage, such as emergency response situations when timely access to testing and diagnostics information is critical for detecting, managing, and eradicating pests and diseases.

GEOGRAPHIC BREAKDOWN OF OBLIGATIONS AND FTES

Table APHIS-12. Discretionary Geographic Breakdown of Obligations and FTEs (thousands of dollars, FTEs)

State/Territory/Country	2023 Actual	FTE	2024 Actual	FTE	2025 Estimated	FTE	2026 Estimated	FTE
Alabama	$8,356	32	$12,590	38	$13,000	40	$11,000	32
Alaska	814	3	1,296	4	1,300	5	1,200	4
Arizona	11,234	76	13,892	78	14,000	81	11,000	44
Arkansas	5,432	25	7,864	25	8,000	30	6,000	26
California	71,805	110	209,144	139	210,000	146	211,000	121
Colorado	128,094	373	130,498	364	132,000	371	110,000	253
Connecticut	2,047	12	2,692	14	3,000	16	2,400	14
Delaware	1,409	6	1,610	8	7,000	26	4,000	21
Florida	52,066	214	46,837	229	47,000	240	48,000	144
Georgia	10,366	49	12,236	62	12,000	65	10,000	50
Hawaii	26,976	307	27,899	281	28,000	300	28,000	285
Idaho	9,137	56	8,774	56	9,000	60	7,500	47
Illinois	5,528	29	5,131	30	8,000	35	6,000	25
Indiana	6,674	26	5,722	23	22,000	50	19,000	45
Iowa	134,557	348	192,108	377	195,000	385	200,000	304
4Kansas	13,159	34	45,522	76	48,000	85	50,000	49
Kentucky	5,650	31	5,669	27	6,000	32	5,000	27
Louisiana	6,888	31	7,295	34	7,000	35	6,000	26
Maine	3,827	9	1,654	7	2,000	8	1,600	7
Maryland	243,876	735	226,465	778	225,000	785	195,000	537
Massachusetts	16,778	89	15,998	83	16,000	90	14,000	66
Michigan	7,682	50	111,414	66	50,000	60	30,550	48
Minnesota	72,695	182	151,953	212	135,000	220	120,000	133
Mississippi	14,024	45	12,992	40	13,000	45	11,000	35
Missouri	18,109	58	17,786	67	18,000	70	16,000	58
Montana	9,809	42	12,261	46	12,500	50	10,000	32
Nebraska	16,599	18	4,248	18	4,500	20	3,000	14
Nevada	3,589	19	3,760	21	4,000	24	3,000	20
New Hampshire	17,458	22	20,575	24	21,000	25	19,000	20
New Jersey	5,262	28	5,481	32	6,000	36	3,000	20
New Mexico	5,921	36	7,718	35	7,700	40	4,000	24
New York	36,984	139	39,713	141	40,000	150	38,000	118
North Carolina	60,392	179	54,159	185	66,400	195	66,000	125
North Dakota	6,967	18	6,248	14	6,000	15	5,000	10
Ohio	41,968	77	108,828	92	109,000	100	95,000	75
Oklahoma	6,986	38	6,892	40	10,000	46	8,000	35
Oregon	5,552	21	11,672	24	8,000	24	6,000	16
Pennsylvania	32,134	88	19,282	73	20,000	80	17,000	61
Rhode Island	1,264	1	3,162	5	3,000	5	2,000	4
South Carolina	16,378	43	23,629	43	20,000	44	16,000	29
South Dakota	35,651	15	50,446	22	30,000	22	25,000	20
Tennessee	13,648	53	9,989	48	8,000	48	6,000	35
Texas	75,253	347	99,706	363	100,000	386	108,000	325
Utah	36,607	49	13,164	37	20,000	51	17,000	36
Vermont	1,728	9	1,680	8	2,000	9	2,000	8
Virginia	18,123	64	19,657	71	20,000	75	12,000	33
Washington	12,223	31	8,410	35	9,000	39	7,000	27
West Virginia	3,053	18	3,220	19	3,000	20	3,000	17
Wisconsin	18,011	27	14,088	27	14,000	30	8,000	15
Wyoming	4,639	24	5,308	27	5,000	30	4,000	22
U.S. TERRITORIES:								
District of Columbia	31,489	77	26,597	66	28,000	71	19,000	35

State/Territory/Country	2023 Actual	FTE	2024 Actual	FTE	2025 Estimated	FTE	2026 Estimated	FTE
Guam	369	2	477	1	500	1	500	1
Puerto Rico	16,415	158	16,664	143	20,000	162	16,000	140
Virgin Islands	1,199	5	664	5	700	6	800	4
INTERNATIONAL REGIONS								
AFRICA:								
Egypt	1,014	2	912	1	900	1	900	1
Senegal	339	-	511	1	500	1	500	1
South Africa	740	1	925	2	900	2	900	2
Other	138	-	449	1	500	1	500	1
ASIA/PACIFIC:								
China	1,380	2	1,508	2	1,500	2	1,000	2
Japan	1,566	3	1,428	3	1,500	3	1,000	2
South Korea	781	-	661	1	700	1	700	1
Other	4,260	7	4,317	9	4,300	9	4,300	9
CARIBBEAN:								
Dominican Republic	10,464	9	11,019	7	10,000	7	10,000	7
Other	226	-	242	-	200	-	200	-
CENTRAL AMERICA:								
Guatemala	25,415	3	33,448	4	40,000	5	30,000	4
Panama	16,962	4	69,292	7	80,000	7	80,000	7
Other	487	-	458	-	500	-	500	-
EUROPE/NEAR EAST:								
Austria	373	-	645	-	650	-	650	-
Belgium	1,910	2	2,058	3	2,100	3	2,000	3
Other	1,117	2	1,881	3	2,000	3	1,800	3
NORTH AMERICA:								
Canada	2	-	39	-	50	-	50	-
Mexico	8,136	4	12,230	5	10,000	5	10,000	5
SOUTH AMERICA:								
Brazil	779	2	658	1	700	1	700	1
Chile	202	-	245	-	250	-	250	-
Other	2,064	2	1,685	3	2,000	3	2,000	3
Obligations	1,491,212	4,622	2,017,349	4,837	1,986,850	5,138	1,795,500	3,774
Lapsing Balances	981	478	1,745	442	-	-	-	601
Rescinded Balances	-	-	-5,000	-	-	-	-	-
Balance Available, EOY	1,016,169	879	1,342,765	784	1,191,112	947	543,262	1,343
Total, Available	2,508,362	5,979	3,356,859	6,063	3,177,962	6,085	2,338,762	5,718

Table APHIS-13. Mandatory Geographic Breakdown of Obligations and FTEs (thousands of dollars, FTEs)

State/Territory/Country	2023 Actual	FTE	2024 Actual	FTE	2025 Estimated	FTE	2026 Estimated	FTE
Alabama	$2,164	13	$1,658	6	$1,700	6	$1,700	6
Alaska	129	-	174	-	175	-	175	-
Arizona	3,371	16	4,270	17	4,500	19	4,500	18
Arkansas	2,201	11	1,241	5	1,250	5	1,250	5
California	44,706	98	42,676	112	44,000	125	44,000	105
Colorado	9,521	49	19,495	43	20,000	45	20,000	44
Connecticut	780	5	659	3	700	4	700	4
Delaware	1,673	4	2,324	9	2,500	10	2,300	9
Florida	23,832	141	29,746	162	31,000	175	35,000	168
Georgia	12,072	57	10,917	64	11,000	66	9,000	55
Hawaii	6,791	27	7,005	24	7,000	24	8,000	24
Idaho	1,586	3	2,367	9	2,500	10	2,600	10
Illinois	2,658	16	2,367	14	2,500	15	3,000	15
Indiana	1,183	2	1,649	2	2,000	3	2,100	3
Iowa	11,160	3	10,936	9	11,000	10	11,500	9
Kansas	589	2	1,099	3	1,100	3	1,500	3
Kentucky	927	3	1,443	3	1,500	3	1,600	3
Louisiana	1,463	9	1,633	11	2,000	13	2,100	13
Maine	925	1	667	1	700	1	700	1
Maryland	75,842	315	75,601	274	77,000	299	74,665	270
Massachusetts	2,893	11	3,515	16	3,600	16	4,000	16
Michigan	2,962	13	2,512	14	3,000	16	3,000	15
Minnesota	10,452	40	10,251	8	10,500	9	10,000	8
Mississippi	1,578	4	1,471	3	1,500	3	1,500	3
Missouri	1,667	6	1,876	5	2,000	6	2,000	6
Montana	653	2	572	2	700	3	700	3
Nebraska	389	3	679	4	700	4	700	4
Nevada	369	1	699	3	700	3	500	2
New Hampshire	225	0	134	0	150	0	150	0
New Jersey	4,480	23	6,065	25	6,100	25	6,500	25
New Mexico	653	4	1,302	4	1,500	6	1,600	5
New York	25,197	45	16,396	54	17,000	58	17,000	55
North Carolina	31,364	98	26,197	98	27,500	110	32,000	105
North Dakota	560	2	413	2	500	2	600	2
Ohio	2,892	5	3,463	8	3,800	10	4,500	9
Oklahoma	2,047	7	1,418	3	1,500	3	2,000	3
Oregon	2,442	4	2,673	6	3,000	8	2,800	7
Pennsylvania	6,150	21	5,961	24	6,100	25	5,500	23
Rhode Island	253	-	380	0	400	0	400	0
South Carolina	3,099	14	2,804	14	3,000	15	3,500	14
South Dakota	1,044	0	114	1	200	1	250	1
Tennessee	2,153	4	1,993	3	2,000	3	2,200	3
Texas	16,528	73	17,720	86	18,200	91	22,000	88
Utah	308	1	526	2	600	2	700	2
Vermont	622	1	1,025	3	1,200	4	1,500	4
Virginia	18,081	8	20,549	19	21,000	21	22,000	20
Washington	8,065	22	9,505	32	10,000	35	9,500	33
West Virginia	976	3	1,625	6	1,700	7	1,500	6
Wisconsin	1,400	2	1,998	5	2,000	6	1,500	5
Wyoming	158	1	314	1	400	1	500	1
U.S. TERRITORIES:								
District of Columbia	6,029	16	16,344	18	16,500	19	16,000	18
Guam	743	3	1,610	3	1,650	3	1,800	3
Puerto Rico	6,971	53	7,617	65	7,700	67	8,000	63
Virgin Islands	223	2	189	1	200	1	200	1
INTERNATIONAL REGIONS								
AFRICA:								
Egypt	-	-	4	-	4	-	4	-
Senegal	-	-	6	-	6	-	6	-
South Africa	-	-	3	-	3	-	3	-
Other	39	-	2	-	2	-	2	-
ASIA/PACIFIC:								

State/Territory/Country	2023 Actual	FTE	2024 Actual	FTE	2025 Estimated	FTE	2026 Estimated	FTE
China	40	-	22	-	20	-	20	-
Japan	173	-	283	-	280	-	300	-
South Korea	2	-	1	-	1	-	1	-
Other	11	-	21	-	20	-	20	-
CARIBBEAN:								
Dominican Republic	80	-	150	-	150	-	150	-
Jamaica	2	-	-	-	-	-	-	-
CENTRAL AMERICA:								
Costa Rica	506	-	605	-	600	-	600	-
Guatemala	376	-	-	-	-	-	-	-
EUROPE/NEAR EAST:								
Austria	-	-	3	-	3	-	3	-
Belgium	-	-	16	-	10	-	10	-
France	4	-	1	-	1	-	1	-
Germany	65	-	41	-	40	-	40	-
Other	127	-	84		80		80	
NORTH AMERICA:								
Canada	169	-	108	-	100	-	100	-
Mexico	1,442	-	1,486	-	979	-	1,000	-
SOUTH AMERICA:								
Argentina	7	-	-	-	-	-	-	-
Brazil	103	-	71	-	70	-	70	-
Chile	36	-	5	-	5	-	5	-
Colombia	75	-	167	-	170	-	170	-
Peru	75	-	141	-	150	-	150	-
Other	-	-	-	-	-	-	-	-
Obligations	370,532	1,266	391,058	1,308	403,419	1,419	415,725	1,318
Lapsing Balances	865	139	73	35	-	-	-	-
Balance Available, EOY	323,795	387	255,334	474	281,464	471		721
Total, Available	695,192	1,792	646,465	1,817	684,883	1,890	415,725	2,039

CLASSIFICATION BY OBJECTS

Table APHIS-14. Classification by Objects Discretionary (thousands of dollars)

Item No.	Item	2023 Actual	2024 Estimated	2025 Estimated	2026 Estimated
	Personnel Compensation:				
	Washington D.C.	$94,223	$101,236	$115,000	$100,000
	Personnel Compensation, Field	315,444	338,922	345,000	300,000
11	Total personnel compensation	409,667	440,158	460,000	400,000
12	Personal benefits	163,853	174,409	178,000	160,000
13.0	Benefits for former personnel	492	354	2,000	350
	Total, personnel comp. and benefits	574,012	614,921	640,000	560,350
	Other Objects:				
21.0	Travel and transportation of persons	28,753	31,463	25,000	24,000
22.0	Transportation of things	3,662	3,214	4,000	4,000
23.1	Rental payments to GSA	40,140	39,662	35,000	35,000
23.2	Rental payments to others	7,626	9,637	10,000	10,000
23.3	Communications, utilities, and misc. charges	9,793	5,130	6,000	6,000
24.0	Printing and reproduction	842	514	500	500
25.1	Advisory and assistance services	266,818	365,123	318,054	352,454
25.2	Other services from non-Federal sources	68,269	75,822	87,000	119,000
25.3	Other goods and services from Federal sources	93,107	143,073	140,000	140,000
25.4	Operation and maintenance of facilities	965	799	800	800
25.5	Research and development contracts	3,778	3,677	3,000	3,000
25.6	Medical care	54	93	100	100
25.7	Operation and maintenance of equipment	61,690	39,299	40,000	40,000
26.0	Supplies and materials	43,202	48,968	48,000	48,000
31.0	Equipment	45,789	21,798	25,000	25,000
32.0	Land and structures	1,023	427	500	500
41.0	Grants, subsidies, and contributions	7,329	11,228	10,000	10,000
42.0	Insurance Claims and Indemnities	232,072	600,467	593,896	416,796
43.0	Interest and Dividends	5	4	-	-
	Total, Other Objects	914,918	1,400,396	1,346,850	1,235,150
99.9	Total, new obligations	1,488,930	2,015,317	1,986,850	1,795,500
	DHS Building Security Payments (included in 25.3)	$7,990	$7,669	$7,677	$7,761
	Information Technology Investments:				
	Major Investment 1 Animal Disease Traceability Information System (ADTIS)				
	External Labor (Contractors)	$2,750	$935	$1,368	$1,434
25.2	Outside Services (Consulting)	30	-	-	-
	Total Major Investment 1	2,780	935	1,368	1,434
	Major Investment 2 Certif, Accred, Reg, Permitting & Other Lics (CARPOL)				
11	Internal Labor	31	-	-	-
	External Labor (Contractors)	12,938	8,845	5,700	5,871
25.2	Outside Services (Consulting)	48	60	50	52
	Total Major Investment 2	13,017	8,905	5,750	5,923
	Major Investment 3 National Bio and Agro Defense Facility (NBAF)				
	External Labor (Contractors)	-	5,491	3,000	3,000
25.2	Outside Services (Consulting)	3,229	1,175	4,545	4,360
	Total Major Investment 3	3,229	6,666	7,545	7,360
	Mission Area Non-Major Investment Totals	50,669	41,823	54,473	59,920
	Mission Area Standard Investment Totals	89,629	21,207	94,580	104,038
25.3	Mission Area WCF Transfers	56,313	67,295	59,994	62,169

Item No.	Item	2023 Actual	2024 Estimated	2025 Estimated	2026 Estimated
	Total Non-Major Investment	196,611	130,325	209,047	226,127
	Total IT Investments	215,637	146,831	223,710	240,844
	Cybersecurity				
	Human Capital	-	$14	$8	$8
	Identify	$1,681	592	630	650
	Protect	2,218	1,498	1,705	2,325
	Detect	50	34	38	39
	Respond	100	451	499	514
	Recover	42	139	153	159
	Total Cybersecurity	4,091	2,728	3,033	3,695
	Position Data:				
	Average Salary (dollars), ES Position	$198,937	$205,749	$206,160	$206,573
	Average Salary (dollars), GS Position	$97,459	$102,490	$102,695	$102,900
	Average Grade, GS Position	10.9	10.9	10.9	10.9

*This table assumes a reduced 2026 FTE baseline due to 2025 voluntary staff separations and administrative cost efficiencies.

Table APHIS-15. Classification by Objects – Mandatory (thousands of dollars)

Item No.	Item	2023 Actual	2024 Estimated	2025 Estimated	2026 Estimated
	Personnel Compensation:				
	Washington D.C.	$31,294	$32,525	$35,000	$31,500
	Personnel Compensation, Field	104,767	108,888	111,000	100,000
11	Total personnel compensation	136,062	141,413	146,000	131,500
12	Personal benefits	45,719	54,359	55,000	50,000
13.0	Benefits for former personnel	56	95	100	500
	Total, personnel comp. and benefits	181,837	195,867	201,100	182,000
	Other Objects:				
21.0	Travel and transportation of persons	5,472	5,346	5,000	5,000
22.0	Transportation of things	325	325	325	325
23.1	Rental payments to GSA	5,459	6,092	6,000	6,000
23.2	Rental payments to others	9,895	10,539	11,000	11,000
23.3	Communications, utilities, and misc. charges	4,638	4,563	4,500	4,500
24.0	Printing and reproduction	97	70	70	70
25.1	Advisory and assistance services	290,911	99,430	103,074	124,480
25.2	Other services from non-Federal sources	13,235	17,186	20,000	25,000
25.3	Other goods and services from Federal sources	31,927	28,335	25,000	25,000
25.4	Operation and maintenance of facilities	312	464	450	450
25.5	Research and development contracts	12,295	1	-	-
25.6	Medical care	-	15	-	-
25.7	Operation and maintenance of equipment	36,365	7,900	10,000	11,000
25.8	Subsistence and support of persons	-	335	300	300
26.0	Supplies and materials	13,383	4,400	4,500	4,500
31.0	Equipment	8,989	10,006	12,000	16,000
32.0	Land and structures	875	106	100	100
33.0	Investments and loans	-	-	-	-
41.0	Grants, subsidies, and contributions	-	-	-	-
42.0	Insurance Claims and Indemnities	12	77	-	-
43.0	Interest and Dividends	2	-	-	-
	Total, Other Objects	434,192	195,191	202,319	233,725
99.9	Total, new obligations	616,029	391,058	403,419	415,725
	DHS Building Security Payments (included in 25.3)	$879	$960	$971	$981

*This table assumes a reduced 2026 FTE baseline due to 2025 voluntary staff separations and administrative cost efficiencies.

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STATUS OF PROGRAMS

SAFEGUARDING AND EMERGENCY PREPAREDNESS/RESPONSE

Current Activities

American agriculture faces many threats from foreign and domestic pests and diseases which have the potential to negatively impact animal and plant agricultural production, trade, and the economy. APHIS monitors and responds to potential diseases of livestock and wildlife, invasive species, 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 Federal, State, Tribal and industry partners to conduct animal and plant 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. APHIS 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 to support plant protection programs and cooperators at the State, national, and international levels. APHIS also develops methods to control animals and pests that are detrimental to agriculture, wildlife, and public safety.

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 animal and plant pests and diseases. APHIS also actively engages State, Tribal, and local governments, and industries to advance their emergency preparedness and response capabilities.

APHIS conducts operations to ensure the humane care and treatment of vulnerable animals covered under the Animal Welfare Act and the Horse Protection Act. The Agency also balances a regulatory system that safeguards agriculture while fostering innovative research and development in the field of biotechnology.

Selected Examples of Recent Progress - Animal Health:

1. Animal Health Technical Services
   APHIS' Animal Health Technical Services develops, enhances, and maintains tools for acquiring and managing information vital for improving global market access for U.S. livestock and animal products. Incorporating national surveillance standards into data management applications allows the program to compile animal health information nationally, thus leveraging the work of animal health professionals nationwide to meet local, State, and national veterinary health objectives. The National Veterinary Accreditation Program (NVAP) trains private veterinarians to help producers meet export requirements and disease program standards. Ultimately, this allows U.S. animals and animal products to compete in the global economy.

   Animal Disease Traceability (ADT)

   The national ADT framework allows Federal, State, Tribal, and private animal health professionals to work together to identify diseased animals, quickly trace their movements, and control disease spread to protect the livestock industry, whose production value was approximately $145 billion in 2023 (National Agricultural Statistics Service, USDA). The ADT framework enables animal health officials to trace an animal from the location of official identification to the animal's last location,

which is often the termination point or slaughter plant. Knowledge of the location of diseased and at-risk animals helps preserve animal health; enables a rapid response in case of an animal disease event; reduces animal illnesses and deaths during outbreaks; and decreases the cost to producers, consumers, and the government. This system also assures our trading partners that States and USDA can rapidly contain an animal disease event. Each year, APHIS provides cooperative agreement funds to States, tribes, and territories to help them establish and maintain support for ADT activities. Currently all cooperators receiving program funds have approved ADT strategic plans in place with APHIS.

The ADT program continues to maintain effectiveness and increase the timeliness of retrieving traceability data. APHIS measures the success of the ADT program by conducting trace exercises that assess a cooperator's ability to properly record and retrieve documents pertaining to official livestock identification and interstate movement. In 2024, APHIS continued to conduct national priority trace exercises where cooperators prioritize the traces as national emergencies. Most cooperators were able to complete each trace exercise in less than or equal to one hour. Participants in these exercises cite the increased use of electronic record keeping processes, electronic identification tags, and electronic Interstate Certificates of Veterinary Inspection applications as some of the main reasons for the reduction in time to complete the exercise. The ADT program will continue to assess options for ways to use trace exercises that uncover gaps in the current trace-back or trace-forward system in 2025. Additionally, the ADT program will continue to conduct national priority trace exercises as part of its performance-based program to evaluate cooperators' abilities to successfully complete trace investigations.

One of the most significant opportunities to strengthen the ADT system is to improve the accessibility for electronic identification tags in adult beef and all dairy cattle, as well as in bison. On April 26, 2024, APHIS published a final rule (9 CFR Part 86) requiring ear tags to be both visually and electronically readable. Previously, ear tags used as official animal identification (ID) had to be visually readable only. This change allows for use of official animal ID for the interstate movement of certain classes of cattle and bison on November 5, 2024. The rule does not discontinue the use of other means of official ID, if agreed on between the shipping state and the receiving state or tribal animal health authority. The electronic identification (EID) tags speed information capture and sharing. In 2024, APHIS distributed approximately 8 million official EID tags to States as an optional alternative to metal ear tags, at no cost. As of October 1, 2024, approximately 28 million EID tags have been provided as an alternative to visual metal ID since distribution began in 2020.

Information Management

Many of the APHIS information management systems are available to States and Tribal Nations to support their traceability plans and other animal health activities. APHIS conducts evaluations of existing data systems and applications to determine if they should be modified and enhanced or if a new system should be developed. In 2024, APHIS continued modernization efforts for the Animal Disease Traceability Information System (ADTIS). The ADTIS is an information management system that APHIS utilizes to maintain records of official identification devices and other information associated with official identification numbers of animals. The ADTIS contains two major components: Premises Management (PM) and Animal Identification Management System (AIMS). PM is an application offered free to States enabling them to manage their State premises identification activities. AIMS is designed to facilitate order and delivery of physical animal identification devices to premises locations and to maintain other animal events such as animal movements. In 2024, AIMS underwent a modernization effort with an anticipated release date of November 2024.

The APHIS Veterinary Services Trade Systems Modernization project began in 2024. The project will build a new system that replaces two legacy systems, Veterinary Services Process Streamlining and Veterinary Export Health Certificate System, along with six other processes that

are yet to be in a web-based application. The goal of the project is to develop a holistic system that streamlines 14 business processes into one application. The new system will streamline the business processes to improve service delivery, increase efficiency, and enhance user experience. The processes include live animal and animal products import and export activities, facility inspections and certificates, veterinarian accreditation, equine infectious anemia testing, and Interstate Certificate of Veterinary Inspection for movement of animals within the country. The Agency estimates that it will be a 5-year effort to address all 14 business processes.

National Veterinary Accreditation Program

More than 69,000 highly trained accredited veterinarians voluntarily participate in NVAP. Accreditation by USDA allows private practice, academic, industry, military, and other veterinarians to serve as the first line of defense for reportable domestic and foreign animal diseases. Once symptoms of a suspected foreign animal disease are reported, further diagnostics can be conducted or facilitated by Federal veterinarians and State animal health officials to provide rapid diagnosis, quarantine, and other control measures to safeguard animal and human health. Accredited veterinarians also provide official animal, flock, and herd health certifications, disease testing, and traceability measures which are needed for the intrastate, interstate, and international movement of animals each year. Mandatory training for participants and renewal of accreditation every three years provides current information of animal disease surveillance, prevention, zoonoses, judicious use of antimicrobials, animal welfare, and disaster preparedness. APHIS currently hosts 37 web-based supplemental training modules for accredited veterinarians and veterinary students. Since 2011, accredited veterinarians have completed nearly 1 million hours of online training modules, and more than 40,000 modules completed at veterinary conferences nationwide.

2. Aquatic Animal Health

The Aquatic Animal Health program protects the health and value of U.S. farm-raised aquatic animals and natural resources. This program supports commercial producers in domestic and international trade markets, valued at $1.5 billion in 2018 (National Agricultural Statistics Service, 2018 Census of Aquaculture). The National Aquaculture Health Plan and Standards (NAHP&S), represents a more comprehensive approach to aquatic livestock health management, monitoring, and certification, and provides a framework for Federal policies and programs to address aquatic animal diseases for the benefit of aquaculture and aquatic animal resources. The NAHP&S affirms USDA as the lead Federal authority for U.S. aquaculture health, consistent with other livestock health programs, and presents the Federal vision for a national aquatic animal health plan that encompasses all Federal authorities and ensures a strong domestic infrastructure for supporting and determining aquatic animal health. In 2024, APHIS continued to support the implementation of NAHP&S by leading a review in consultation with other Federal agencies, such as the U.S. Fish and Wildlife Service and the National Oceanic and Atmospheric Administration. This review will lead to several updates anticipated to be published by January 2025.

This program is also working towards codifying uniform aquaculture health standards, entitled the Commercial Aquaculture Health Program Standards (CAHPS). This voluntary, non-regulatory certification program establishes a national, uniform approach for site-specific biosecurity, surveillance, and response plans. These plans are designed to prevent and control the dissemination of aquatic animal pathogens through animal movement and trade, especially pathogens that are reportable to the World Organisation for Animal Health. In 2024, APHIS continued the rulemaking process to establish CAHPS as an official USDA aquatic animal health certification program. In addition, the Agency supported the development of a field data collection application for CAHPS for inspections and training, which the Office of Management and Budget approved in September 2024; supported and promoted the aquaculture sector through a public-facing APHIS webpage entitled "Homegrown and Healthy"; completed the development of foundational documents for the CAHPS, including program standards and education materials;

funded several projects through cooperative agreements for outreach and education to clarify aquatic disease statuses, surveillance, and biosecurity practices, and/or sector practices of the U.S. Aquaculture industry; and entered into a cooperative agreement with Texas A&M AgriLife to develop an online CAHPS aquatic health training program for producers, veterinarians, and the public.

The Agency has developed an approach where aquaculture producers address biosecurity surveillance and other management practices that support aquatic health and allow producers to compete in interstate and international trade. Through the Registered Aquaculture Export Facility inspection program (RAEF 2.0), the Agency provides a framework for Federal policies and programs to support and enhance aquatic livestock exports. APHIS opened 10 new or expanded export markets for live aquatic animals across Asia, Oceania, North & South America, and Africa in 2024.

3. Avian Health

The Avian Health program protects the U.S. poultry industry, while facilitating agricultural trade in poultry and poultry products. The production value of the U.S. poultry and eggs in 2024 was $67 billion (USDA, National Agricultural Statistics Service, April 2024). APHIS' Avian Health program consists of the surveillance, prevention, and control of avian diseases; disease threat planning and response; and international avian health activities.

APHIS works to quickly detect and address endemic, emerging, and foreign disease threats to ensure that the U.S. poultry industry maintains worldwide competitiveness. To detect these threats, the Agency conducts surveillance in domestic poultry, wild birds, and the live bird marketing system (LBMS). As of September 30, 2024, 25 States had live bird market components that participated in APHIS' H5/H7 Avian Influenza (AI) prevention and control program. State cooperators help conduct surveillance and diagnostic activities for LBMS. When testing yields presumptive positive results, the Agency confirms the presence and strain of AI. LBMS testing prevents and controls AI in markets and among producers and distributors that supply those markets. In 2024, there were 69 detections of highly pathogenic avian influenza (HPAI) and one H7N3 detection of Low Pathogenicity Avian Influenza (LPAI) in the LBMS. The program conducted 91,429 AI surveillance tests in the LBMS in 2023, and approximately 23,973 tests in the first two quarters of 2024. Complete 2024 data will be available after the agreements with States conclude on March 31, 2025. In 2024, LBMS surveillance remained a high priority. Approximately 68,483 tests were conducted for LPAI surveillance in the LBMS, for the first three quarters of 2024. Tests included agar gel immunodiffusion (AGID), real-time reverse-transcriptase polymerase chain reaction (rRT-PCR), antigen capture immunoassay (ACIA), and virus isolation (VI). For rRT-PCR and VI, each sample may represent 5 or 11 individual swabs pooled for a composite single test. Since APHIS and the States began the H5/H7 LPAI LBMS prevention and control program and surveillance and response efforts in 2004, the number of LBMS LPAI positive premises has decreased significantly. There was no detection of H5/H7 LPAI virus in U.S. LBMS in 2024. During the 2024 HPAI outbreak, only eight LBMs and one dealer were found positive for the strain H5N1 HPAI Clade 2.3.4.4b.

The National Poultry Improvement Plan (NPIP) is a cooperative Federal-State-industry program administered by APHIS that helps participants guard against disease incursion and enhance the marketability of poultry and poultry products. NPIP has a scientific, thorough, and democratic process for vetting proposed modifications and updating the NPIP. Proposed updates are reviewed and brought to a vote by US poultry and egg industry stakeholders at the NPIP Biennial Conference. This conference is attended by Official State Agencies, dealers, authorized laboratories, and owners of hatcheries and independent flocks. NPIP held its 46th Biennial Conference in August 2024, and nearly 300 stakeholders attended. Of the 56 proposals that were considered, 40 passed. Proposals addressed issues such as the refinement of definitions, compartmentalization changes, avian influenza testing, Pullorum testing requirements for exhibition birds, and consideration of a new Salmonella program for broilers. Successful proposals

are routing through the Federal rulemaking process for inclusion into the Final Rule. APHIS is working to publish an interim rule for biosecurity audits for poultry operations affected by HPAI during an outbreak. This rule is intended to validate that premises-specific biosecurity plans are being effectively implemented to increase biosecurity efforts to reduce HPAI spread.

APHIS conducts AI surveillance in commercial poultry under the NPIP H5/H7 LPAI Prevention and Control program. Most of the testing is performed within the NPIP Authorized Laboratory System and/or the National Animal Health Laboratory Network, but the Agency's National Veterinary Services Laboratories provides reagents for testing and performs confirmation and identification testing of presumptive positive specimens. In 2023, APHIS performed approximately 1.8 million AI surveillance tests through NPIP AI cooperative agreements and approximately 1.3 million tests through the third quarter of 2024. Complete 2024 data will be available after the agreements with States conclude on March 31, 2025. Based on tests results available as of September 30, 2024, there was no detection of H5/H7 LPAI virus in the U.S. commercial poultry flocks in 2024.

AI circulates in waterfowl, shorebirds, and other species, which allows the viruses to move efficiently along migratory flyways in these birds. Since 2022, thousands of migratory birds died from HPAI infections, often in large congregations, in numerous States. These viruses can infect domestic land-based poultry such as chickens and turkeys. When poultry are infected with H5 or H7 strains of AI virus, the virus can evolve into the more serious disease-causing form, HPAI. HPAI usually causes significant disease and mortality in domestic poultry and sometimes in wild birds. APHIS conducts wild bird surveillance to gain insight into AI viruses in wild populations, and to provide that data to poultry producers and others so they can make informed biosecurity and management decisions. In 2024, the Agency coordinated the collection and laboratory analysis of 52,247 wild bird samples from wild waterfowl in priority watersheds in all four flyways. This total consisted of 42,433 samples from routine targeted surveillance, 5,341 spring enhanced surveillance samples, and 4,473 samples from targeted wild bird surveillance around HPAI-infected dairy and poultry premises. The sample collection from HPAI-infected dairy and poultry premises was funded through HPAI emergency funds, while the sample collections from routine surveillance and the spring enhanced surveillance were funded though the Avian Health line item. As of September 30, 2024, there had been approximately 10,000 wild bird detections among across 49 States and Washington, DC. Genetic sequencing of these samples revealed multiple introductions of HPAI viruses from outside the United States and helped inform whether poultry outbreaks resulted from point source introductions or lateral farm-to-farm spread.

Internationally, APHIS facilitates agricultural trade, works with agricultural officials, monitors agricultural health, and supports efforts in sanitary and phytosanitary standard-setting. The Agency works with animal health counterparts to reduce the impact of AI in trade by promoting transparent communications; clarifying animal disease status; and when U.S. poultry markets close, providing relevant data to reopen them and minimizing trade disruption of these products. In addition, APHIS works with the USDA's Foreign Agricultural Service and the U.S. Trade Representative's Office to maintain a coordinated, strategic approach to resolving avian health issues that affect U.S. exports. Further, APHIS coordinates with the World Organisation for Animal Health and other international organizations to assist with disease prevention, management, and eradication activities in HPAI-affected regions. In addition, APHIS sponsors and staffs the Emergency Management Center at the Food and Agriculture Organization of the United Nations, in Rome, Italy. This Center provides assessments, guidance, and resources to enable rapid response to animal disease outbreaks in countries where the United States would have difficulties placing personnel or responding bilaterally. This approach reduces the threat of disease outbreaks becoming widespread and evolving into pandemics.

4. Cattle Health

The Cattle Health Program protects and improves the quality, productivity, and economic viability of the U.S. cattle industry, whose production was valued at approximately $120 billion (National

Agricultural Statistics Service, 2023). The Cattle Health Program works to rapidly detect and respond to diseases that could significantly affect the U.S. cattle and bison population.

APHIS activities in the Cattle Health Program include surveillance, disease prevention, disease investigation, and outbreak response actions. In addition, APHIS maintains regulations, national program standards, and guidelines that direct activities at the Federal, State, Tribal, and local levels. Establishing and maintaining these standards is critical to supporting interstate and international commerce by providing assurances about the health of cattle or bison being moved or traded.

In 2024, APHIS continued to conduct surveillance for foreign, emerging, and endemic diseases, including bovine tuberculosis (TB), brucellosis, and bovine spongiform encephalopathy (BSE) as well as disease vectors, such as the cattle fever tick (CFT), and new world screwworm (NWS). The Agency conducts surveillance through cattle testing on-farm as well as at slaughter facilities, livestock markets, shows, sales, buying stations (first point testing), and rendering facilities (operations that collect dead, dying, disabled, and diseased animals). APHIS also continued working with Canada and Mexico to prevent the introduction of foot-and-mouth disease, NWS, and other cattle diseases. The following are examples of the Agency's efforts to protect cattle health during 2024.

Bovine tuberculosis

Bovine TB primarily affects cattle but has the potential to affect other animal species and humans. APHIS' surveillance for bovine TB includes testing live cattle and slaughter surveillance conducted by the USDA's Food Safety and Inspection Service (FSIS). The bovine TB program, initiated in 1917, has significantly decreased the prevalence of the disease in U.S. livestock. Today the prevalence rate in cattle herds is less than 0.001 percent.

The Cattle Health Program has five State bovine TB classifications. A higher disease prevalence results in classifications that have more restrictive movement requirements. The classifications are, in order of least restrictive to most restrictive: accredited free, modified accredited advanced, modified accredited, accreditation preparatory, and non-accredited. Michigan is currently composed of two classification zones: accredited free and modified accredited status. At the end of 2024, 49 States, 2 Territories (Puerto Rico and the U.S. Virgin Islands), and 1 classification zone in Michigan were TB accredited free.

In 2024, 115 Federally inspected slaughter establishments submitted 3,787 samples for TB testing. Through these slaughter surveillance efforts, the program detected TB in four cattle in 2024. One of the animals detected in Michigan was traced back to Michigan, one in Texas which was traced back to Mexico, one in Nebraska which was traced back to Montana, and one in South Dakota that traced back to Nebraska. During 2024, APHIS in cooperation with State animal health agencies continued to manage two TB-positive herds under test-and-remove protocols, both of which were released from quarantine in 2024. There are currently no herds under quarantine for TB in the U.S. APHIS used Commodity Credit Corporation funds to conduct test-and-remove protocols in accordance with each herd's management plan.

Bovine brucellosis

Bovine brucellosis is an infectious disease that can cause decreased milk production, weight loss, abortions, infertility, and lameness. These effects can negatively impact the livelihood of cattle producers and the supply of meat and dairy products. Federal and State brucellosis eradication efforts have resulted in all 50 States, the District of Columbia, Puerto Rico, and the U.S. Virgin Islands being Class-Free since July 2009. The brucellosis Class-Free classification is based on no detections of brucellosis in the cattle herd for 12 months. Class-Free States with brucellosis in wildlife work with APHIS to implement a state brucellosis management plan (BMP). Each BMP defines the basis for the area identified; describes the epidemiologic assessment and surveillance

activities to determine if wildlife populations are affected; and describes surveillance and mitigation activities for cattle, bison, and wildlife. Although the United States is considered Class-Free of brucellosis, there continues to be a presence of brucellosis in free-ranging bison and wild elk in the Designated Surveillance Area (DSA), which includes parts of Idaho, Montana, and Wyoming and is commonly referred to as the Greater Yellowstone Area.

APHIS provides expertise to land and wildlife management agencies to manage brucellosis in the DSA. In 2024, APHIS conducted a brucellosis program review for Idaho to ensure the State is properly administering the brucellosis program standards to control their DSA and prevent infection from escaping the endemic zone. In 2024, APHIS detected brucellosis in one herd within the DSA of Wyoming though surveillance testing.

As part of the Bison Conservation Transfer Program, APHIS uses an Approved Bison Quarantine Facility located in Montana to quarantine and test bison from Yellowstone National Park, determine their brucellosis disease status, and release them, disease-free, outside the DSA. In 2023, APHIS and Yellowstone National Park (YNP), shipped 116 brucellosis free bison to the Fort Peck Indian Reservation in Poplar, Montana. The bison were shipped from the two quarantine facilities in Gardiner, Montana, one managed by APHIS and one by YNP, and had completed testing between one and 2.5 years to be declared brucellosis-free. Once at Fort Peck, the bison remain for one year and will be retested at 12 months before being moved to other tribes and organizations for conservation purposes. Between 2018 and the end of 2024, a total of 414 bison have been transferred

In 2024, APHIS tested approximately 477,489 head of cattle under the market cattle identification national slaughter surveillance program, exceeding the annual target goal of 350,000. The Agency, in conjunction with States, tests cattle and domestic bison on farms and ranches prior to movement, private sale, and herd certification issuance for show and exhibition purposes. In 2024, the program tested approximately 204,000 cattle and vaccinated over 2.4 million calves and 4,772 adult cattle for brucellosis. The number of certified-free herds is steadily declining since all States are considered Class-Free of brucellosis. Agency-accredited veterinarians perform most of the vaccinations and sample collection, and State laboratories test the samples. As of September 30, 2024, the program is still collecting and validating fourth quarter testing and sampling data.

Bovine spongiform encephalopathy

BSE, widely referred to as "mad cow disease," is a progressive and fatal neurologic disease of cattle. The disease is caused by a transmissible abnormal prion protein. BSE is not a contagious disease and therefore is not spread through casual contact between cattle or with other species. BSE detections are separated into two distinct categories, classical and atypical. Classical BSE occurs through the consumption of contaminated feed. While classical BSE was identified as a significant threat in the 1990s, most years there are no detections made worldwide. This is a result of the successful implementation of effective control measures on an international scale. Atypical BSE refers to naturally and sporadically occurring forms, which are believed to occur in all bovine populations at a very low rate, and which have only been identified in older bovines when conducting surveillance. APHIS works with the USDA FSIS and the Food and Drug Administration to conduct ongoing BSE surveillance, allowing the United States to maintain BSE Negligible Risk status per the World Organisation for Animal Health's (WOAH) standards to facilitate trade.

The WOAH evaluates countries that submit a request for disease freedom and assigns a points-based risk status for BSE. The BSE surveillance program uses WOAH's weighted surveillance points system, which reflects that the best BSE surveillance program focus on obtaining quality samples from targeted populations rather than looking at the entire adult cattle population. The WOAH's surveillance points system also incorporates a country's history with the disease, the implementation and enforcement of cattle feed regulations, and their overall BSE surveillance. As

of September 1, 2024, the Agency tested for BSE in 21,854 cattle, exceeding the WOAH's international surveillance standards by nine times the minimum requirement. As a result, APHIS' BSE surveillance program reassures consumers and international trading partners regarding our ability to detect a problem if one should arise. No cases of classical BSE were detected in 2024.

Cattle fever tick

The Federal-State CFT Eradication Program is a partnership between APHIS and the Texas Animal Health Commission. The cattle fever tick (Boophilus annulatus) and the southern cattle tick (B. microplus) are vectors for spreading babesiosis, also known as cattle, fever. Even when not transmitting this disease, CFT can cause blood loss, damage to hides, and an overall decrease in the condition of livestock. Mortality in cattle without prior exposure to the disease ranges from 70 to 90 percent. The Agency focuses on controlling the spread of tick species that transmit the infectious agent through the inspection of livestock before they leave quarantined areas, surveillance at local markets, inspection of hunter-killed white-tailed deer and other exotic ungulates that can harbor the tick, and horseback river trail patrols to capture stray and smuggled Mexican livestock that may carry ticks into the United States.

The United States remains free of cattle fever. There is a permanent quarantine buffer zone established between Texas and Mexico. Mexican states bordering the United States can introduce tick-infested wildlife or livestock potentially bringing ticks into the United States. Tick eradication activities consist of identifying and quarantining infested premises and treating livestock and wildlife. Approved treatment methods for ticks include dipping or spraying cattle with coumaphos, feeding ivermectin-treated corn to wild deer, and injecting cattle with Doramectin. 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. In 2024, 39 infested quarantine premises were released, compared to 100 in 2023. In 2024, 362 premises changed quarantine status compared to 749 in 2023. In 2024, APHIS conducted 70,489 individual livestock inspections and treatments throughout South Texas. Additionally, in 2024, the permanent quarantine zone and the free area of Texas contained 31 newly infested quarantined premises, compared to 61 in 2023.

Carrizo cane is an invasive species and perennial bamboo-like grass that occupies the banks and floodplains of the Rio Grande River in Texas. The cane makes for a particularly favorable habitat for CFT which resides in the vegetation waiting for animals to brush by so they can attach. The standard approach for keeping Carrizo cane under control is to cut it down to three feet twice a year using a mechanical cutter bar mounted on a tractor, a process referred to as "topping". In 2024, APHIS worked with contractors to aid in the eradication of the invasive cane and increase river visibility by successfully topping approximately 61.4 miles of land area, primarily alongside river trails used by CFT inspectors.

Screwworm

APHIS cooperates with Panama through the Panama-United States Commission for the Eradication and Prevention of Screwworm (COPEG) to maintain a biological barrier against the northward spread of the NWS, a devastating pest of livestock that can affect any warm-blooded animal, including people. The program had successfully prevented the movement of NWS beyond the barrier zone at the Panamanian-Colombian border for decades. However, outbreaks occurred in calendar year 2023, in Panama and Costa Rica, likely due to several factors, including weather patterns favorable to the pest, a significant increase in the number of cattle in the barrier zone, and illegal movement of livestock from infected areas to free areas. Development of infrastructure in Darien, the Panamanian province that neighbors Colombia, and movement of people through this formerly remote area also pose challenges for the program.

In 2024, the program continued addressing the unprecedented NWS outbreak, confirming numerous cases throughout Panama and Costa Rica and into Nicaragua and Honduras. APHIS

and COPEG worked with the ministries of agriculture of the affected countries and international organizations including the International Regional Organization for Animal and Plant Health (OIRSA) and the Inter-American Institute for Cooperation on Agriculture (IICA) to implement a regional response, including increased sterile insect production and release, increased inspections and treatment of livestock, and outreach to farmers and ranchers to increase awareness of the threat and provide information on how to prevent and treat NWS infections on animals. Using emergency funds transferred to APHIS from the Commodity Credit Corporation, the program made repairs and renovations at its sterile insect production facility to increase production from an average of 20 million sterile insects per week to approximately 90 million per week. The program also worked to reinvigorate the sterile insect strain used in the program with new genetic material and enhanced epidemiological surveillance throughout areas with cases. Additional NWS cases occurred in Guatemala in October 2024. APHIS anticipates it will take several years of intensive efforts with affected countries, OIRSA, and IICA to eradicate the outbreak and prevent further spread. This work is critical to preventing NWS from reestablishing in Central America and spreading to the United States. Keeping the United States free of NWS saves $1.5 billion annually for cattle producers (APHIS internal analysis).

5. Equine, Cervid and Small Ruminant Health

The Equine, Cervid, and Small Ruminant Health (ECSRH) program protects the health and improves the quality, productivity, and economic viability of the equine, cervid, sheep, and goat industries. APHIS activities include monitoring, surveillance, investigation, response, and disease prevention and preparedness to address animal health issues. The Agency's monitoring and surveillance activities detect foreign, emerging, zoonotic, and domestic diseases that could substantially impact the economy. APHIS also works with international and domestic trading partners to facilitate safe trade in equine, cervids, and small ruminants and their products and ensure disease incidents of trade concern are reported to the World Organisation for Animal Health (WOAH). In 2024, the ECSRH Program conducted disease surveillance and/or monitoring for the following diseases: scrapie, bovine tuberculosis (TB), chronic wasting disease (CWD), vesicular stomatitis virus (VSV), contagious equine metritis (CEM), equine piroplasmosis (EP), Eastern equine encephalitis, West Nile virus, and equine infectious anemia (EIA).

Sheep and Goat

Scrapie is a fatal, degenerative disease affecting the central nervous system of sheep and goats. Infected flocks can experience significant production losses. The National Scrapie Eradication Program (NSEP) focuses on improving the health of domestic sheep and goats, reducing scrapie-associated economic losses, and increasing international marketing opportunities. APHIS and State animal health personnel implement NSEP standards to prevent, monitor, and eradicate classical scrapie throughout the United States. All 50 States maintain a Consistent State status under NSEP, where States must conduct an active scrapie control program which is verified through Consistent State reviews. In 2024, APHIS conducted Consistent State reviews in Arizona, Wyoming, Maine, Vermont, New Hampshire, Massachusetts, Connecticut, and Rhode Island.

Regulatory scrapie slaughter surveillance efforts began in 2003 and were designed to identify scrapie infected flocks and herds by sampling animals at slaughter. Since then, the program has collected samples from approximately 773,000 animals at slaughter, and only 471 sheep have tested positive for classical scrapie. There hasn't been a classical scrapie detection since 2021. In 2024, APHIS collected samples from more than 25,000 sheep and goats for scrapie testing, with no animals testing positive for classical or non-classical. Unlike classical scrapie, non-classical scrapie is either not laterally transmissible or is transmissible at a very low rate. The WOAH and APHIS determined that it is not a disease of trade concern.

The NSEP's voluntary flock certification, the Scrapie Free Flock Certification Program (SFCP), enables producers to enhance the marketability of their animals by monitoring them for scrapie and reducing the risk of introducing scrapie which provides participants an avenue to export sheep

and goats. In 2024, 161 flocks were enrolled in SFCP. Of these, 31 were export certified (scrapie-free), 22 were export monitored (working towards documenting scrapie freedom), and 108 were select monitored (reduced scrapie risk).

Cervids

APHIS works with State agencies to encourage cervid owners to prevent CWD in their herds by enrolling in and meeting the requirements of the CWD Herd Certification Program (HCP) Standards. The goal of the HCP is to provide a consistent, national approach to control the incidence of CWD in farmed cervids and prevent the interstate spread of CWD. In 2024, there were 1,524 herds across 28 States participating in the CWD HCP in the U.S. In 2024, APHIS tested over eight percent of farmed cervids within the HCP States for CWD and confirmed 26 CWD-positive herds. The infected herds are currently under State quarantines or have been depopulated. APHIS determines the use of Federal indemnity payments within the CWD program on a case-by-case basis.

Additionally, APHIS made approximately $12 million available for cooperative agreements with States and Tribal governments to further develop and implement CWD surveillance, testing, management, and response activities. This includes improving management of CWD-affected farmed and wild cervid populations; improving management of CWD-affected areas or premises; researching amplification assays and other new diagnostic methods; and developing and delivering educational materials or programs. APHIS funded cooperative agreements with 30 States, 12 universities, and 10 Tribes and Tribal Organizations for CWD projects.

APHIS also coordinates a voluntary cervid TB herd accreditation program. Herds that participate in this program must have negative TB results from two rounds of testing 9 to 15 months apart (on animals over 12 months of age) using either the Dual Path Platform (DPP) test or the Single Cervical Test (SCT) for their herd to be TB-accredited. Herds must retest every three years thereafter to maintain accredited herd status. In 2024, 4,103 animals were tested for TB using the DPP test and 2,488 using the SCT. Of the cervids tested using DPP, 18 were identified as suspects on the first round of testing, and 3 were classified as reactors based on the second round of testing. Of the cervids tested using the SCT, 40 suspects were identified on the first round of testing and 5 of the suspects were classified as reactors on follow-up testing using Comparative Cervical Test (CCT). Upon further testing, APHIS determined that all of these reactors were negative for TB.

In 2024, APHIS continued a project to evaluate the DPP test (approved in 2012 for elk, red deer, white-tailed deer, reindeer, and fallow deer) for use as a primary and secondary TB test in mule, sika, and axis deer. The DPP test is a serologic test that performs comparable to skin tests for the diagnosis of cervid TB, with the added advantage of reducing animal handling and associated morbidity and mortality. As of the end of 2024, 385 mule deer, 157 sika deer, and 193 axis deer were tested as part of the project. All animals tested TB-negative.

Equines

APHIS collaborates with the Federal, State, and industry partners to protect the equine industry from disease, improve the health of our domestic herd, and protect human health. These activities improve trade and facilitate equine movement, which are vital to maintaining the industry's economic value. APHIS provides veterinary support and consultation to the U.S. Department of the Interior's Bureau of Land Management Wild Horse and Burro Program through an interagency cooperative agreement.

APHIS provides expertise and helps develop the industry's National Equine Health Plan. The plan functions as a roadmap for owners, veterinarians, and industry organizations to coordinate with State and Federal animal health officials to recognize, prevent, control, and respond to equine diseases. APHIS integrates the roles of the State and Federal health officials with industry

stakeholders to improve both equine health and the industry by decreasing the impact of infectious disease on the horse economy.

In 2024, APHIS provided oversight and epidemiological support in response to 11 cases of equine piroplasmosis in 6 States, 63 cases of equine infectious anemia in 12 States, 155 cases of West Nile virus in 26 States, and 100 cases of Eastern equine encephalitis in 19 States. In 2024, an outbreak of contagious metritis occurred with at least 48 confirmed positive cases across at least 4 States (Florida, North Carolina, Maine, and Maryland). Also in 2024, APHIS maintained certification and annual proficiency testing for 20 equine viral arteritis laboratories, 12 EP laboratories, and 13 CEM laboratories, and additionally certified and conducted annual proficiency testing for 383 EIA laboratories. APHIS also participated in the Agricultural Research Services' VSV Grand Challenge project which produces scientific publications annually.

6. National Veterinary Stockpile

The National Veterinary Stockpile (NVS), overseen by APHIS' Field Operations Logistics Center, serves as the primary source of materials, supplies, and equipment for the response to, control of, and containment of significant animal disease outbreaks. The NVS has two primary objectives. The first is to deploy countermeasures, within 24 hours of approval, against the most damaging animal diseases including highly pathogenic avian influenza (HPAI), foot-and-mouth disease (FMD), virulent Newcastle disease, classical swine fever, and African swine fever (ASF). The second objective is to assist States, Tribes, and Territories with planning, training, and exercises for the rapid request, receipt, processing, and distribution of NVS countermeasures during an event. The NVS works with States, tribes, and territories to develop their logistics plans, conduct logistics training, and organize full-scale logistics exercises.

The NVS continuously evaluates its inventory of supplies and replaces expired inventory. In 2024, The NVS deployed supplies, equipment and contractor support to States responding to HPAI outbreaks for poultry and dairy cattle across the United States. The NVS also coordinated the purchase of additional supplies to support response efforts to the outbreak of ASF in the Dominican Republic and Haiti. The NVS shipped animal handling equipment, depopulation equipment, and personal protective equipment to the Dominican Republic and provided supplies and equipment to Puerto Rico in support of enhanced ASF surveillance and outbreak preparedness activities. In 2024, the NVS also acquired new equipment and refurbished existing equipment to bolster domestic preparedness and response efforts for swine depopulation systems. Additional supply purchases were made in 2024 to include animal handling equipment and testing supplies for enhanced ASF response efforts. In 2024, The NVS supply catalog was updated for the first time in 6 years to include the new items, such as personal protective equipment and animal incinerators, added to the NVS and is available to State partners and APHIS employees.

The NVS coordinates and supports activities with States, Tribes, and territories to improve logistical readiness in the event of a foreign animal disease outbreak (FAD). In 2024, the NVS conducted a logistics-based full-scale exercise with the West Virginia Department of Agriculture based on a FMD outbreak scenario. The objective of this exercise was to validate West Virginia's NVS Logistics Plan in response to a FAD of high consequence. Additionally in 2024, APHIS hosted a tabletop exercise with the Iowa Department of Agriculture and Land Stewardship to identify the agencies, non-governmental organizations, and industry partners that would be activated during an FAD response and improve the State's NVS Logistics Plan. These activities support APHIS, participating stakeholders, and industry partners in refining preparedness procedures. The NVS will continue to conduct exercises and trainings in resource deployment and response preparedness to animal disease events in 2025.

In 2024, APHIS continued to maintain the North American Foot and Mouth Disease Vaccine Bank (NAFMDVB) as part of the Agency's animal health readiness initiative. The NAFMDVB is a vaccine stockpile that the United States and Canada cooperatively support. Each country has contributed funding to acquire and maintain a stockpile of vaccine antigen concentrate, from which FMD

vaccine is derived. Canada and the United States continue to ensure that the Bank maintains stocks of vaccine antigen concentrate and conducts necessary quality assurance testing. A portion of NVS funding was used to acquire new antigen for FMD preparedness. The NAFMDVB will continue to prepare for the transition to the new National Bio and Agro-Defense Facility (NBAF) in Manhattan, KS. This transition work includes digitizing records and historical documents, reducing inventory that is unable to be shipped to NBAF, preparing for the data migration to the new NBAF inventory system, and participating in transfer drills for BSL-2 and 3 inventories.

7. Swine Health

APHIS' Swine Health Program protects the health and improves the quality, productivity, and economic viability of the swine industry. The 2023 production value of the swine industry was approximately $25 billion (USDA, National Agricultural Statistics Service). In addition, the program facilitates trade in swine and pork products, and addresses swine health issues at the human-swine interface and between wildlife and domestic swine. APHIS activities include comprehensive and integrated swine surveillance, emergency preparedness and response planning, disease investigation and control activities, zoonotic disease prevention and response, swine health studies and special projects, collaborations on emerging issues, and outreach and communication with stakeholders. In addition, the Agency maintains regulatory and programmatic guidelines that direct activities at the Federal, State, and Tribal levels. Establishing and maintaining national standards support interstate and international commerce by ensuring the health of swine and swine products being moved or traded.

Swine Health Improvement Plan

In 2024, APHIS devoted $1 million to the development of an official sustainable U.S. Swine Health Improvement Plan (SHIP). This investment builds on activities that were included in the SHIP pilot project, which began in 2021. In 2024, APHIS prepared to transition the pilot program into a fully established swine certification program. To achieve this goal, APHIS supported official State agencies to further increase the enrollment of swine premises in the SHIP; drafted program standards and resolutions in areas such as sampling and diagnostics, traceability, and biosecurity; and hosted the annual House of Delegates (a forum of industry stakeholders) meeting to increase membership to the program. To support the transition of the pilot program, in 2024, APHIS established a coordinator to implement components of the program and contracted the development of a website that will house enrollment information and data access points for program stakeholders.

When fully established, the SHIP will be a collaborative effort involving State, industry, and Federal partners and will provide standards for certifying the health status of swine across participating farm sites, supply chains, States, and regions. It will be a key part of APHIS' national plan to safeguard U.S. pork production from African swine fever (ASF), Classical Swine Fever (CSF), and other diseases, and it will support industry leadership on sustainable solutions to ASF preparedness and prevention. Producer participation will enhance biosecurity and traceability practices, bolstering APHIS' ability to control disease and return to productivity and marketability in the event of an ASF incursion in its swine sector. The program will eventually have the potential to reduce trade impacting disease-related market risks; establish an officially recognized program for monitoring for foreign diseases that can support and sustain interstate and export commerce in an outbreak; facilitate larger efforts to mitigate the impact of recurring endemic diseases of high consequence; and garner feedback in an officially recognized forum to inform Federal and State programs, planning, and activities. As of September 30, 2024, 68 percent of the U.S. Swine Inventory was enrolled in the pilot. APHIS expects to increase this percentage to 70 in 2025 and 72 in 2026.

Swine Health Surveillance and Related Activities

APHIS conducts routine, active surveillance of commercial swine herds and non-commercial high-risk swine herds for pseudorabies (PRV) and swine brucellosis (SB). In 2024, the Agency tested 81,993 samples. Although testing results confirmed that all commercial swine herds continue to be free from PRV and SB, APHIS supported the investigations of more than 80 swine herds from which non-negative results were referred to APHIS' National Veterinary Services Laboratories for confirmatory testing. Of these investigations, APHIS confirmed SB disease detection, coordinated payments for 1 whole-herd depopulation, and facilitated the necropsy of 13 swine from 6 premises to exclude SB infection. Most herds were not infected with PRV or SB, and the herds that were infected were identified to be non-commercial high-risk herds with known feral swine exposure. When disease is confirmed, APHIS and State cooperators investigate and quarantine infected herds, conduct outbreak testing to determine herd disease levels, and depopulate or remove infected animals through a test-and-removal strategy to eliminate disease risk from these herds. These efforts protect commercial herds that may be exposed to infected backyard herds. Complete 2024 herd data will be available in spring 2025.

APHIS continued an ASF/CSF surveillance program in 2024, testing 47,160 specimens at the National Animal Health Laboratory Network (NAHLN) laboratories, the Foreign Animal Disease Diagnostic Laboratory (FADDL), and the Dorado laboratory. The FADDL tested 2,600 CSF-only serum specimens. Of these, 84 percent originated from feral swine and 16 percent originated from high-risk domestic swine. APHIS continues to sample all higher-risk swine and a subset of feral swine for ASF and CSF from high-risk counties in Florida, Georgia, Louisiana, Mississippi, New Mexico, Oklahoma, South Carolina, and Texas. In April 2024, APHIS expanded sero-surveillance in feral swine through the entire invaded range to include ASF serology in addition to the serologic testing previously and routinely conducted for CSF, pseudorabies virus, and swine brucellosis. Sero-surveillance is the collection and testing of specimens against a pathogen to assess prevalence changes. In 2024, the Agency tested 8,178 samples from feral swine via antigen and antibody-based diagnostics for ASF and CSF, and 2,202 samples via antibody-based diagnostics for both ASF and CSF. ASF has not been detected in the United States and CSF remains eradicated from the United States. APHIS developed and implemented a single-step, multiplex real-time polymerase chain reaction (PCR) and deployed it to NAHLN laboratories participating in the ASF/CSF surveillance program. The laboratories used this PCR for the simultaneous and differential laboratory diagnosis of CSF and ASF. Differential diagnosis is essential since ASF cannot be differentiated from CSF by either clinical presentation or postmortem examination. In 2024, the program tested 454 pooled whole blood swab samples, representing 2,103 specimens, in the ASF Protection Zone. In 2025, APHIS will modify the existing field data capture systems to expand sample pooling to other areas of the country.

APHIS performed slightly fewer foreign animal disease (FAD) investigations in swine in 2024 compared to 2023. In 2024, APHIS performed 881 FAD investigations in swine, and all were negative. A total of 848 of the investigations included testing for vesicular diseases, such as foot-and-mouth disease (FMD), and 38 included testing for hemorrhagic fevers, such as ASF and CSF. Five of the FAD investigations included testing for both vesicular diseases and hemorrhagic fevers.

Also in 2024, APHIS distributed a draft of a modernized and unified PRV Program Standards and SB Uniform Methods and Rules (UM&R) to internal stakeholders and is addressing comments received. This document will update the existing SB UM&R and PRV Program Standards. The SB and PRV surveillance and regulatory programs are increasingly executed in tandem due to commonalities in the populations of at-risk swine, methods of disease detection and response, and strategies to ensure disease exclusion. This document will combine the recommendations for these programs into a comprehensive document that reflects the concurrent execution of these programs. In 2025, the document will be distributed for additional internal and external stakeholder review.

In 2024, APHIS evaluated the Swine Hemorrhagic Fevers Integrated Surveillance Plan, posted a summary report on the Agency website, and recommended modifications to improve the

program. These modifications will be implemented in 2025 and include enhancing risk-based targeting of swine subpopulations through ongoing disease introduction risk analyses, re-evaluating State sample target numbers to efficiently execute geographically representative disease surveillance and continuing to develop and expand the use of tools to capture and share electronic information.

Coordination and Collaboration

APHIS has the responsibility under the Swine Health Protection Act (SHPA) to license and inspect swine production facilities that feed cooked garbage to swine, and to conduct searches for unlicensed facilities that may illegally feed raw garbage to swine. In addition, the SHPA authorizes States to have primary enforcement responsibility, which provides authority to regulate the feeding of garbage to swine. If a State fails to meet SHPA enforcement requirements, APHIS may assume responsibility in the State. Feeding untreated or improperly treated garbage could transmit infectious diseases such as ASF, FMD, or CSF to swine. In 2024, 25 States, Puerto Rico, and the U.S. Virgin Islands allowed the feeding of cooked garbage to swine. Twelve of these States held primary enforcement responsibility, and the remaining 13 maintained a cooperative Federal/State enforcement program. There are 588 active licensed garbage feeders in the United States. As of September 30, 2024, APHIS had supported 1,191 routine inspections of licensed premises and 3,661 searches for non-licensed facilities in 2024. Through these searches, the Agency identified 33 non-licensed feeders. APHIS worked with States to either bring unlicensed facilities into compliance or force them to cease their illegal activities. In 2024, APHIS facilitated an SHPA Workshop for State and Federal field personnel to enhance program implementation.

In 2024, APHIS collaborated with the Canadian Food Inspection Agency to plan the North American ASF Forum hosted by Canada for national and international government officials, State animal health officials, and swine industry representatives. The forum was held in September 2024 and was the fourth in a series of meetings among the United States, Canada, and Mexico to focus on trilateral coordination to prevent ASF introduction into North America while planning and preparing for an introduction. In this year's forum, participants examined key ASF management strategies, structured around preparedness planning, enhanced biosecurity, ensuring business continuity, and coordinated risk communication.

In 2024, APHIS and the Agriculture Research Service (ARS), with the support of the National Pork Board, completed a five-year research study to evaluate the incidence of Trichinella parasites in pigs raised under the quality assurance standards of the Pork Quality Assurance Plus (PQA Plus) program, engaging a broad sampling of plants throughout the United States. The PQA Plus program is an education and certification program that helps pig farmers improve production practices. It addresses food safety, animal well-being, environmental stewardship, worker safety, public health, and community. Individuals can become certified through an education program, and farms can receive PQA Plus site status through an on-farm site assessment. The study data clarified the singular success of controlled housing in excluding Trichinella from the pork supply. Documenting negligible risk eases producer liability, improves consumer confidence, and favors marketing opportunities, especially for trading partners demanding evidence of negligible risk. Finding no infection in nearly 3 million tested animals provides such assurance.

Zoonotic Disease Preparedness and Prevention

Swine can harbor several zoonotic disease agents, such as SB and influenza A viruses in swine (IAV-S). In such cases, state public health and animal health officials conduct investigations, and request support from APHIS and the Centers for Disease Control and Prevention when warranted. Joint animal health and public health investigations support the One-Health concept and strengthen APHIS' ability to respond when both animal and human health might be compromised. In 2024, State public health officials reported nine human variant influenza A cases in four States (Colorado, Michigan, Ohio, and Pennsylvania). Eight of the nine individuals reported exposure to swine. Many States and local public health officials find information derived from whole genome

sequencing helpful in their investigations. APHIS and ARS have established a surveillance program for IAV-S to help States and industry identify and sequence isolates from circulating influenza strains and associated outbreaks. In 2024, more than 1,000 IAV-S isolates were entered into this program. States and industry enter genetic sequences from the samples tested in this program into GenBank, a publicly accessible genomic database that provides the scientific community with comprehensive DNA sequence information to support diagnostic test and vaccine development.

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. The CVB develops regulations concerning the production and licensing of veterinary biologics, evaluates pre-licensing dossiers and issuance of licenses and permits, tests products submitted for licensure, inspects facilities and products, approves product certifications, investigates non-compliance, and conducts post-marketing surveillance to ensure that manufacturers comply with all relevant regulations and policies. The CVB continued to ensure an effective, efficient, and responsive veterinary biologics program that can provide timely approvals and availability of veterinary vaccines, diagnostics, and other novel biologics to protect animal and public health and enhance export opportunities for U.S. veterinary biologics companies.

Licensed Products and Inspections

APHIS licenses and inspects facilities to ensure that all veterinary biological products produced and distributed within, imported into, or exported from the United States are of the highest quality, and are not worthless, contaminated, dangerous, or harmful. All countries require import and export certificates to certify that all veterinary biological products are prepared in accordance with the Virus-Serum-Toxin Act. In 2024, APHIS reviewed/processed 2,381 Certificates of Licensing and Inspection and reviewed/processed 1,781 export certificates for veterinary biological products. The Agency achieved its internal goal of processing all export certificates within 4 days, and all certificates of licensing and inspection within 28 days. Timely processing helps ensure that markets are accessible for manufacturers who export their product. APHIS also helped ensure there were no foreign animal disease events related to the importation of more than 653 million doses of biological products, a 27 percent increase from 2023, in the number of doses imported. Each year, APHIS inspects an average of 50 biologics facilities to assure regulatory compliance. In 2024, APHIS conducted 82 inspections.

In 2024, APHIS received 84 applications for new and renewal licenses/permits and issued 16 licenses/permits for the prevention, diagnosis, management, or cure of existing or new/emerging animal diseases. This data depends on the biologics manufacturers and is outside CVB's control. The Agency licensed 83 manufacturers and permittees for 1,378 active product licenses/permits for the control of animal diseases in 2024. These products are vital for protecting American agriculture, facilitating trade, and enhancing agricultural economic opportunities. CVB also released approximately 125.5 billion doses of veterinary vaccines and diagnostic test kits in 2024, a 7 percent increase from the approximately 117 billion doses released in 2023. In 2024, the Agency issued licenses for veterinary biologic products within an average of 606 workdays. This represented a 29 percent increase from an average of 470 workdays in 2023. This increase was attributable to significant staff turnover and the training required for new staff to review all aspects of license packages. These packages encompass the manufacturing technology and complex scientific studies required to ensure product purity, safety, potency, and efficacy. With training in place, and filling of most of the funded reviewer vacancies, the timeframe to issue licenses should decrease as long as there are no high consequence disease outbreaks requiring priority review of licensing submissions.

APHIS' National Centers for Animal Health Portal allows real-time communication and data exchange between APHIS and biologics manufacturers, reducing the time and costs for application reviews. The Agency continued to enhance the Portal for more comprehensive electronic

submissions and two-way data exchange. By the end of 2024, 96 percent of licensed firms and permittees were using the Portal. This resulted in CVB receiving 99 percent of marketing documents, 95 percent of biographical summaries, 92 percent of licensing correspondence, and 71 percent of inspection and compliance correspondence through the Portal. In 2024, the Portal received 94 percent of export certificates and 98 percent of facility documents. Import permits submitted electronically represented 100 percent of Research and Evaluation Permits, 100 percent of Transit Permits, and 64 percent of Sales and Distribution Permits. Overall, 95 percent of 2024 CVB submissions were received through the Portal. In total, CVB received 35,003 submissions from the Portal in 2024, a decrease of nearly 2.7 percent from 35,986 submissions in 2023.

APHIS continued to enforce the Virus-Serum-Toxin Act regulation in 2024, requiring all veterinary biologics licensees and permittees to submit reports to the CVB concerning adverse events associated with the use of biological products they produce or distribute domestically and internationally. An adverse event is any illness, reaction, or other undesirable occurrence after the use of an immunobiological product, whether the product caused the event. For diagnostics products, adverse events include anything that hinders the discovery of the correct diagnosis. Adverse event reports are a vital component of CVB's mission to ensure that veterinary biologics, including those marketed internationally, comply with regulations. In 2024, CVB continued working to improve the quality of data submitted by manufacturers. In response to the mandatory reporting requirement, CVB received 76,705 adverse event reports in 2024. This represented a 5 percent increase from the 72,966 that CVB received in 2023. APHIS also performed 189 regulatory actions, issued 63 violation notices, and conducted 18 investigations of possible violations. More than 99 percent of the unlicensed entities investigated either moved toward product licensure or ceased the objectionable activity.

9. Veterinary Diagnostics

Laboratory and diagnostic services are essential components of the U.S. animal health infrastructure. The Veterinary Diagnostics line item supports efforts to stand up the National Bio and Agro-Defense Facility (NBAF) in Manhattan, Kansas which will help protect the nation's agriculture, farmers, and citizens against the potential threat and effects of serious foreign and zoonotic animal diseases. This line item also supports the National Veterinary Services Laboratories (NVSL), which consists of laboratories in Ames, Iowa and Plum Island, New York, and NVSL's satellite African swine fever (ASF) testing laboratory in Dorado, Puerto Rico. The Veterinary Diagnostics line item also supports the National Animal Health Laboratory Network (NAHLN), an animal disease surveillance and monitoring system that interconnects Federal and State laboratory resources to improve the security of the nation's livestock by providing disease diagnostics both daily and at increased levels during outbreaks.

National Bio and Agro-Defense Facility

The state-of-the-art NBAF is used to study transboundary, emerging, and zoonotic animal diseases that threaten the U.S. agriculture economy, food supply, and public health. NBAF will ultimately replace the Plum Island Animal Disease Center (PIADC), and all its essential functions, as well as provide additional capabilities for early development of veterinary medical countermeasures. In 2024, APHIS and ARS continued the phased transition of NVSL's Foreign Animal Disease Diagnostic Laboratory (FADDL) at the PIADC to NBAF. As part of this transition, the testing of feral swine for ASF and Classical swine fever (CSF) has been moved to NBAF. APHIS continues to develop a workforce of subject matter experts in foreign, emerging, and zoonotic diseases to conduct diagnostics in preparation for the transition through the NBAF Scientist Training Program. As of the end of 2024, 69 students completed the NLTP with 30 additional students completing the program in December 2024. APHIS continues NLTP partnerships with Tuskegee University, Kansas State University, and Texas Tech University. Besides Texas Tech University, students in this program come from several Hispanic-Serving Institutions including

Auburn University, Berry College, Midwestern State University, Sam Houston State University, Tarleton State University, and University of Wyoming.

APHIS participates in the Global Partnership for Animal and Zoonotic Disease Surveillance (GPAZDS), which links NBAF to nine laboratories in Africa and the Philippines, to better understand high consequence diseases endemic in other countries and develop and/or validate diagnostic tests with current disease isolates. In addition, the Agency partners with the Research Alliance for Veterinary Science and Biodefense BSL-3 Network (RAV3N), which involves 20 U.S. BSL-3 and BSL-4 laboratories jointly funded with ARS, as well as the BSL4ZNet, an international network of animal and human health laboratories ensuring APHIS has the latest threat and research information on high consequence animal and zoonotic diseases. In 2023, APHIS developed an NAHLN-NBAF partnership to institute a regional NAHLN laboratory approach to enhance agro-defense capabilities. In 2024, this partnership placed five scientists at five NAHLN laboratories to evaluate and develop diagnostics for animal and zoonotic diseases. The partnership also addressed Canine Infectious Respiratory Disease Complex, avian metapneumovirus, and highly pathogenic avian influenza (HPAI).

National Veterinary Services Laboratories

Diagnostic testing and confirmation of surveillance samples improve the security of the nation's livestock. The National Veterinary Services Laboratories is in the forefront of emerging and re-emerging diseases of concern including ASF, virulent Newcastle disease, tilapia lake virus, infectious hypodermal and hematopoietic necrosis virus, Senecavirus A (SVA), bluetongue, vesicular stomatitis virus, and rabbit hemorrhagic disease virus. In 2024, NVSL managed 506,625 diagnostic tests and 33,827 accessions (one or more diagnostic samples received from the same submitter on the same day). In 2024, the laboratories produced and shipped more than 90,000 reagent order items representing approximately 600 product types. Many of these products are only available to stakeholders through APHIS.

Since 2014, APHIS has conducted significantly more FAD investigations, due to the emergence of Senecavirus A (SVA), a non-fatal infectious disease of pigs. Because it mimics FMD, APHIS must diagnose each case to exclude FMD. In 2024, NVSL tested 12,372 samples from 1,192 FAD accessions across 45 States and territories. The NAHLN serves as a resource to conduct high-volume testing with confidence. SVA and FMD PCR results (if negative for FMD) from NAHLN laboratories can be considered final and actionable for the field. Using an FMD/SVA multiplex assay in the NAHLN laboratories that facilitates simultaneous testing for both diseases from a single sample has saved time, money, and resources.

APHIS conducts proficiency testing when Federal, State, and university-sponsored laboratories perform authorized diagnostic testing as part of APHIS-approved surveillance and/or response programs. This is done to ensure standardized, rapid diagnostic techniques are used and to maintain diagnostic credibility in the international marketplace. In 2024, APHIS produced 34 proficiency panels covering 25 diseases or procedures available to international, Federal, State, and private laboratories. The Agency produced the necessary controls and reference strains for approximately 200 diseases to help other laboratories develop and validate diagnostic tests.

In 2024, NVSL completed the core activities of a new Laboratory Information Management System called DARBI (Diagnostic and Research Biomaterial Inventory). These functions include accessioning, subject creation, sample creation, report distribution, the collection of user fees for requested testing, and developing workflows for polymerase chain reaction (PCR) and Enzyme-linked immunosorbent assay (ELISA) tests. A PCR test is used to detect infectious agents, while an ELISA test can detect antibodies. APHIS expects that this new system will improve efficiency by allowing laboratory sections to have paperless workflows and improved search functions.

National Animal Health Laboratory Network

The Veterinary Diagnostics program also provides support to the NAHLN including laboratory infrastructure; NAHLN staff; the APHIS Laboratory Portal, which provides secure communication for NAHLN laboratories and proficiency test management for NAHLN and non-NAHLN APHIS-approved laboratories; information management system support for electronic messaging; and quality management training to enable NAHLN laboratories to participate in the network. NAHLN personnel are trained at NVSL to ensure diagnostic proficiency and standardization. As of September 30, 2024, the NAHLN consisted of 64 State, Federal, and university laboratories in 42 States. These laboratories work with the NVSL reference laboratories to test for 14 economically devastating and/or FADs and potential zoonotic diseases. These diseases include FMD; avian, bovine, and swine influenza, ASF, and classical swine fever (CSF). In 2024, network laboratories performed 468,214 diagnostic tests, an increase of 37,714 tests in 2023, to support APHIS' animal health surveillance and response programs for NAHLN scope diseases, including ASF/CSF active surveillance. The NAHLN conducts exercises to prepare participating laboratories for animal disease outbreak scenarios and enable them to remain proficient in animal disease testing. It also enables them to generate rapid, local preliminary diagnostic results while NVSL performs confirmatory testing.

NAHLN staff use various communication mechanisms to efficiently exchange information among laboratories and State and Federal officials. One mechanism is the NAHLN Coordinating Council, which consists of laboratory directors, State animal health officials, and officials from APHIS and the National Institute of Food and Agriculture. A laboratory designation system reflects different capability levels for surveillance, preparedness, and emergency response preparation. NAHLN laboratories designated as Level 1, -2, or -3 receive infrastructure support from USDA, and conduct fee-for-service testing for the USDA. In 2024, the Council approved 36 Level-1 laboratories, 24 Level-2 laboratories, 2 Level-3 laboratories, and 2 Federal Affiliate laboratories. NAHLN continues to prioritize electronic messaging in their laboratory assessments. Overall, 61 laboratories were capable of messaging results for approved NAHLN assays, and APHIS projects that number will increase to 63 laboratories in 2025.

Emergency Response and Preparedness Activities

APHIS' NVSL and the NAHLN collaborate to provide high quality and timely results for the HPAI outbreak in poultry and cattle. NVSL provide consistent, timely sequencing results for both domestic and wild bird species. In 2024, sequences from 1,700 HPAI isolates were publicized in a Global Initiative on Sharing Avian Influenza Data, supporting APHIS' long-standing goal of improving transparency and improving access for policy makers and researchers to data that demonstrates the virus' global circulation. NVSL shared more than 1,280 dairy cattle and related sequences, making them available to the National Center for Biotechnology Information (NCBI). The NCBI is a branch of the National Institutes of Health and offers online access to various databases.

APHIS continues to expand its rapid detection capability to maintain a timely, effective response and build surge capacity in case of an ASF outbreak. The Agency engaged in collaborative efforts at FADDL and across the NAHLN to strengthen diagnostic preparedness. To enhance capacity in the NAHLN, FADDL provided proficiency testing to NAHLN laboratories, maintaining its ASF testing capacity in 2024 with 52 approved laboratories. APHIS also has 12 NAHLN laboratories performing ASF/CSF active surveillance. In 2024, APHIS executed an agreement with Ghana to fund an oral fluid infection study. This study showed that aggregate oral fluid sampling can detect ASF virus early in naïve swine herds, with environmental sample testing enhancing early detection and surveillance strategy. NAHLN is working with FADDL to deploy an ASF assay to NAHLN laboratories. In addition, APHIS approved spleen and blood swabs for FAD investigations and ASF/CSF active surveillance at NAHLN laboratories. This will streamline sample collection and processing time. APHIS continues to evaluate and define capability and capacity needs for a potential ASF outbreak. The Agency continues to develop strategies to use oral fluids to achieve early and rapid detection of positive cases. NVSL continues conducting ASF diagnostic

developmental projects and testing at Ames, Iowa. In addition, APHIS continued molecular and serological surveillance testing for ASF and CSF at NVSL's satellite laboratory in Puerto Rico establishing a quality management system with bilingual standard operating procedures. Finally, APHIS, in collaboration with the Canadian Food Inspection Agency, strategized on how to improve and harmonize diagnostic methods to enhance ASF preparedness.

10. Zoonotic Disease Management

The Zoonotic Disease Management Program enhances State, national, and international collaborative efforts to promote healthy animals, people, and ecosystems by addressing zoonotic diseases (those that pass between animals and people) and other relevant issues.

The Agency contributes animal health expertise, infrastructure, and networks in combination with those of human and environmental health to provide holistic solutions to complex problems. The Agency collaborates with industry and State partners to develop strategies, policies, and training to help stakeholders effectively engage with public health counterparts, provide guidance, facilitate information exchange, and enhance responses to issues. By enhancing APHIS' efforts to address the animal health component of zoonotic diseases, the program protects public health and improves animal health and marketability.

Zoonotic Disease Engagement, Investigation, and Response

In 2024, APHIS continued work on the Bovine Tuberculosis (TB) Initiative. This initiative is composed of five projects that address the challenges of bovine TB eradication. APHIS is the lead on this work and collaborates with USDA's Agricultural Research Service (ARS) and Mexican entities. The projects include clinical trials to test the efficacy of TB vaccines in cattle and deer, evaluation of new TB diagnostic tests, in-depth epidemiological analysis of affected herd investigations to determine TB introduction source, increasing slaughter surveillance numbers, and acquisition of TB sample data from other countries. In 2024, in collaboration with public health partners focused on the zoonotic aspects of TB, APHIS distributed 90 TB Lesion Flipbooks for slaughter personnel to better identify possible TB lesions. This work addresses critical gaps in slaughter surveillance.

In 2024, APHIS successfully transferred the management of the Baja California project to the University of Baja California and was able to enroll and vaccinate more than 3,300 calves across four dairies. APHIS will continue these vaccination efforts with the goal of enrolling and vaccinating 6,000 calves. APHIS established agreements with these operations to share production and health data to evaluate the effectiveness of vaccination. Additionally, APHIS continued evaluating a test that will distinguish between vaccinated and unvaccinated animals and has the potential to increase specificity over the current blood test. APHIS also assisted in the vaccination of free-ranging deer in Michigan to reduce the incidence of TB. APHIS worked with ARS to develop an effective bait-based delivery system for use in free-ranging white-tailed deer. APHIS and ARS stabilized the vaccine and are working to provide a carrier to incorporate into field deployable baits.

Antimicrobial Resistance

Antimicrobial resistance (AMR) is the ability of a microbe to resist the effects of medication previously used to treat it. There continues to be a gap in understanding of AMR patterns in bacteria that cause disease in animals and having national-level information on AMR in animal health pathogens is an important component of addressing AMR at the Federal level. To combat AMR, APHIS uses a multidisciplinary approach to improve coordination from public health and animal health sectors, and private sector organizations and stakeholders. APHIS works with its State, Federal, and industry partners to promote the judicious use of antimicrobials, which supports a strong, healthy, and thriving U.S. animal agriculture system as well as public health. Additionally, APHIS collaborates with the State Departments of Agriculture, diagnostic

laboratories, and public health officials to address AMR infections in humans found to have an animal component. APHIS also is currently investigating the presence of AMR genes in biologics, particularly those capable of vertical and lateral transfer and regardless of the occurrence of an AMR phenotype.

In 2024, APHIS was awarded over $3.2 million through 12 cooperative agreements to create AMR dashboards. These awards, in partnership with the National Association of State Departments of Agriculture and various universities, aim to enhance scientific knowledge on AMR. These public-private partnerships will improve access to information on AMR in livestock, poultry, and companion animals. The AMR dashboard monitors trends, detects emerging resistance profiles, and understands the relationships between antimicrobial use, animal health practices, and resistance. It continues to provide whole genome sequencing data to the National Center for Biotechnology Information and includes antimicrobial susceptibility testing data. Antimicrobial susceptibility testing data from over 3023 isolates and Whole Genome Sequencing data from over 500 isolates were collected by the NAHLN AMR monitoring project. In 2024, APHIS continued a cooperative agreement with the New York Farm Viability Institute to evaluate how to change human behavior on dairy farms related to antimicrobial stewardship.

In 2024, APHIS worked closely with the Centers for Disease Control and Prevention (CDC) to investigate human outbreaks of drug-resistant bacterial organisms stemming from animal origins. APHIS continues to be involved with the National Antimicrobial Resistance Monitoring System.

APHIS works with the Food and Drug Administration (FDA)-Center for Veterinary Medicine on their approach to measure the use of antimicrobial drugs in food producing animals. APHIS annually reports progress updates to partner agencies on activities associated with the National Action Plan for Combating Antimicrobial Resistance. In 2024, APHIS continued to participate on the Presidential Advisory Council for Combating Antibiotic Resistant Bacteria. APHIS also presented information on antimicrobial resistance activities at several events including the National Institute for Antimicrobial Resistance Research and Education annual meeting, the United States Animal Health Association, and the National Institute for Animal Agriculture's Annual Antibiotics Symposium.

APHIS participated in several international AMR activities in 2024. APHIS and the FDA submitted a report on antibiotic use in animal agriculture to the WOAH Global Database on Antimicrobial Agents Intended for Use in Animals in compliance with the international standards. In May 2024, APHIS participated in the WOAH General Session in Paris to update a chapter on prudent and responsible use of antimicrobial drugs in veterinary medicine in the WOAH Terrestrial Animal Health Code. APHIS worked across government to influence a Political Declaration that was issued by the UN General Assembly High-Level Meeting on antimicrobial resistance in September 2024. APHIS continues to participate in the Quads Animal Health Alliance Antimicrobial Resistance Network and uses this forum to share information on topics including progress on AMR National Action Plans, challenges regarding antimicrobial use and resistance monitoring, communication activities, and relevant legislation. APHIS also continues to review AMR-related statements and positions that stakeholders and other governmental and nongovernmental agencies promulgate that may have implications for animal agriculture. For example, APHIS monitors European Union (EU) legislation related to antimicrobial use in animal agriculture, and potential implications for exporting animals and animal products to the EU.

Zoonotic Disease Preparedness

APHIS continues to coordinate with cross sector partners to develop and implement national and international strategies and strengthen our emergency response capacities to ensure a quick response to zoonotic diseases with pandemic potential. In 2024, APHIS hosted Farm 2 Fork in coordination with FSIS, FDA, CDC, and industry partners discussing recent food safety related outbreaks, research updates, and industry priorities for pre-harvest food safety. Additionally, APHIS continues to participate in the North American Plan for Animal and Pandemic Influenza

Health Security working group. This group exchanges information on animal and human health sector responses to zoonotic diseases, include modeling, detection, diagnostic information and healthcare capacity and capability data. In 2024, APHIS shared animal health information with the CDC on monkeypox, Japanese encephalitis virus, and highly pathogenic avian influenza.

In May 2024, APHIS, in collaboration with the Johns Hopkins Applied Physics Laboratory, participated in a tabletop exercise to assess APHIS' preparedness for zoonotic disease threats. APHIS Veterinary medical officers, epidemiologists, entomologists, and trade coordinators worked with Agency public affairs specialists, budget analysts, and information technology managers to complete three prompts that resembled zoonotic disease threats the Agency has faced in the past, that could possibly happen in the future. Additionally, a second tabletop exercise in June 2024 was completed which included additional USDA partners to determine how all USDA entities would respond to a zoonotic disease incident that crosses multiple programs, agencies, and offices.

Additionally, APHIS coordinates and reports USDA's international efforts related to implementation of the Global Health Security Agenda (GHSA), a partnership of over 70 nations, international organization, and non-governmental stakeholders to minimize the threat of infectious diseases on the world stage. APHIS coordinates GHSA reporting on zoonotic disease, AMR, biosafety and biosecurity, national laboratory systems, and real time disease surveillance, ensuring interagency collaboration and communication with relevant agencies and stakeholders, both international and domestic. APHIS, in coordination with other GHSA member countries, contributed to the Zoonotic Disease Action Package in 2024, which is used to implement guidance and models on behaviors, policies, and practices to minimize the spill over, spread, and full emergence of zoonotic disease into or out of human populations.

APHIS uses its position as a coordination leader on the national effort to address the animal health component of zoonotic disease response during the COVID-19 pandemic. In 2024, APHIS reported SARS-CoV-2 test results to the WOAH as positive detections were identified, contributing to international knowledge of SARS-CoV-2 infections in animals. APHIS subject matter experts provide consultation and guidance to State animal and public health agencies on decisions and testing of animals for SARS-CoV-2.

Selected Examples of Recent Progress - Plant Health:

1. Agricultural Quarantine Inspection

APHIS and the Department of Homeland Security's Customs and Border Protection (CBP) safeguard U.S. agricultural and natural resources from the introduction of invasive pests and diseases through the Agricultural Quarantine Inspection (AQI) program. APHIS assesses the risks associated with international trade and specific imported agricultural products and develops import regulations to exclude foreign pests and diseases and protect U.S. agriculture. In addition, the Agency conducts off-shore pest risk reduction activities including foreign commodity pre-clearance programs; trains agricultural inspectors and detector dog teams to work at U.S. ports of entry; inspects and takes action as necessary on imported plant propagative materials; monitors the fumigation of arriving containers and cargo to mitigate pest risks; conducts trade compliance activities to detect violations of APHIS' import regulations and prevent smuggling; and provides the scientific support necessary to carry out these activities and those carried out by CBP, including, among other things, the authoritative and timely identification of pests necessary to determine whether regulatory actions on imported products are required.

APHIS collects AQI user fees under the authority of The Food, Agriculture, Conservation, and Trade Act of 1990, to recover costs for services provided by APHIS and CBP associated with preclearance inspections of passengers and the port-of-entry arrival of commercial vessels, trucks, loaded railroad cars, aircraft, and passengers entering the U.S. from a foreign destination. AQI user fee collections for 2024 exceeded pre-pandemic levels ($867 million for 2024 compared to $825 million for 2019, the last full year before the pandemic). However, the program's costs and

operations have changed significantly over the last five years due to changes in commercial transportation and travel patterns along with inflationary factors. On May 7, 2024, APHIS published a final rule in the Federal Register updating the user fee rates. Fees for the AQI program had last been updated in 2015. The new rates became effective on October 1, 2024, and will allow the AQI program to recover the full costs of carrying out the inspection and other safeguarding activities that protect U.S. agriculture and natural resources.

APHIS also 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 facilitating the movement of travelers and agricultural goods. APHIS inspects all passenger baggage leaving these islands because of the risks associated with pests of fruits and vegetables grown in these areas. When inspectors identify an item that poses a specific risk, they take immediate action to prevent the entry of materials that could harbor the pest or disease in question. This action prevents damage to the country's agricultural industry and negates the need for cost 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 on APHIS' behalf for shipment to the continental United States.

APHIS inspectors oversee the preclearance of certain commodities by inspecting shipments for export in the country of origin, monitoring treatments where required, or by monitoring systems approaches for pest mitigation (a combination of integrated pest management practices used in the field and after harvest). In most cases, exporters of the pre-cleared commodity cover the costs of this APHIS service through trust funds established for this purpose.

Cooperative Program Management

APHIS works with CBP to protect America's agricultural resources and food supply by inspecting international passenger baggage, cargo, and conveyances. APHIS and CBP share management of the program through working groups and daily collaboration. Senior leadership of both Agencies meet frequently to develop joint plans and coordinate efforts in priority areas, ensure clear and balanced decision-making, streamline effective outreach and communication, and improve organizational structure and leadership to support the shared work in the agriculture safeguarding mission. In 2024, APHIS trained 240 new CBP agriculture specialists and conducted basic agricultural threat training for 1,440 first line CBP officers. In addition, APHIS provided training support to CBP Agriculture Specialists who delivered military cooperator inspector training, certifying 635 Department of Defense cooperators who perform agriculture quarantine inspections in mainland U.S. military installations and delivering USDA Military Cooperator Train-the-Trainer certification workshop training to 12 CBP Agriculture Specialist field trainers. These cooperators prevent the entry of agricultural pests and diseases associated with military equipment and/or personnel returning from overseas military installations to the United States. Additionally, APHIS trained 29 Agriculture Detector Dog Team Supervisors, 23 Agriculture Canine Certifiers, and 34 Canine Teams for CBP.

Preclearance and Offshore Risk Reduction

One of the most effective ways to facilitate the safe movement of commodities into the U.S. is to address pest threats where they originate. In 2024, APHIS precleared 4.9 billion pounds of 68 different fresh fruits and vegetables from 19 countries before they arrived in the United States. Additionally, APHIS inspected 2.2 billion pounds of avocados in Mexico as a part of a systems approach to facilitate safe trade. APHIS has overseen this program since 1997, and the program accounts for about 80 percent of avocado imports to the United States. APHIS also precleared 1.7 million pounds of cut flowers, bulbs, and perennials from Chile and approximately 800 million bulbs and perennials from the Netherlands and South Africa.

APHIS conducts certain inspections and certifications overseas to verify that treatment or production facilities meet the Agency's standards and regulatory requirements to help protect U.S. plant health from pests that could move into the United States with high-demand, large-volume commodity imports. In 2024, APHIS certified 190 phytosanitary treatment facilities, including 83 facilities in Mexico, 6 facilities in Central America, 6 facilities in Caribbean, 88 facilities in South America, and 7 facilities in Asia. APHIS is currently tracking 302 offshore treatment facilities in 19 countries. Among the most common mitigation types are hot water treatment (148 active facilities) and methyl bromide fumigation (82 active facilities). These actions ensure the efficacy of offshore treatments that protect American agriculture from potential pests on imported commodities before they arrive onshore.

Through audit-based monitoring programs, APHIS oversees almost 90 commodity programs that mitigate pests before they reach U.S. ports. Of these, 12 programs require annual audits of all or a portion of their facilities. APHIS completed 30 audits and recertifications, including 17 Ralstonia exclusion program facilities for geranium cuttings and tomato plantlets in growing media, 5 offshore greenhouse certification program facilities, and 8 clean stock program facilities for dracaena (a genus that includes many popular houseplants). These three programs alone allowed for the safe import of 266 million propagative plant units with a wholesale value of $83 million (based on industry-provided data).

To help the U.S. military prevent the spread of foreign animal diseases and plant pests, APHIS worked with the U.S. Department of Defense to inspect 22,426 shipments of personal goods, 3.6 million pieces of military cargo, and 7,568 personal vehicles from 16 countries before they returned stateside to prevent the introduction of foreign pests and disease. APHIS completed annual evaluations and recertifications of military preclearance programs in 111 countries in Europe and Africa, ensuring that these programs meet all administrative, programmatic, and safeguarding requirements. APHIS trained 176 military service members to manage these programs locally in Europe and Africa.

Defoliating moth species from Asia, or the flighted spongy moth complex (FSMC) made up of five Lymantria species and subspecies, present a significant threat to U.S. forests. These moths can lay their eggs on the superstructure of maritime vessels, allowing the pest to spread into new territories. In partnership with CBP, APHIS coordinated the inspection of approximately 4,620 vessels that had visited high-risk ports within the last 24 months. Vessels can request a predeparture FSMC inspection certificate from 28 national plant protection organization (NPPO)-accredited certification bodies in high-risk countries, including China, Japan, Korea, and Russia. APHIS coordinates on the standard for these inspections with its counterparts in Australia Canada, Chile, and New Zealand. Seventeen ships had FSMC infestations in 2024.

APHIS also helps keep plant pests and diseases offshore with cooperative programs like the Greater Caribbean Safeguarding Initiative (GCSI), the Don't Pack a Pest Program, and the PestLens website and early warning system. The GCSI is a cooperative framework of 42 NPPOs and regional partner organizations in the Caribbean region that funded 9 safeguarding projects to mitigate pest risk near U.S. borders in 2024. The Don't Pack a Pest program provides traveler education materials in participating countries and territories to stop the introduction of pests and diseases travelers may bring in personal baggage. APHIS works with 19 partner countries and territories on the Don't Pack a Pest program, expanding to Mexico in 2024. In cooperation with North Carolina State University, APHIS provided 26 pest alert notifications to more than three thousand registered users of PestLens, including 78 new pest-related articles, and added 7 new pests and 47 new pest distribution records to the Global Pest and Disease Database. These systems serve as a resource for APHIS and other plant health regulatory officials that conduct plant health risk assessments and develop inspection policies for imported goods, among other things.

Pre-Departure Inspections

APHIS inspected the baggage of more than 16.7 million passengers prior to departing Hawaii and Puerto Rico and intercepted approximately 289,855 prohibited items and 3,008 quarantine-significant pests in 2024. APHIS conducts commodity certification and inspection programs to facilitate interstate trade between Hawaii, Puerto Rico, and the continental United States. In 2024, the program conducted 375,740 inspections of regulated agricultural commodities shipped as cargo or through Express Carriers from Hawaii and Puerto Rico utilizing canine teams to assist in these inspections. In addition, out of the 375,740 cargo inspections, the program oversaw 7,284 cargo treatments in Hawaii and Puerto Rico.

The Predeparture program continued to conduct inspections and risk mitigation to prevent the movement of prohibited pork products and byproducts from the African swine fever (ASF) protection zone in Puerto Rico and the U.S. Virgin Islands. Since the inception of the ASF Federal Order in 2021, the Predeparture program has successfully seized over 95,000 kilograms of pork and pork products destined to the U.S. mainland, keeping the 28-billion-dollar industry safe from this devastating disease.

CBP Facilitated Port-of-Entry Inspections

In 2024, 196,701,944 passengers and pedestrians entered the United States by air, bus, ship, train, or on foot. The program also conducted secondary agricultural inspections of 494,084 of the approximately 75,555,026 million passenger vehicles entering the United States from Canada and Mexico in 2024. In addition, agriculture inspectors cleared 30,382 ships and inspected more than 1.4 million cargo, mail, and express carrier shipments, intercepting 61,313 pests and issuing 72,687 Emergency Action Notifications.

Propagative Plant Inspection

Imports of nursery stock and other propagative plant materials can serve as significant pathways for invasive pests and diseases. To reduce the pest and disease risks associated with such imports, APHIS requires that certain imported plant materials enter the United States through one of 16 plant inspection stations located at or near ports of entry throughout the country and territories at major international airports and seaports, and at major crossings along the U.S.-Mexico border. Plant Health Safeguarding Specialists at these stations inspect shipments to ensure that imported plants and seeds 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 2024, inspectors cleared 26,813 imported shipments containing 1.80 billion plant units (cuttings, rooted plants, tissue culture, etc.) and over 584,887 kilograms of seeds of woody plants. Through these inspections, PPQ employees detected 4,509 pests of which 1,830 were quarantine significant pests at the plant inspection stations. In addition, the stations conducted 3,803 treatments or other actions to remediate pests on more than 10.0 million plant units and 102,987 kilograms of seed.

Plant Germplasm Quarantine

APHIS' Plant Germplasm Quarantine Program (PGQP) provides quarantine services for importing plant cultivars and germplasm safely to improve U.S. agriculture and prevent foreign pathogens from entering our agricultural production areas and environment. In 2024, PGQP released from quarantine 7 bamboo clones, 54 grass clones, 4 kiwis, 53 pome fruits, 56 potato clones, 40 potato true seed lots, 9 rice seed lots, 13 stone fruit clones, 8 sugarcane clones, and 4 sweet potato clones. Thirty-nine of the pomes, 6 of the stone fruits, 1 of the potato clones, 8 of the sugarcanes, and 4 of the sweet potatoes released this year resulted from therapy performed on the infected originally imported plants. Quarantine regulations prohibit entry of these high-risk crops into the United States in commercial quantities, but importers can bring in small quantities through an APHIS-approved plant quarantine program. All released clonal and seed accessions tested negative for pathogens by polymerase chain reaction and high throughput sequencing. Due to an

increasing interest in importing NAPPRA (Not Admissible Pending Pest Risk Analysis), the PGQP anticipates additional imports of these plants in the future.

Pest Identification

When pests are detected during AQI activities, the program must identify them to determine if they are considered quarantine significant under APHIS regulations (i.e., if they are exotic and could pose a significant threat to U.S. plant health, if the program can allow the cargo entry into the United States, and what, if any, mitigation measures would be required.) In 2024, APHIS processed and identified approximately 99,000 AQI pest interceptions, with approximately 53,000 being quarantine significant. In 2024, APHIS continued its use of digital imaging technology for pest identification, and APHIS National Specialists performed 84 percent of their final identifications for cargo on hold based on digital images, an increase of 3 percent over 2023. APHIS will continue the use of digital imaging technology as a means to improve the timeliness of pest identifications for urgent submissions (i.e., those for which cargo is on hold pending a pest identification). APHIS and CBP use the Cargo Release Authority (CRA) program to reduce the number of pests that CBP must submit to APHIS for identification, speeding up the inspection process for shipments that contain no suspect quarantine pests. Through the CRA program, APHIS provides training and job aids that allow CBP Agriculture Specialists to recognize frequently intercepted, easily identifiable, low-risk organisms, and to release the cargo if the organism is not a quarantine significant pest. APHIS grants CRA after the Agriculture Specialist has successfully identified a particular pest a certain number of times and submitted documentation to APHIS.

Risk Analysis and Methods Development

APHIS' Plant Pest Risk Analysis (PPRA) unit develops pest risk analyses and epidemiological approaches to support and improve pest exclusion programs and decision making. In 2024, APHIS completed approximately 287 risk analyses associated with imports, exports, invasive pest threats, and other programmatic requirements. This total includes 28 analyses to open, expand, or maintain export markets for U.S. producers and 41 risk assessments for import requests from foreign countries. PPRA's work also included evaluations of 41 newly detected pests, 54 evaluations of offshore pests to identify the greatest threats and help prioritize resources, 12 pathway analyses and spread models, and 10 New Pest Response Guidelines to proactively prepare for emergency responses. These products identify potentially harmful plant pests and diseases and help APHIS decide what mitigating actions to take in order to prevent their entry into or limit their spread or economic impact within the United States.

Smuggling Interdiction and Trade Compliance (SITC)

SITC identifies and closes smuggling pathways for prohibited agricultural products into U.S. commerce. SITC works closely with CBP to identify and target agricultural risks at the ports of entry before they enter U.S. commerce. In 2024, SITC conducted 17,650 surveys and made 3,782 seizures of prohibited agricultural items in non-Port of Entry locations. Of these seizures, 559 were made in express courier facilities and one in eCommerce. Those seizures totaled 208,791 pounds of prohibited and/or restricted plants, plant products, meat, and meat products valued at approximately $1.9 million. SITC initiated 1,553 product traces including 15 for sales conducted via ecommerce. Additionally, SITC conducted 34 recalls for restricted material, including noncompliant wooden handicrafts and grain products. Total seizures as a result of recalls weighed 5,480 pounds and had an estimated value of $67,608.

Treatment Program

APHIS supports U.S. imports of plants and plant products by facilitating and monitoring phytosanitary treatments. APHIS facilitated entry of regulated agricultural cargo through the monitoring of 13,775 fumigations (587 commodities from 75 countries), 42,521 cold treatments (25 commodities from 18countries), 6,862 irradiation certifications (17 commodities at 11 facilities

in 6 countries), and 163 heat treatments of Niger Seed to reduce pest risks on cargo that would not otherwise have been allowed entry. The treatment program expanded to allow cold treatment at a new port of entry and additional commodities to be treated at an established irradiation facility within the United States.

Permitting

APHIS requires that importers apply for permits for the importation of certain high-risk regulated plants and plant products for consumption or propagation into the United States and transit through the United States. These products include regulated plants and plant products, pests, and pathogens for diagnostic and research, biological control agents, soil, and Federal noxious weeds. Permits notify importers of commodity import requirements to ensure products and commodities making entry into the United States will not harm American agriculture. 2024, APHIS issued 23,975 import permits for regulated plant material, organisms, and soil, and issued 10,248 letters (Letters of Denial or Letters of No Jurisdiction) in response to permit application requests. In addition, the Plant Protection and Quarantine Customer Support Center responded to 31,329 customer support calls and emails to assist stakeholders with import-related questions. APHIS continues to improve customer experience through the development and delivery of the new eFile permitting system. The eFile system supports automated permitting for more than 60 percent of all permit types and reduces the wait time for a permit to be issued to within minutes, as compared to 2-4 weeks using the previous ePermits system.

Phytosanitary Export Certification

APHIS facilitates the export of agricultural shipments by tracking plant health import requirements for approximately 200 countries and provides certifications to U.S. exporters to help ensure that U.S. products meet other countries' requirements. More than 2,100 Authorized Certification Officials at the Federal, State, and county levels can access countries' certification requirements online and conduct inspections to issue phytosanitary certificates. These certificates facilitate the entry of commodities into foreign markets. The program employs a web-based Phytosanitary Export 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 that 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. In 2024, APHIS collected more than $42.9 million for certificates and remitted more than $24.8 million of that amount to State and County cooperators for certificates they issued. Currently, 39 States and 35 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. Additionally, the Agency is continuing its effort with international counterparts exchanging phytosanitary certificates electronically. APHIS and the International Plant Protection Convention established an electronic hub that countries can access to exchange export certificates with trading partners. Studies by industry have shown that paperwork errors slow down exports, leading to the majority of costly delays. The United States began using the hub in May 2018 and is actively exchanging certificates with 107 countries now (an increase of 12 countries in 2024) with more than 548,000 phytosanitary certificates received and more than 352,000 sent (53 percent of the total number of certificates issued). In 2024, APHIS, State, and county officials issued more than 663,000 Federal export certificates for agricultural shipments. APHIS continued implementing a compliance-based program for high quality grains. This program allows U.S. shipments to meet Japan's requirement for phytosanitary certificates for shipments that were previously exempt and facilitates exports to other trading partners. APHIS now has seventeen approved facilities as part of the program (up from 11 at the end of 2023), and APHIS and States issued more than 2,500 certificates to 13 countries for more than 78,000 metric tons of grains.

2. Cotton Pests

The Cotton Pests Program works with growers, the cotton industry, States, and Mexico to eradicate the boll weevil (BW) and pink bollworm (PBW) from all cotton-producing areas of the United States and northern Mexico. Collectively, the BW and PBW are the most destructive pests of cotton, worldwide. 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 insect technology), while program partners continue to provide 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.

Boll Weevil

The BW has cost cotton growers more than $15 billion since it entered the United States in the late 19th century (National Cotton Council of America, 2021). APHIS began the initial BW eradication program along the Virginia-North Carolina border in the early 1980s. The BW eradication effort involves mapping cotton fields, using pheromone traps to evaluate weevil presence, and applying pesticides to treat infested crops. Once BW is eradicated from an area, cotton growers rely less on insecticides, thus reducing their production costs. Over the course of the eradication efforts, the program has increased these growers' global competitiveness, primarily through reduced production costs and increasing yields.

To date, APHIS and cooperators have eradicated BW from 99.5 percent of the 10.23 million acres of planted cotton in the United States, with eradication activities continuing in the Lower Rio Grande Valley (LRGV) of Texas. Currently, BW only exists in 10 quarantine counties in the LRGV, Texas. The LRGV is the last zone within the United States where the pest persists. BW populations in neighboring Mexican cotton producing State of Tamaulipas impact eradication efforts in the LRGV. Therefore, APHIS and its cooperators in Mexico's National Service for Agrifood Health, Safety and Quality (SENASICA) and Texas Boll Weevil Eradication Foundation (TX-BWEF) are working to eradicate BW from the Mexican state of Tamaulipas.

In 2024, APHIS continued its support for the BW Eradication Program in Tamaulipas, Mexico, through its agreement with the North American Plant Protection Organization which funds ultra-low volume malathion and aerial treatment expenses. Cooperators from TX-BWEF provided technical training and assistance to SENASICA and growers in Tamaulipas to implement the rigorous quality control program protocols. This includes providing technical assistance through the smart device application that enables employees and TX-BWEF managers to monitor trap deployment, trap servicing, and treatment activities in real time. In 2024, cooperators from TX-BWEF and SENASICA, established additional BW traplines into southern Tamaulipas, extending over 100 miles from current BW eradication efforts. The trap lines informed cooperators of active BW populations that are a migratory distance from the current Boll Weevil Eradication Program (BWEP) in northern Tamaulipas. The U.S. cotton industry and cotton growers support the BWEP to eradicate it from the United States and cotton-growing regions in northern Mexico to prevent BW from re-establishing in the United States.

In 2024, APHIS also continued virtual monthly meetings with SENASICA to maintain open communication about BW eradication successes and challenges throughout the growing season. APHIS will continue providing support to SENASICA at multiple levels to ensure growers adhere to eradication and quality control protocols, as well as ensure growers adhere to defoliation, harvest, and stalk-destruction timelines set by BWEP. In addition to monthly meetings with cooperators in 2024, officials from APHIS and SENASICA successfully negotiated with growers in northern Tamaulipas to cap their cotton planting at 3,850 hectares to restrict available habitat for BW and reduce the costs of the Binational BWEP. Additionally, SENASICA provided financial support towards the purchase of ultra-low volume Malathion and ground-based application equipment.

Overall BW activity peaks in late August into early September for the LRGV, and late August to early October in Tamaulipas. As a result of no environmental or weather-related interference effecting growing and harvesting efforts, BW captures in Tamaulipas decreased by 78 percent, with 447 captures through September 2024, compared with 1,958 BW captures by the same time in 2023. Cooperators in Tamaulipas treated 284,024.22 acres in 2024, compared with 338,922 treated acres in 2023. Captures in LRGV decreased by 92 percent, totaling 168 through September 2024, compared with 2,175 BW captures by the same time in 2023. Cooperators treated 197,753 acres in the LRGV, compared with 569,567 that needed treatment at the same time the prior year. APHIS will continue partnering with the U.S. cotton industry to reduce the BW population in the LRGV and to conduct BW surveillance efforts for all U.S. cotton production areas in 2025. APHIS will also continue to partner with SENASICA's Tamaulipas BW Eradication Program to provide technical assistance and funding for their parallel program to the LRGV program. APHIS is committed to monitoring BW to ensure the early detection of any reintroductions, and to work toward successful eradication of BW in the United States in the coming years.

Pink Bollworm

In the U.S., although the volume of acreage planted with cotton varies from year to year, the PBW commonly caused cotton losses of 20 percent or more in affected areas. In 2018, APHIS, in conjunction with industry partners, successfully eradicated PBW from all commercial cotton-producing areas in the continental U.S. In that same year, Florida Department of Food, Agricultural, and Consumer Services (FDACS) added a PBW quarantine for south Florida where wild PBW populations have persisted for over 80 years in wild cotton. In 2020, FDACS restricted planting of commercial cotton by designating south Florida as a Regulated Area for PBW. Since 2018 APHIS has supported PBW surveys to ensure that isolated PBW populations in southern Florida do not move north into the commercial cotton production areas. In 2024, there were no detections of PBW found in 83,380 acres of commercial cotton surveyed in north central Florida. These surveys will continue in 2025.

3. Field Crop & Rangeland Ecosystems Pests

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

Grasshoppers and Mormon Crickets

APHIS cooperates with Federal, State, Tribal, and local agencies, organizations, and institutions to conduct survey and suppression activities in western States to reduce damage that GMC outbreaks cause, protecting rangeland resources that serve as forage for livestock, provide habitat for wildlife and ecosystem services, and provide recreation opportunities. A 2012 University of Wyoming study found that healthy rangeland provides forage value worth $6.7 billion and overall benefits ranging from $10.7 to $21.2 billion. 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, GMC can also devastate cultivated crops such as alfalfa, barley, corn, and wheat. Damage from GMC also reduces habitat and food sources for wildlife, which can threaten animal and plant biodiversity as well as the rangeland's ability to sequester carbon. Infestations often cover vast acreage, and landowners or land managers may need Federal support to control them. The program helps landowners and land managers by providing population information, helping to predict where grasshopper populations could develop into

outbreaks, and providing technical assistance about options for dealing with problem-level populations. By providing information and advice to land managers and by conducting suppression treatments where necessary and possible, this program helps protect 661 million acres of rangeland across the western United States.

In 2024, APHIS conducted surveys in 13 States for GMC, collecting data at 20,270 survey points. With available funding, APHIS was able to conduct treatments for small areas with high populations. The program conducted treatments in five States in 2024, using FCREP funding and reimbursements from participating landowners. The Plant Protection Act specifies that the Federal government covers 100 percent of treatment costs on Federal lands; 50 percent on States lands; and 33.3 percent on private lands. APHIS conducted treatments on 371,002 acres in Idaho, Montana, Nevada, Oregon, and Utah. These treatments protected rangeland forage and wildlife habitat on more than 812,923 acres. Treatment numbers for 2019 through 2023 can be found at the following link on the GMC program website: APHIS Treatment data 2019-2023. Before conducting any grasshopper treatments, APHIS confirms the species of the grasshopper as some do not cause damage to rangeland and others can even provide ecological benefits by eating weeds (leaving grasses for grazing livestock). At the state level, APHIS works with landowners and land managers including the Bureau of Land Management, Tribes, ranchers, and local governments to coordinate requested treatments and to ensure treatments conform with established environmental standards to minimize impacts on non-target species.

Imported Fire Ants

IFA is a public nuisance and serious agricultural pest causing approximately $6.7 billion in damage to homeowners, agriculture, and natural ecosystems within the IFA Federal quarantine area, according to the Ant Pests Community funded by the National Institute of Food and Agriculture's Extension Service. The economic impact if IFA reached all suitable habitats in the United States where IFA could become established is greater than $10.6 billion per year (Economic Evaluation of the Regulatory Program for IFA, APHIS, March 2018). Currently, IFA infests more than 374 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, which are under a partial or full State quarantine.

In 2024, the program expanded the existing imported fire ant quarantine areas in Tennessee and Oklahoma. The IFA program continues to work with university researchers and USDA's Agricultural Research Service (ARS) to develop new pesticide treatments to prevent IFA movement on nursery stock and sod and to evaluate ways to optimize existing biological control agents for IFA control. The program supported 22 cooperative agreements in all infested states and territories for inspecting nurseries and conducting delimiting surveys. The program continued to provide funding to conduct joint surveys with the New Mexico Department of Agriculture staff to collect IFA infestation data for potential deregulation actions. The IFA program continues to provide regulatory guidelines to stakeholders for the treatment of regulated articles, oversight, and enforcement to help prevent the human-assisted spread of the pest. In 2024, APHIS completed a review of federal program functions, and state and industry practices related to IFA, as part of an ongoing evaluation of potential changes to APHIS program, given that IFA continues to spread naturally.

Karnal Bunt

The FCREP program also addresses Karnal bunt, a fungal disease of wheat that was first detected in 1996. Many U.S. trading partners will not accept U.S. wheat unless it is certified to originate from areas where Karnal bunt is known not to exist. The program prevents the disease from entering the grain market system, spreading beyond the areas of Arizona where it is currently found (portions of two counties in the State, accounting for 0.12 percent of wheat acreage in the United States). In 2024, the program implemented a reduced buffer requirement around infested fields based on analysis showing that a significantly smaller buffer (0.2 miles down from 3 miles)

will provide protection from spread of the disease's causal agent (a fungal pathogen, Tilletia indica). During the year, the program removed a total of 36,982 field acres (835 fields) in Arizona from Karnal bunt regulation in Maricopa County, Pinal County, Ak-Chin Indian Community tribal land, and Salt River Pima-Maricopa Indian Community tribal lands. Three of the fields met the five-year cumulative tillage requirement for deregulation, and the rest were removed because of the reduced buffer requirement. The buffer reduction provided relief to multiple growers from having to follow quarantine requirements and allowed the program to discontinue monitoring in buffer fields that never had a positive Karnal bunt detection, without compromising safeguards against the spread of T. indica. In 2024, 25 wheat-producing States participated in the Karnal bunt national survey. The program tested 524 samples from 222 unique counties with no positive detections. Based on this national survey, the program certifies wheat exports free of Karnal bunt, assuring trading partners about the safety of U.S. wheat exports, retaining export markets, and facilitating wheat movement into domestic and international markets. In 2023, growers across the country planted approximately 49.6 million acres of wheat and harvested 1.8 billion bushels of wheat with a value of $12.7 billion (National Agricultural Statistics Service, Crop Values 2023 Summary and Crop Production and Quick Stats). The U.S. exported 18 million metric tons of wheat, valued at $6.1 billion; wheat products valued at $189 million; and wheat flour valued at $151 million to 102 countries (FAS, GATS 2023). The successful Karnal bunt quarantine and survey program facilitates wheat trade without disruptions.

Witchweed

If witchweed, a parasitic plant that can significantly damage corn, rice, sorghum, and sugarcane, were to spread throughout the Corn Belt, it could decrease crop yields for corn and sorghum by up to 10 percent and could negatively impact trade in commodities from these areas. Since program activities began in 1957, APHIS and cooperators have successfully eradicated witchweed from 99 percent of the infested areas in North Carolina and South Carolina. These activities consist of frequent field inspections, treatment of infested acres (tillage, ethylene injections to stimulate witchweed seeds to sprout, and hand-pulling and herbicide application), post-eradication surveys, and addressing any new infestations. The program surveyed more than 38,000 acres in 2024 (surveys continue through the fall and are still ongoing). At the end of 2024, 2,530 acres remain regulated, including acres in two risk categories—higher-risk acres where witchweed has been more recently detected and lower-risk acres approaching the point at which they can be deregulated. Because witchweed seeds can remain viable in the soil for up to 14 years, and a host plant must be present for witchweed germination, year-to-year fluctuations in the number of acres infested are common. The program detected 0 new or reinfested acres during 2024. By preventing the spread of this damaging weed, the program indirectly protects U.S. corn production, which covered more than 94.6 million acres in 2023, valued at $73.9 billion (National Agricultural Statistics Service, Crop Production Historical Track Records, April 2024).

Roseau Cane Scale

Roseau cane is an important grass species in wetland areas of the lower Mississippi Delta, Louisiana. The plant's root system provides wildlife habitat, protects the interior from storm surges, and protects riverbanks from erosion, which impacts the Mississippi River navigation channel. However, while investigating dieback, the invasive scale insect, Roseau cane scale, was found infesting affected stands. Researchers from Louisiana State University (LSU) investigated potential stressors causing die back, including include high water levels, salinity intrusion, scale insects, plant pathogens, and soil chemistry. To further investigate the possible causes of the die off and build management and restoration plans, starting in 2018 LSU formed a multi-disciplinary and multi-institutional team with support from APHIS and collaboration with ARS. Research objectives include the biology and control of the scale insect that affects Roseau cane; other stressors that may affect the health of Roseau cane, including soil composition, pH levels, and nitrates; marsh grass restoration techniques; host plant resistance to scale insects; impacts of both beneficial and pathogenic microbes on Roseau cane; and restoration ecology. With 2024

funding from APHIS, LSU continued to investigate the causes of Roseau cane decline. Research strongly suggests that the dieback of Roseau cane was precipitated by saltwater incursion during an extreme drought event. The introduction of the nonnative Roseau cane scale and possibly pathogenic fungi contributed further stress to the plants. In the Gulf of Mexico, sea levels are rising above the global average, leading to prolonged inundation of coastal Roseau wetlands. This extended submersion overwhelms the plants, exposing their roots to excessive salt levels, leading to dieback. Findings also suggest that the invasion of the non-native taro plant following Roseau cane dieback could severely limit the ability of the common Delta lineage to successfully recover and reestablish in these areas. The work to date by the Roseau cane die-back team improves our understanding of plant stressors on Roseau cane and the biology, distribution, feeding ecology, and impact of the scale insect attacking the cane at the Mississippi River Delta. Project scientists continue to evaluate the impacts of the presence of Aprostocetus Sp., a potential biological agent that arrived independently in the Mississippi River Delta, on the Roseau cane scale.

Cogongrass

Cogongrass is an invasive perennial weed that is a prolific seed producer and forms an extensive rhizome network. The primarily wind-dispersed seeds spread easily along rights-of-way and in other disturbed areas encouraging population expansion. Cogongrass readily invades pine plantations and is believed to create chemical interference that decreases pine production. Moreover, cogongrass is difficult to control because the rhizomes are drought, fire, and herbicide tolerant. APHIS estimates that this species has the potential to spread across 82 percent of the United States. In 2024, APHIS provided $1.724 million to Alabama and South Carolina to support survey, outreach, and control activities related to cogongrass infestations in these States. In addition, APHIS supported a project aimed at developing new management methods for the weed.

4. Pest Detection

The goal of programs funded by Pest Detection is to survey and evaluate the presence or absence of plant pests and diseases of significance in the United States. This information is the basis of APHIS' efforts that preserve economic opportunities for farmers (i.e., interstate commerce and international trade) and safeguard U.S. agricultural and natural resources from the risks associated with the entry, establishment, or spread of plant pests, diseases, pathogens, and noxious weeds. The programs collaborate with Federal agencies, state departments of agriculture, Tribes, academic institutions, and industry partners in all 50 States and several U.S. Territories to conduct activities.

APHIS and its cooperators carry out plant pest surveys through programs funded by the pest detection line item, including the Cooperative Agricultural Pest Survey (CAPS) program. APHIS provides national coordination, develops policies and procedures for surveys, and provides funding to cooperators to conduct surveys through CAPS. In addition to funding the surveys, APHIS makes available funding for a survey coordinator position in each participating State as part of the personnel infrastructure necessary to do surveys. In 2024, the program funded a network of State Survey Coordinators. Programs funded by Pest Detection also coordinate development of survey tools for high-risk pests. In 2024, APHIS continued developing maps to help State cooperators determine which high-risk pests to target for survey efforts. APHIS completed 9 maps during 2024, for pests of concern, bringing the total number of maps to 33. Overall, programs funded by Pest Detection enable APHIS and its cooperators to conduct surveys and collect data about pests and use the resulting data to make decisions aimed at averting economic and environmental damage. While many entities are involved in protecting crops and resources, APHIS verifies that U.S. products for export do not pose risks to other countries.

In 2024, APHIS and cooperators in 50 States and 4 Territories conducted surveys targeting a total of 202 unique pests, including 95 out of the 103 pests APHIS' CAPS Committee identified as high risk. When combined with surveys funded by Plant Protection Act 7721, APHIS and cooperators

targeted 102 out of the 103, or 99 percent, of identified high-risk plant pests. APHIS confirmed nine pests new to the United States based on the data collected during the 2024 surveys; however, none required federal regulatory action. APHIS is evaluating and/or responding to approximately 45 pests detected in prior years. Evaluating these detections allows APHIS and State officials to determine whether regulatory or mitigation measures are necessary to manage the potential impacts of the pests or diseases. In consultation with stakeholders, APHIS determined 22 pests do not require regulatory measures and changed the regulatory pest status from quarantine to non-quarantine. In addition to providing data for determining when pest response activities are needed in the United States, APHIS uses the survey data to support U.S. farmers' access to export markets. In 2024, APHIS used the data in bilateral trade discussions, pest risks assessments supporting U.S. exports, and issuance of phytosanitary certificates.

5. Plant Protection Methods Development

The Plant Protection Methods Development (PPMD) program develops scientifically viable and practical tools for exotic plant pest exclusion, detection, and management. These tools preserve economic opportunities for farmers and industries who engage in interstate commerce and international trade, and safeguard U.S. agricultural and natural resources from invasive plant pests. The program is essential to APHIS' mission by developing and validating tools for detecting exotic pests in survey programs; molecular diagnostic tests and identification tools for pest identification; integrated pest management methods, including biological control, to help eliminate or manage invasive pests; and phytosanitary treatments to support interstate and international trade. A major focus of the program is to develop and implement biological control technologies that allow for the use of natural enemies 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.

In 2024, the PPMD program continued developing and improving technologies, tools, and treatments for APHIS plant pest and disease programs, such as Mexican fruit fly, grasshopper, mollusks, and spotted lanternfly (SLF). More specifically, the program evaluated the effectiveness of pesticides and trapping methods to aid in the detection and management of invasive land snails, as well as, developed and delivered protocols to monitor treatment effectiveness of insecticide applications, spot treatments, and portable vacuums as a treatment for SLF. The program also improved and deployed data collection tools for field use that improved accuracy of the data collected from the SLF treatment monitoring sites. Additionally, the program completed the optimization of a high-throughput sequencing metabarcoding protocol that will aid in the identification of unknown fungal pathogens in plant tissue.

The PPMD program maintains rearing facilities for biological control agents in Arizona, California, Massachusetts, Michigan, Texas, and Guatemala. APHIS partners with USDA's Agricultural Research Service (ARS), the U.S. Fish and Wildlife Service, State departments of agriculture, universities in 30 States and Territories, and 2 Native American Tribes to evaluate and establish biological control agents for invasive plants, pests, and diseases. The biological control program has been responsive in developing biological control agents to address invasive pests and weeds such as Japanese beetle, spotted wing drosophila, spotted lanternfly, box tree moth, invasive shot hole borers, Roseau cane scale, air potato, and houndstongue. As of September 2024, the biological control portfolio includes 33 cooperative agreements with States and Tribal Nations in 19 different States that will rear, release, and monitor the establishment and impact of 14 agents attacking 2 invasive arthropods and 14 exotic weeds.

The PPMD program also supports research related to invasive honeybee pests. Managed honeybee colonies add at least $15 billion to the value of U.S. agriculture each year through increased yields and superior quality harvests (O'Brien, D. 2019 ARS Microscopy Research Helps Unravel the Workings of a Major Honeybee Pest). In 2024, the program continued to fund priority projects with other Federal agencies as well as universities and non-profit researchers that support

managing, suppressing, and eradicating Varroa mites and other pests and diseases contributing to a decline in honeybee health. These projects included investigating a multidisciplinary approach for tackling emerging disease outbreaks, management techniques to improve overwintering success, and detection and management of the parasitic Tropilaelaps mites that feed on honeybee eggs, larvae, and pupae. Research efforts will continue into 2025.

6. Specialty Crop Pests

The goal of the Specialty Crop Pests (SCP) Program is to protect U.S. fruits and vegetables, tree nuts, horticulture, and nursery crops from adverse impacts associated with invasive pests, such as crop damage or threats to international trade and interstate commerce. APHIS works with State, Tribal, university, and industry partners to develop and implement practices, policies, and regulations that prevent or mitigate impacts for invasive pests of Federal regulatory significance. These activities include verifying pest distribution, identifying and mitigating risk pathways to prevent long distance spread of the pests, developing and implementing diagnostic tools and pest mitigation strategies, and communicating with the public to gain support for program strategies. These efforts help U.S. farmers 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. The program currently addresses several pests and diseases including exotic fruit flies, a variety of citrus pests and diseases, glassy-winged sharpshooter (GWSS), spotted lanternfly (SLF), pale cyst nematode (PCN), navel orangeworm (NOW), and Phytopthora ramorum, among others. Overall, the program directly protects specialty crop production worth more than $12.7 billion in 2023 (APHIS internal analysis based on National Agricultural Statistics Service data). The program indirectly protects additional specialty crop production valued at $7.7 billion in 2023, by preventing the spread of these damaging pests and diseases to new areas (APHIS internal analysis based on National Agricultural Statistics Service data). Without the SCP program, trading partners might not accept a variety of U.S. fruits and vegetables. The value of trade in specialty crops that could potentially be disrupted without the SCP program was $3.8 billion in 2023, according to an internal APHIS report using data from the Foreign Agricultural Service's Global Agricultural Trade System.

Grapes

The SCP program targets several devastating pests and diseases, including glassy-winged sharpshooter, European grapevine moth (EGVM), and SLF, that could affect grape production and impact export markets. In August 2016, APHIS declared the successful eradication of EGVM from California. However, APHIS, in collaboration with the California Department of Food and Agriculture (CDFA), county departments of agriculture, and industry partners continue to monitor for EGVM. In 2024, we placed more than 22,000 traps in 37 participating counties, using a multi-lure trap that targets four grape pests in addition to EGVM and surveyors monitored California grape-growing areas for SLF. No infestations were found.

APHIS also continued the successful, cooperative GWSS program designed to suppress populations of this pest where it is established. GWSS is a vector for Pierce's disease, which is lethal to grapevines. The program's suppression and regulatory activities work to prevent the spread of the vector and disease across California. In 2024, the program continued to conduct surveys and other regulatory activities, including inspections of nursery stock and bulk citrus for the pest in 49 California counties, and continued area-wide suppression activities in affected agricultural production areas of four California counties. With citrus growers' voluntary suppression treatments, the program covered over 20,000 acres. Of the more than 27,000 shipments of nursery stock from infested areas, California county inspectors rejected two shipments due to GWSS life stages being present. Together, the EGVM and GWSS programs directly protected 820,000 acres of grape production worth $6.8 billion in the State of California in 2023 (National Agricultural Statistics Survey Noncitrus Fruit and Nuts 2023 Summary).

In 2024, APHIS and cooperators continued addressing SLF through SCP funding, as well as $13.9 million in funding made available under Plant Protection Act Section 7721. This invasive pest is now found in 17 States, including Connecticut, Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, Massachusetts, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Rhode Island, Tennessee, Virginia, and West Virginia. The insect sucks sap from stems and leaves, causing damage to plants as they feed. SLF prefers to feed on the "tree of heaven" (Ailanthus altissima), a rapidly growing deciduous tree native to China that has become a widespread invasive species across North America. However, SLF also feeds on a wide range of crops and plants, including grapes, apples, hops, walnuts, and hardwood trees. Thus far, vineyards have been the most adversely affected agricultural commodity. There is a strong correlation between new SLF populations and major transportation pathways, such as railroads and interstate corridors. APHIS conducts targeted treatments and, in some areas, removes SLF's preferred host plant, tree of heaven, from transportation hubs with the aim of reducing the risk of SLF spreading to new areas. APHIS and cooperators also continue to conduct treatments in high-risk sites of the infestation and to eradicate isolated infestations. In 2024, the program continued using golden spray oil—an environmentally friendly control option that allows year-round control—to treat SLF egg masses to combat the pest and expanded its use to include early instar nymphs, providing more options to reduce populations around high-risk areas. In 2024, APHIS and cooperators treated 4,892 properties covering 5,847 acres in affected areas included in the program's environmental assessment (EA). APHIS and cooperators surveyed more than 30,000 acres and deployed more than 7,000 traps nationwide. In April 2024, the program published a programmatic, nationwide EA to address all known and potential SLF treatment areas in the U.S., allowing APHIS and cooperators to implement treatments expeditiously when infestations are detected in new areas. In 2024, APHIS continued developing new methods to control SLF, including potential biological control organisms, such as a fungal pathogen that targets the tree of heaven and a parasitoid that targets SLF nymphs, and additional treatments for egg masses. APHIS will continue to evaluate the biological control agents and develop methods to rear them on a larger scale in the laboratory should they prove to be effective and specific to their targets. APHIS also developed a process to prioritize methods development needs for SLF as outlined in the program's strategic plan.

Citrus

APHIS supports the citrus industry's continued ability to produce, harvest, process, and ship citrus fruits and nursery stock despite the presence of diseases such as citrus canker, citrus greening or Huanglongbing (HLB), sweet orange scab, and citrus black spot, which decrease fruit quality, increase production costs for producers, and threaten export markets in areas when found. HLB is the most serious disease of citrus currently impacting Florida and Texas, and threatening the citrus crop in Arizona, California, Louisiana, and most recently, Mississippi, where it was recently detected in a residential area. The insect vector, the Asian citrus psyllid (ACP), spreads the disease. Through the Citrus Health Response Program, APHIS and State partners also conduct surveys for other diseases not known to occur in the United States, including citrus leprosis and citrus variegated chlorosis.

APHIS and cooperators in citrus-producing States perform multi-pest surveys providing timely information about the presence of pests and diseases to growers and State government partners. This information allows growers to take necessary actions to manage their groves and allows APHIS and States to update quarantine boundaries and regulations to prevent the spread of serious citrus pests and diseases through the movement of regulated materials. In 2024, APHIS updated quarantine boundaries for HLB, ACP, sweet orange scab, citrus blackspot, and citrus canker due to detections outside existing quarantine areas or to align with State quarantine boundaries. In areas affected by citrus pests and diseases, APHIS' flexible regulatory protocols have minimized the impact of the quarantines on growers, who can move citrus out of quarantined areas to packinghouses if they follow mitigation procedures to prevent the disease or its insect vector from spreading. The Agency works with citrus nurseries across the U.S. to ensure

that nursery stock produced in areas quarantined for citrus diseases is free from the pests, ensuring that clean plants are moving between States and available for citrus producers and residential use. In 2024, APHIS worked with citrus nursery growers to evaluate changes to citrus nursery stock protocols that would meet disease prevention goals while adding flexibility for growers, such as adding new treatment options, adjusting treatment intervals, and allowing flexibility in scheduling inspections, among other things. In 2024, APHIS also developed a disaster preparedness plan for citrus nursery stock producers to mitigate the potential citrus pest and disease risks associated with damage to nurseries in the event of natural disasters such as hurricanes. For example, nurseries can protect tables of plants with individual screen covers that would allow those plants to maintain their status in the event that the screenhouse experiences a breach. Additionally, APHIS updated the citrus black spot Federal Order to remove unnecessary requirements for growers. In 2024, approximately 580 businesses had compliance agreements with APHIS and moved regulated host materials such as citrus fruit and nursery stock under more than 5.6 million certificates and limited permits (includes items such as boxes of fruit and individual plants that growers under compliance agreement can certify on site). State partners managed an additional 1,800 compliance agreements to facilitate the same movement of regulated host materials.

APHIS and cooperators continue extensive surveys that establish citrus black spot-free production units and low -prevalence areas for citrus canker in Florida for export packing to the European Union. APHIS also supports area-wide management efforts in Texas and California for citrus pests and diseases. In 2024, APHIS and cooperators continued to conduct risk-based surveys for HLB in residential and commercial citrus areas in California to ensure they detect the disease quickly if it is present. APHIS assists CDFA in aggressively responding to positive detections of HLB (thus far in residential areas only) and implementing an area-wide management approach for ACP population control. APHIS continued biological control efforts targeting ACP. This program, which employs a predatory wasp against ACP, augments other management methods, especially in residential areas in Arizona, California, Louisiana, and Texas, where use of chemical pesticides is undesirable. APHIS and CDFA continued surveys for citrus yellow vein clearing virus in California and found a single detection in Los Angeles County, outside where it was first confirmed in Tulare County. For the 2023-2024 season, there were 532,500 bearing acres with production worth approximately $2.9 billion (National Agricultural Statistics Survey Citrus Fruits 2024 Summary). Without APHIS' activities, citrus exports could be at risk each year. The 2023 value of U.S. citrus exports totaled approximately $778 million (Foreign Agricultural Service Global Agricultural Trade System).

HLB Multi-Agency Coordination (MAC) Group

Between 2014 and 2019, the HLB MAC funded a total of 105 projects focused on strategies for vector control, therapies for infected trees, sustainability of new plantings, early detection technologies, best management practices for citrus groves, and support for the development of HLB-resistant citrus varieties. In 2019, the HLB MAC shifted focus towards determining the best management practices for producing citrus under the threat and pressure of HLB. APHIS first supported the Florida Citrus Research and Field Trials (CRaFT) project to conduct field evaluations of strategies that showed previous scientific evidence of success and then initiated similar projects in California and Texas. These long-term projects evaluate interactions between methods, treatments, environments, rootstock/scion combinations, and growing practices in the different conditions in each State. Florida's CRaFT program is treating more than 71,000 acres (11,000 of them supported with HLB MAC funds) of mature citrus trees with novel therapies as part of the field trials; in California, the program is supporting growers in adopting strategies to mitigate ACP presence in groves covering 4,800 acres to prevent HLB introductions; and in Texas, the program is evaluating strategies including different approaches to grove floor management and ACP management on 1,000 acres. In 2024, APHIS provided HLB MAC funds to Florida and Texas for ongoing CRaFT projects and provided funding to maintain the CRaFT dashboard and to rebuild the dashboard on a more efficient and cost-effective platform. APHIS also funded an additional project

using CRISPR for resistance to HLB for grapefruit. In 2024, APHIS provided HLB MAC funds to Florida and Texas for ongoing CRaFT projects and funded an additional project using CRISPR for resistance to HLB for grapefruit. APHIS also provided funding to maintain the CRaFT dashboard and to migrate the dashboard to a more efficient and cost-effective platform.

Tree Fruit and Nursery Stock

APHIS protects a wide variety of specialty crops (particularly tree fruit and citrus) through exotic fruit fly exclusion and detection activities targeting Mediterranean fruit fly (Medfly), Mexican fruit fly (Mexfly), Oriental fruit fly, and other species. The program has reduced the number, and mitigated the effect of Medfly and Mexfly incursions for many years by conducting preventive releases of sterile insects to disrupt normal population growth in at-risk areas, detecting and responding to outbreaks when they occur, and developing advanced methods for survey and control.

Medfly is one of the most destructive agricultural pests in the world, attacking more than 300 cultivated and wild fruits and vegetables. One of the Agency's key strategies is maintaining internationally recognized Medfly free areas in Petén, Guatemala and in Belize (approximately 57,529 square miles combined), and managing pest populations in southern Mexico and neighboring areas of Guatemala to prevent northward movement of Medfly towards the United States through the international MOSCAMED program. The MOSCAMED program conducts surveillance with a 61,912-square-mile fruit fly monitoring network across Guatemala, the Mexican State of Chiapas, and Belize to detect Medfly incursions in the managed areas and suppresses populations through sterile insect release and bait spray treatments. The program treated 47,884 acres in Peten, Guatemala and Belize, eradicating 159 wild Medfly detections to effectively maintain Medfly-free status. In 2024, the program also continued responding to high numbers of Medfly incursions in MOSCAMED-designated free areas of Mexico and Guatemala. The program produced a total of 53 billion sterile insects for use in the regional program and for release in California's and Florida's preventive programs. Using emergency funds transferred to APHIS in 2024, the program released an average of 320 million additional sterile Medflies per week in areas of Guatemala and Mexico experiencing outbreak levels of Medfly detections. Additionally, the program treated 491.5 million acres in Mexico and Guatemala to control populations and curb northward Medfly migration. The MOSCAMED program-maintained activities through a period of insecurity in the region, including country-wide protests and closures restricting movement and access in and across Guatemala in late 2023 after the country's Presidential elections. The program-maintained access to 98 percent of the sites for traps and control activities, through strategic collaboration with rural communities and agricultural producers, complemented by a mass media campaign that generated 7 million views and boosted social media engagement by 28.5 percent, effectively promoting the safety and purpose of Medfly control activities.

Since 2015, when the first Medfly outbreak occurred in the Caribbean, APHIS has worked with partner countries in the region to improve surveillance for Medfly and other exotic fruit flies. In 2024, six Caribbean countries participated in this effort with active trapping and surveillance programs. APHIS and MOSCAMED assisted the Dominican Republic response to a Medfly outbreak during 2024, providing 72 million sterile flies (funded through the Organismo Internacional Regional de Sanidad Agropecuaria).

Domestically, APHIS and State cooperators maintain the cooperative Preventive Release Program, which releases sterile fruit flies in high-risk areas to prevent any introduced Medflies or Mexflies from reproducing and establishing a population in the United States. In the Los Angeles area in California, APHIS and cooperators release 120 million sterile Medfly per week, and 80 million per week in four port areas in Florida. To protect Texas and California from Mexfly incursions, APHIS releases sterile Mexflies in Texas and in the Tijuana and Reynosa areas of northern Mexico. In support, the MOSCAMED program provided 4.34 billion sterile pupae to Texas and 1.25 billion

sterile pupae to the northern Mexico programs. APHIS and cooperators also maintain a detection network of more than 160,000 traps in California, Florida, New York, Puerto Rico, Texas, and other States vulnerable to exotic fruit fly incursions. When outbreaks occur, APHIS and cooperators implement immediate emergency response activities to eradicate them. In 2024, the program faced an unprecedented number of domestic fruit fly outbreaks, including eight outbreaks in California and 10 in Texas. Using emergency funds transferred from the Commodity Credit Corporation, APHIS and cooperators completed the eradication of seven outbreaks in California that were initially detected in 2023, or early in 2024. APHIS also completed the eradication of five of the Mexfly outbreaks in Texas in 2024 and continues to address the remaining outbreaks. In 2024, APHIS continued releasing approximately 130 million sterile male Mexfly per week in the Lower Rio Grande Valley.

APHIS also continued to address the European cherry fruit fly (ECFF) in northwestern New York in 2024. APHIS and cooperators in New York enforce quarantine regulations over the 5,140 square-mile affected area to reduce the risk of human-assisted spread of ECFF to other cherry-producing areas. APHIS conducted surveillance along the border of the quarantine and detected ECFF in one area outside the current quarantined zone. APHIS is continuing to delimit the affected area and will expand the quarantine in 2025, to include the newly affected area. Cherry producers can mitigate the damage the pest may cause to crops through current management practices. APHIS regulatory measures allow the movement of cherries out of the quarantine areas using float tests in the orchard and at the processing plants—when the cherries are submerged in water, fruit fly life stages float to the surface—to determine whether any ECFF are present in shipments. These float tests reduce trapping requirements for growers in their fields while meeting the goal of preventing ECFF from spreading through cherry shipments.

APHIS and cooperators also work to address NOW. In 2024, APHIS and cooperators in California continued implementation of the NOW areawide program, targeting the moth, which is a serious pest of tree nut crops including almonds, pistachios, and walnuts. Adult moths lay eggs through gaps in the nut hulls or shells, where newly hatched larvae feed and contaminate the nuts with insect waste and secondary fungal spores that may produce poisonous aflatoxins. APHIS uses its rearing facility in Phoenix, Arizona to produce sterile NOW moths and ships them to California where they are released by airplane over participating pistachio and almond orchards. In 2024, APHIS and cooperators at CDFA and the University of California Cooperative Extension (UC Riverside) continued work with participating orchards that maintain 2,560 acres for NOW release and 2,560 for non-release for comparison. APHIS produced and released approximately 750,000 sterile NOW moths per day for release over participating almond and pistachio orchards. APHIS continued to provide a portion of the sterile NOW moths for research initiatives conducted by ARS and the UC Riverside. APHIS also worked with ARS to develop a protocol to assess NOW damage for pistachios, which previously only had a protocol for almonds. APHIS and cooperators continue to evaluate the impact of the release of sterile moths and the other integrated pest management measures on NOW in tree nut crops.

APHIS protects natural resources and nursery stock production and trade by limiting the spread of P. ramorum from quarantine areas and affected nurseries through regulatory strategies and adoption of mitigations and changes to cultural practices. P. ramorum, which causes sudden oak death, can be moved through host nursery stock and can affect a variety of forest trees. The disease is present in coastal northern California (affecting 16 counties in the State) and a small area in Curry County, Oregon. In 2024, Oregon State officials continued surveys related to a positive detection outside the quarantined area. APHIS will update quarantine regulations to include the new area when the delimiting surveys are completed. Because of the presence of P. ramorum in the surrounding environment, nurseries within the quarantine area that ship interstate must meet annual certification survey and sampling requirements to prevent the movement of potentially infested material. The program also regulates nurseries outside the quarantine area that have been confirmed positive for P. ramorum in plants, water, or other regulated articles. The nurseries must remain free of P. ramorum for three consecutive years to

be deregulated. All positive interstate shipping nurseries must participate in a compliance program using protocols to eliminate the pathogen and implement required mitigations focused on critical control points to reduce the risk of reintroduction. During 2024, 15 nurseries participated in the program. Three nurseries were added to the program, and APHIS released two nurseries which completed program requirements.

Through all these activities, APHIS directly protects nursery stock production worth approximately $1.3 billion in 2019, (the most recent year that data is available), and tree fruit production worth more than $2 billion in 2023 (APHIS internal analysis based on National Agricultural Statistics Service data). By preventing pests and diseases like exotic fruit flies and P. ramorum from spreading to new areas, the program indirectly protects approximately $6.4 billion in fruit and nursery stock production (APHIS internal analysis based on National Agricultural Statistics Survey data).

Potatoes

APHIS addresses two major potato pests, pale cyst nematode (PCN) in Idaho and the golden nematode (GN) in New York, that feed on the roots of high-value crops such as potatoes, tomatoes, and eggplants. If pest populations are left unchecked, they can reduce crop yields by 20 to 70 percent. APHIS and cooperators have confined each to a relatively small area and continue survey and regulatory efforts to protect potatoes that are grown in all 50 States and exported from 18 States.

PCN has not been detected outside of Idaho, and fumigations of infested fields in Idaho have reduced PCN populations by 99 percent since the pest was first detected in 2006. In 2024, APHIS processed 9,970 samples for the PCN eradication effort in Idaho and 7,450 samples for detection surveys in six other States. In 2024, the program conducted 1,625 regulatory treatments of farm equipment to prevent the spread of PCN out of regulated areas. There are currently 32 PCN-infested fields, and the current regulated area is 6,495 acres (down from 6,535 acres at the beginning of 2024), of which 3,538 acres are infested fields, and 2,957 acres are associated fields (those connected through use of shared farm equipment or other means of pest spread). The infested fields are in an 8.5-mile radius that spans a portion of northern Bingham County and southern Bonneville County. In 2024, the program continued eradication treatments on 7 infested fields, totaling 754 acres. In the treated fields that no longer show PCN viability, according to a greenhouse bioassay test, producers can plant potatoes with continued monitoring by APHIS and cooperators to ensure PCN is not present. During the greenhouse bioassay (three rounds of greenhouse bioassay that is the equivalent of three crop cycles), the program tests the viability of any PCN nematodes found in the soil. If the nematodes are found to be non-viable (they fail to reproduce under favorable conditions in the presence of a host), the fields from which they came are eligible to immediately return to potato production at the landowners' discretion. The PCN program requires infested fields that return to potato production to undergo full-field surveys following each of three subsequent potato crops to check for viable PCN populations. These fields remain regulated but benefit from reduced sanitation requirements. The fields will be sampled following harvest and analyzed for the presence of viable nematodes. The program is working with ARS, the University of Idaho, and other cooperators to develop PCN-resistant potato varieties. APHIS has funded several projects on PCN-resistant potato varieties through Plant Protection Act 7721 for this long-term effort.

In 2024, APHIS and New York cooperators continued an effective survey and regulatory program targeting golden nematode, with a focus on deregulation of all eligible land. Adopting strategies used in the more recently established PCN program, the GN program is focusing on fields that are either infested or associated with infested fields rather than political boundaries such as townships. APHIS, working closely with the New York State Department of Agriculture and Markets (NY AGM), has removed more than 1.2 million acres from the GN regulated area in New York since 2010, allowing several farmers to grow their crops without restrictions. In 2024, APHIS

worked with NY AGM on additional proposed reductions to the area regulated by the State following the completion of soil surveys consistent with APHIS regulations. Pending the successful completion of updates to New York's GN regulations, APHIS will publish a parallel quarantine to reduce the GN regulated area in New York in early 2025. APHIS continues to manage an active control and mitigation program to prevent GN from spreading from the remaining regulated acres in portions of eight New York counties, including 5,945 acres that are infested with GN. The program enforces regulations designed to prevent the spread of GN and requires sanitation treatments of farm equipment and other items moving out of the quarantined area. In 2024, the program processed 2,362 soil samples for the GN deregulation effort in New York. The program conducted 435 regulatory treatments of farm and earthmoving equipment to prevent the spread of GN out of regulated areas and certified 9 shipments of potatoes to Canada, totaling 400,045 pounds. APHIS has cooperated with ARS, NY AGM, and Cornell University to develop GN-resistant potato varieties for several decades. The program has developed a total of 45 GN-resistant varieties. Because the pest can overcome resistance, continued development of new GN-resistant varieties is necessary.

Together, these programs protected 960,000 acres of U.S. potatoes, valued at approximately $5.6 billion at 2023 (National Agricultural Statistics Service). In 2023, the United States exported more than 579,000 metric tons ($339.3 million) of fresh and seed potatoes (Foreign Agricultural Service Global Agricultural Trade System).

Canine Detection and Surveillance

The use of canine detection has the potential to serve as a critical surveillance tool for invasive pests and diseases. In 2024, APHIS continued developing canines for pest surveillance efforts, focusing on Asian longhorned beetle, (ALB), box tree moth (BTM), Japanese beetle (JB), Oriental Fruit Fly (OFF), and SLF. APHIS provided funding to Auburn University College of Veterinary Medicine’s Canine Production Sciences program for the ALB, SLF, and JB projects. As a result, Auburn University will transfer two SLF and three ALB trained detector canines to APHIS in early 2025. Due to challenges securing JB training materials and field locations, Auburn continues training and testing the use of canines to detect Japanese beetle larvae as part of an effort to prevent the pest from becoming established in western states. APHIS also supported the Pennsylvania Department of Agriculture to initiate a pilot project to cross-train SLF canine to detect BTM and to develop a new SLF detector canine.

APHIS’ National Detector Dog Training Center (NDDTC) cross-trained two existing Mexfly canines to detect OFF. APHIS deployed the canines to assist with the fruit fly emergency programs in California (OFF) and Texas (Mexfly). The program continued to fund existing SLF detector canines in North Carolina and Pennsylvania and deployed three canine teams to Florida to assist with the cooperative APHIS and Florida Department of Agriculture and Consumer Sciences (FDACS) giant African snail eradication (GAS) program. The program also initiated two projects to develop canine training tools based on the odor profile of the target pest (GAS and fruit flies). In 2024, NDDTC also supported training and recertification for several stakeholders, including offering three agricultural detector canine handler trainings to CDFA, FDACS, and Guam Customs and Quarantine and completed the annual recertification of canines for CDFA and FDACS.

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), spongy moths, and shot hole borers (SHB). 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 surveys, regulatory, control, and outreach activities in 48 States to manage or, in some cases, eradicate these pests. Conserving forests enhances the economic vitality of rural communities by supporting forest-related industries, recreation and tourism, and the overall livability of communities. The value of forest

products that APHIS protects is over $200 billion (U.S. Forest Service, 2024). In addition, trees in residential areas lower cooling bills, filter pollutants from the air, decrease runoff, and improve residents' quality of life (U.S. Environmental Protection Agency).

Asian longhorned beetle

ALB threatens forest resources nationwide, as roughly 30 percent of U.S. trees are potential ALB hosts. The Council of Tree and Landscape Appraisers determined the potential value loss of forested areas from ALB as greater than $2 trillion nationwide. In the eastern United States alone, 4 million jobs depend on forests vulnerable to ALB. The program's ALB eradication activities prevent multi-billion-dollar losses to the maple syrup, timber, tree nursery, trade, and tourism industries.

APHIS' eradication strategy for ALB includes surveys, regulatory inspections, quarantine restrictions, removal of infested and high-risk trees, and chemical treatment applications. APHIS conducts several cycles of surveys to determine the scope of infestation, establish a quarantine area, identify trees to remove or treat, determine if the pest has spread outside of the established quarantine area, and determine when to release an area from quarantine. A survey cycle, which is the time it takes to complete a survey of a given area, can take several years depending on the size of the area, the density and type of trees in the area, and type of landscape or land use. APHIS can declare eradication in a given area after a minimum of four years of not finding ALB between the last detection of the pest and the completed final survey cycle. APHIS provides ongoing support to evaluate new methods and protocols to combat ALB and tailors project responses to site-specific conditions, resulting in a more efficient program. Currently, each regulated area is at a different stage of eradication and faces unique, local conditions.

ALB was first detected in Brooklyn, New York, in August 1996, and was later found in other states. The program has successfully eradicated ALB from Chicago, Illinois; Boston, Massachusetts; Batavia, Stonelick, Jersey City, Middlesex County, and Union County, New Jersey, Islip, Staten Island, Brooklyn, Queens, and Manhattan, New York, and Monroe Townships, Ohio. In 2024, the program conducted activities in regulated areas of Massachusetts, New York, Ohio, and South Carolina. In 2024, the program surveyed a total of 531,454 trees across the 4 regulated areas.

More specifically, in 2024, the program continued ongoing survey efforts in Worcester County, Massachusetts, surveying 182,884 trees in densely wooded, hard-to-access areas. Over the program's lifetime, the program has surveyed more than 10.8 million trees and removed 36,263 high-risk host and infested trees. In 2024, no new infested trees in Massachusetts were found. In the Long Island, New York quarantine, 33,905 trees were surveyed and found 16 new infested trees were found. All infested trees in New York were removed, and 399 non-infested host trees were treated within a quarter mile of the infested trees as a preventative to protect them from infestation. To date, the program has surveyed a cumulative 1.9 million trees in Long Island over the program's existence and removed more than 8,482 trees. In Tate Township, Ohio, the program surveyed over 179,956 trees, found 126 new infested trees and removed 268 infested and high-risk host trees in 2024. Surveying and infested tree removal efforts continued in the remaining 49 square miles of the Ohio quarantine area. The program has surveyed a cumulative 4.8 million trees in Ohio and removed approximately 118,000 since the initial detection in 2011. Efforts in South Carolina focused on ALB surveys in the southern and eastern parts of the quarantine area and the removal of infested and high-risk host trees in the core area of the infestation. This regulated area includes forested and wetland areas, making access for surveys and tree removals challenging. In 2024, 140,000 trees were surveyed and 880 trees removed. In South Carolina, the program has surveyed 448,821 trees since 2020 and removed approximately 9,400 infested and high-risk host trees.

Emerald ash borer

EAB was first detected in Michigan in 2002 and has since been detected in 36 additional States and the District of Columbia. EAB spreads beyond what a regulatory program can control. As a result, APHIS published a proposed rule in the Federal Register to remove the EAB Federal domestic quarantine regulations on September 19, 2018. In 2021, APHIS published the final rule to remove the Federal domestic EAB quarantine. APHIS continues to operate as a management and biological control program. As a result, in 2024 APHIS provided parasitoids to 119 sites (2 in Canada and 117 in the United States). Parasitoid releases took place across 22 States and two Providences.

The program's biological control initiative is designed to effectively manage EAB populations. It provides a promising strategy, using four species of parasitic stingless wasps for long-term EAB management. To date, the EAB program has cumulatively released a total of more than 8.5 million parasitoids to impacted areas. APHIS and cooperators continue to assess the impacts of the parasitic wasps on EAB populations and tree health at release sites and nearby areas. Field evaluations indicate the EAB parasitoid wasps and other EAB natural enemies are protecting sapling ash from EAB.

Spongy Moths

Spongy moth is a destructive pest of North America's most beautiful and popular deciduous trees, including maples, oaks, and elms. This pest is established in all or parts of 20 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 establishment of spongy 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. The program issues compliance agreements and conducts public outreach to ensure that businesses and residents in infested areas comply with regulations to prevent long-distance spread of the pest. Spongy moth also spread naturally into areas bordering the quarantined zone. APHIS and State partners monitor the transition zone along the 1,200-mile-long border of the quarantine area to ensure that newly infested areas are inspected through trapping and added to the quarantined zone and regulated effectively. Working with the U.S. Forest Service and the Slow-the-Spread Foundation, APHIS and cooperators have greatly reduced the rate of spongy moths spread and eradicated isolated populations, preventing this pest from becoming a larger issue. In 2024, APHIS and State cooperators continued to conduct spongy moth surveys to detect, delimit, and eradicate any isolated populations. APHIS supported 18 states through the spongy moth allocations in the Tree and Wood Pest Line for detection, delimitation, and regulatory activities. More specifically, in 2024, the program and its partners also began a partial year of precision delimiting surveys in California, Washington, and Oregon for spongy moth detections in 2024. Though the results of the delimitations have not been finalized, APHIS anticipates that these States will have treatment or additional precision delimitation activities in 2025. In addition, in 2024, APHIS, Forest Service, and state partners began the first year of a post-treatment delimitation response following spongy moth eradication treatment in Washington state. Results of this first year delimitation response determined that no moths were detected in the treated area.

Flighted spongy moth complex (FSMC) is a collective term for a species complex consisting of five taxa all of which are closely related to the spongy moth. The FSMC is an invasive threat to North American urban and natural forests because of its broad host range, demonstrated damage potential, and its ability to compromise an effective management system that has taken nearly 100 years of research to assemble. The FSMC poses a particular risk to western areas because of its ability to hitchhike on shipping vessels from Asia. APHIS supports the exclusion of FSMC through offshore vessel inspection, certification, and cleaning requirements. APHIS, the Department of Homeland Security's Customs and Border Protection, and the Canada Food Inspection Agency conduct continuous joint outreach to the maritime shipping industry.

In 2024, APHIS and State cooperators began a post-treatment delimitation response following an eradication treatment in Washington state to determine if there was a FSMC population present after detections at two sites in 2023. This precision delimitation process includes at least three years of surveying to determine if the treatment was successful or to determine the scope of infestation. Results of the first year of delimiting determined that no moths have been detected in the area. Results of three consecutive years of precision delimitations in Washinton after a FSMC detection in 2021 have concluded, and no additional moths have been detected.

Selected Examples of Recent Progress – Wildlife Services:

1. Wildlife Damage Management

APHIS provides Federal leadership and expertise to resolve wildlife conflicts to allow people and wildlife to coexist. Specifically, APHIS works to protect agriculture, human health and safety, property, and natural resources from disease and damage caused by wildlife. Cooperator participation and support is critical to the success of the Wildlife Damage Management Program. APHIS' wildlife biologists coordinate activities in every State and in three Territories with Federal, State and Territorial agencies, Tribes, local governments, private entities, farmers, ranchers, and others.

Agriculture

Feral swine are harmful and destructive invasive species which cause significant damage to property, agricultural animal health and crops, natural resources, public health, and native ecosystems. The Agency's damage management strategy for feral swine provides resources and expertise at a national level, while allowing flexibility to manage operational activities from a local or State perspective. In 2024, APHIS National Wildlife Research Center (NWRC) estimated the value of agricultural resources safeguarded by the establishment of the National Feral Swine Damage Management Program to be approximately $40 billion since 2014.

Collaboration with other Federal, State, Tribal, and local entities, universities, and organizations, along with landowners and others experiencing damage, is essential for controlling the spread of feral swine and suppressing or, where possible, eliminating populations. In 2024, APHIS managed the removal of feral swine across approximately 86 million acres in 35 States and 3 Territories. This work included providing technical assistance to the State Departments of Agriculture in Massachusetts and Connecticut to manage free-roaming domestic swine and eliminating an emergent population of feral swine in Maine. In the last 10 years since the program was established, APHIS and partners have successfully eliminated feral swine from 8 States (Colorado, Idaho, Iowa, Maine, Maryland, Minnesota, New Jersey, and New York), and recognizes 4 States (Indiana, Vermont, Washington, and Wisconsin) in detection status. APHIS considers feral swine eliminated from a State in detection status after the State can complete two years of monitoring with no additional sightings. APHIS also continued its feral swine eradication efforts in Puerto Rico and the U.S. Virgin Islands in response to the increased threat of African swine fever (ASF). APHIS successfully eradicated feral swine from the U.S. Virgin Islands and significantly reduced their numbers in high-population areas of Puerto Rico, meeting the goal of eliminating feral swine from islands with low numbers and significantly reducing populations in areas with high numbers within an 18-month period.

In collaboration with our partners, APHIS collected more than 6,000 samples from individual feral swine in 2024 to monitor diseases of national concern with implications for domestic livestock and public health, including 4,120 serology samples for influenza A and H5 antibody testing, and 27 samples for polymerase chain reaction testing for highly pathogenic avian influenza. Additionally, APHIS maintained a National Feral Swine Genetic Archive to assess the human movement of feral swine from source populations and provide support to states enforcing laws prohibiting movement of feral swine Although trapping, aerial operations, and recreational hunting of feral swine have effectively reduced damage in some areas, studies show that at least 70 percent of feral swine

must be removed each year in order to prevent population growth. Finally, APHIS conducted outreach and stakeholder engagement, promoting Squeal on Pigs, an application that relies on partners, cooperators, and local communities to report feral swine sightings or mortalities in States with low feral swine populations.

While predators serve a vital role in ecosystems, they pose challenges for agriculture producers in the United States. Livestock losses attributed to predators cost producers approximately $232 million annually, according to surveys by National Agriculture Statistics Service. APHIS prevents and reduces livestock predation through technical assistance (education and outreach) to producers, and operational management programs. APHIS and cooperators often share the cost of APHIS-conducted livestock protection activities. In 2024, APHIS provided assistance to livestock producers on more than 123,189 occasions. In 2024, APHIS conducted 53 predator management workshops attended by more than 1,615 individuals from 15 States.

In collaboration with State wildlife agencies, the U.S. Fish and Wildlife Service (FWS), and Tribes, APHIS conducts wolf damage management programs and provides additional services to capture and mark wolves for research and population monitoring. APHIS provides technical assistance to producers on preventative measures to supplement direct control activities, which producers then implement themselves. The Agency continues to develop and refine nonlethal methods to decrease wolf conflicts. Upon request, and with appropriate authorizations, APHIS may remove depredating wolves to resolve conflicts. In 2024, livestock producers reported 1,063 animals killed by wolves. As a result, APHIS responded by providing direct control for wolf conflict to at least 984 stakeholders.

Nonlethal wildlife damage management often involves modifying human activities and practices, manipulating habitats, and other actions to change the behavior of wildlife or reduce its presence and impact. APHIS routinely recommends nonlethal methods via technical assistance or applies them directly to reduce a variety of wildlife conflicts across the country. In 2024, Congress provided APHIS funding promotes nonlethal methods to reduce large carnivore-livestock conflict and beaver damage. Nonlethal livestock protection is primarily delivered in the form of range riding, fladry, fencing, livestock guardian dogs, and husbandry practices. Nonlethal beaver damage management routinely involves installing water manipulation devices to reduce beaver damage or physical relocation of beavers in some instances. The Agency continued efforts to increase and expand use of nonlethal methods in 12 States to protect livestock from large carnivore predators and reduce beaver damage to a variety of resources. The Agency has also supported corresponding research from the NWRC to evaluate these methods and cooperator perceptions of nonlethal tools.

Black vulture populations have increased in both abundance and range during the past 30 years. The Migratory Bird Treaty Act, enforced by FWS, protects black vultures, which prey on livestock. Under this Act, the public cannot kill, destroy, or remove migratory birds, their nests, or their eggs without a Migratory Bird Depredation Permit from FWS. APHIS works collaboratively with FWS to recommend short and long-term options to provide producers with relief from damage. If APHIS officials determine removing specific vultures is necessary, APHIS will assist producers in obtaining a depredation permit from FWS. With cooperator funding, APHIS conducted control activities in 25 States in 2024, removing and/or dispersing black vultures to protect agriculture, human health and safety, and property (including cattle and sheep, as well as buildings, vehicles, and utilities, among others), in addition to providing technical assistance to guide private management efforts.

Fish-eating birds, especially double-crested cormorants, can have major impacts on the U.S. aquaculture industry. Annual aquaculture production in the United States is valued at $1.5 billion in 2018 (USDA, National Agricultural Statistics Service), and research from the National Institute of Food and Agriculture estimates that the catfish aquaculture industry incurs an average annual? loss of $64.7 million in costs associated with bird damage and damage prevention. APHIS provides operational and technical assistance to aquaculture producers, particularly on roost

management of double-crested cormorants, harassment of fish-eating birds on catfish facilities, and helping farmers acquire depredation permits from FWS. Operational and technical assistance is concentrated at producer-operated aquaculture facilities in the lower Mississippi valley and southeastern United States in the fall and winter. In 2024, APHIS removed 2,416 and dispersed 168,367 double-crested cormorants to protect aquaculture.

The National Wildlife Disease Program (NWDP) promotes safe agricultural trade by protecting the health of humans, animals, plants, and ecosystems and reducing levels of incurred losses to agricultural and natural resources. NWDP participates in wildlife disease monitoring and surveillance in all regions of the United States. Large-scale projects include wildlife surveillance for avian influenza, SARS-CoV-2, and plague. Activities on emerging pathogens are routinely implemented as well, with recent projects on chronic wasting disease in wildlife, African Swine Fever preparedness and response, and coordination of rabbit hemorrhagic disease virus type 2 reporting.

Human Health and Safety

Rabies is one of the oldest known viral diseases, yet it remains a significant wildlife management and public health challenge. APHIS is the lead Federal agency to prevent the further spread of wildlife rabies, with the goal of eliminating rabies in carnivores in the United States using oral rabies vaccination (ORV). In 2024, APHIS and cooperators distributed more than 7.9 million ORV baits to combat raccoon rabies in 13 eastern states and Nebraska. In 2024, APHIS and the Texas Department of State Health Services distributed more than 890,000 ORV baits in Texas to prevent the reemergence of rabies in coyotes and gray foxes along the border with Mexico. These activities are a continuation of the strategic distribution of more than 252 million ORV baits nationwide since the National Rabies Management Program began in 1995.

Since 2005, APHIS has conducted more than 129,000 tests using a rapid rabies diagnostic field procedure, documenting more than 2,600 rabies cases that, in turn, facilitated science-based wildlife rabies management strategies. In 2024, APHIS collected more than 2,300 raccoon blood samples in 13 states to estimate rabies antibody levels in ORV zones. At the start of 2024, the eastern raccoon rabies virus variant (RRVV) was detected in Nebraska, prompting an emergency response by Federal, State, university, local, and industry partners. The westward spread of RRVV beyond the ORV zone threatened decades of rabies control efforts by APHIS and cooperators. In response to the emergency, APHIS and partners conducted trapping and vaccination efforts for more than 800 animals and distributed approximately 18,000 ORV baits. After the initial response efforts, APHIS and partners conducted surveillance efforts by testing more than 500 animals for RRVV with no positive results. It was ultimately determined that the source of the RRVV was a relocated rabid cat.

Increased air traffic, faster and quieter aircraft, increased populations of some Federally protected species of birds, and other wildlife all impact the safety of aircraft, particularly in rural communities. Wildlife collisions with aircraft cost the U.S. civil and military aviation industry approximately $1 billion annually. With funding provided by airports, and other Federal, State, and local cooperators, APHIS works to reduce wildlife strike hazards to protect people and aircraft. APHIS estimates the annual value of damage prevented from wildlife strikes exceeds $100 million. In 2024, APHIS mitigated wildlife hazards by assisting more than 800 civil and military airports worldwide which included more than 130 Department of Defense (DoD) airports in domestic and international settings.

Natural Resources

Non-native, invasive animals can devastate ecosystems. APHIS focuses on eliminating damage from brown tree snakes (BTS), feral swine, nutria, and other invasive species. In Guam, BTS have eliminated most species of native birds, lizards, and bats, and continue to cause power outages leading to public safety issues and losses in excess of $4.5 million annually. In 2024, with funding

from other Federal Departments and the Guam Department of Agriculture, APHIS continued the multi-agency partnership to prevent BTS movement from Guam to other Pacific Islands, Hawaii, and the continental United States. This resulted in BTS control devices at all civilian and military ports of exit, inspections on military exercise material in the Commonwealth of the Northern Mariana Islands, and a 100 percent inspection rate goal for all departing cargo, vehicles, and aircraft. It is through this partnership that the Agency inspected approximately 210,632 items, removed nearly 8,000 BTS in 2024, via programs at the DoD ports and on-base housing, civilian ports, shipping facilities, and the Guam power substations and transmission lines.

Nutria damage wetlands, agricultural crops, and structural foundations such as dikes and roads. This non-native rodent has destroyed tens of thousands of acres of marshlands critical to the health of the Chesapeake Bay. Between 2002 and 2015, APHIS, in cooperation with the FWS and other Federal and State agencies, and private landowners, removed nutria from more than 250,000 acres of coastal marshland on the Delmarva Peninsula (encompassing Maryland's eastern shore, lower Delaware and Virginia's eastern shore). In 2023, the Chesapeake Bay Nutria Eradication Program was able to officially declare nutria eradicated from the Delmarva wetlands east of the Chesapeake Bay. To protect these historic gains, the FWS provided funding to establish an updated nutria range map in Virginia and to remove populations detected in an Early Detection/Rapid Response (EDRR) zone north of the James River that posed an immediate threat to the western marshes of the Chesapeake Bay. In 2024, the Agency detected and eradicated three small and likely recent breeding populations and have identified a fourth. APHIS has documented significant range expansions of nutria westward and northward in southeastern Virginia into watersheds not previously impacted. Source populations south of the James River that threaten the EDRR zone have been identified by APHIS and will be targeted for removal as resources allow.

APHIS partners with various Federal and State resource agencies, private organizations, and community groups to protect bird species covered under the Endangered Species Act, by preventing predation from other birds and mammals to nests, eggs, and juveniles. APHIS has estimated damages or damage threats to birds, including threatened and endangered species, to be more than $70 million annually. Approximately 5,976 projects across 40 States, Guam, Puerto Rico, and the U.S. Virgin Islands, benefitted protected bird species in 2024.

2. Wildlife Services Methods Development

Wildlife Services Methods Development (WSMD) funding supports research on effective and socially responsible methods to manage conflicts between people and wildlife to protect agriculture, natural resources, and human health and safety. WSMD provides research in support of the Agency's project areas such as feral swine and other invasive species, agriculture protection, rabies, wildlife disease, and population and reproduction control, among others. APHIS' National Wildlife Research Center (NWRC) provides the only dedicated Federal leadership in developing methods to manage wildlife-related damage problems. Scientists work on a variety of wildlife damage management problems through discovery, development, and technology transfer and the use of products and management methods to support Wildlife Services operational programs as well as public and private partners. The majority of NWRC studies involve partnerships with State and Federal agencies, non-governmental organizations, universities, tribal governments, and private sector businesses. In 2024, the NWRC had 185 active studies, produced 100 publications, collaborated with more than 155 entities, and had over 123,000 downloads from Digital Commons, a public platform for sharing research documents.

Agriculture

The WSMD Program develops methods to safeguard livestock from predators, manage invasive species, and minimize the impact of wildlife diseases. The following are examples of efforts to protect American agriculture, which includes protecting resources related to farming and ranching such as livestock, crops, animal products and other associated industries.

The APHIS National Feral Swine Damage Management Program protects agricultural and natural resources, property, animal health, and human health and safety from feral swine damage. In 2024, APHIS continued feral swine efforts by expanding surveillance, collaborating with international partners to prevent transboundary movement, and monitoring and responding to emergent populations in States where eradication has previously been successful. The NWRC improves the efficiency of existing control methods and develops new strategies to ensure the program and partners use safe, acceptable, and science-based management tools. In 2024, NWRC continued efforts to develop a feral swine toxicant, optimize control methods and disease response strategies, and understand public perceptions and policies related to feral swine.

A safe and effective toxicant bait and delivery system is a critical tool for further reducing feral swine populations and their damage. In 2024, the NWRC continued exploring feral swine bait formulations to develop a toxicant that is safe for non-target species while sustaining a high effectiveness and lethality to feral swine. APHIS determined that previous formulations tested were successful at reducing feral swine populations but continued to pose a risk to non-target species even with mitigation strategies. The Agency intends to submit a registration application to the Environmental Protection Agency (EPA) for a new toxic bait once a product has been fully developed and shown to be safe and effective. In 2024, NWRC, in collaboration with Animal Control Technologies Australia, were granted a patent to develop a baiting/feeder system specifically designed to target feral swine, further optimizing control and targeting efforts.

In 2024, NWRC interviewed 37 individuals from 15 organizations to identify key factors that contributed to the success of the Missouri Feral Hog Elimination Partnership, a large network of organizations involved in feral swine elimination efforts. A key finding was the success of an incident command system (ICS) implemented by APHIS and the partnership in 2020 to coordinate feral swine aerial and ground operations, as well as outreach activities. Under the ICS, APHIS and the Missouri Department of Conservation performed coordinated feral swine operations while the University of Missouri Extension conducted outreach activities with landowners to increase support for feral swine control. The study found that using an ICS approach enhanced transparency, engagement, and coordination when managing long-term responses to address feral swine. Results from this study and partnership will be published in 2025.

Black vulture populations are increasing and expanding their range in North America. This, combined with their ability to adapt well to human dominated landscapes, has contributed to increased human–vulture conflicts. In 2024, APHIS continued to document trends in black vulture conflicts, reviewed available management strategies, identified knowledge gaps, and provided recommendations to enhance the management and understanding of this species. Agency researchers also assessed the role of human-based and natural landscape features on vulture roost selection to inform managers where current and future roosts may likely occur. In 2024, NWRC published results from testing the effectiveness of inflatable scarecrows for reducing vulture damage to infrastructure and private property at 13 human-vulture conflict sites throughout the southeastern United States. The results suggest that vultures are more likely to be fearful of novel deterrents, such as inflatable scarecrows, in newly inhabited areas and these deterrents can be used to reduce vulture presence at some sites. Additionally, researchers are collecting vulture movement data in Missouri and Arkansas and deployed 28 tracking devices to study responses to damage mitigation strategies. The NWRC is also working with multiple cooperators to develop wildlife management methods to reduce aviation hazards by collecting vulture movement and behavioral data to inform aviation designs and risk estimates of bird-aircraft collisions.

Chronic wasting disease (CWD) has been detected in 35 States and impacts numerous wild and farmed populations of deer and elk. Concerns about the impacts of CWD on wild and farmed cervid populations continue to prompt research studies to reduce the spread of the disease and minimize the impact on cervid populations and stakeholders. APHIS researchers use an investigative laboratory procedure called protein misfolding cyclic amplification to amplify minute amounts of CWD infectious material to a level that can be detected. APHIS initiated several multi-

year studies including both field and lab work that involves modern amplification methods which supports research on molecular interactions of CWD to landscape and ecological processes. Additionally, NWRC is housing white-tailed deer at the newly built prion laboratory in Fort Collins, Colorado, to investigate CWD transmission and environmental prion persistence. In 2024, NWRC is continuing to develop a sample archive to retain cervid samples collected by Federal and State agencies for use in diagnostic development and future research.

Natural Resources

Invasive and feral species can have profound and transformative effects on native plants, animals, and ecosystems. APHIS aids in designing, implementing, and evaluating wildlife damage management activities on islands and other sensitive habitats; coordinates and provides guidance on the legal use and registration of vertebrate control methods; and assists in protecting reintroduced or recovering native species.

In 2024, NWRC assisted the Bureau of Land Management (BLM), Forest Service, National Park Service, and several horse refugees seeking solutions to resolve damage from overabundant feral horse populations. GonaCon-Equine is an immuno-contraceptive vaccine developed by NWRC and registered by the EPA in 2013. In 2024, GonaCon-Equine treatments were administered by the BLM to over 500 horses. Additionally, the NWRC partnered with the Colorado Department of Agriculture to further support administration efforts to BLM-managed horses and with the Forest Service to conduct research on GonaCona-Equine effectiveness in mares. NWRC is working with other agencies to customize procedures for their specific management areas using this existing tool and incorporating the latest research to increase effectiveness. The Agency also continues to pursue the development of single-shot contraceptive vaccine to provide options to better manage feral horse populations. In 2025, the NWRC will explore other applications using GonaCona and submit a label amendment to expand its use on male prairie dogs as a treatable species to control population levels.

The western Pacific Ocean coral atoll, known as Wake Atoll, is approximately 750 square kilometers and consists of three islands: Wake Island, Wilkes Island, and Peale Island. APHIS is collaborating with the U.S. Air Force and Island Conservation to conduct an eradication project on Wake Atoll for two invasive rodent species— Pacific rats and woodrats. In preparation for the eradication, NWRC worked with partners to determine the range of invasive woodrats on Wake Atoll. Invasive rodents were found on 2 of the 3 islands, and 38 were captured and removed. NWRC received EPA approval in 2023 for island conservation bait products containing the acute toxicant bromethalin. The use of a toxicant expands the number of tools available to remove invasive rodents on Wake Atoll, and possibly other islands to protect human health and safety and restore native ecosystems. In 2024, the Wake Atoll rodent eradication project administered baits and monitored results across all three islands. The project will continue into 2025, to target isolated populations of the invasive rodents.

In North America, bovine tuberculosis (TB) is recognized as a disease of cattle and deer. The Cooperative State-Federal Tuberculosis Eradication Program comprised of the USDA, State animal health agencies, and livestock producers has nearly eliminated TB from cattle in the United States. However, white-tailed deer remain a maintenance host for TB in some locations, and thus represents a barrier for eradication. Efforts to eradicate TB from the United States would be enhanced by optimizing the delivery of the TB vaccine to wild white-tailed deer. Direct vaccine delivery methods, traditionally used for livestock, are impractical for wild deer as they require capture and handling of the animal. Rather than direct administration, NWRC has developed a novel method to encapsulate the vaccine in an edible polymer (provisional patent filed) that can be deployed in the field as an edible bait, eliminating the need for animal handling. Initial studies found that deer receiving the vaccine via the edible polymer had comparable immunological responses to those receiving the vaccine directly. In 2024, APHIS deployed approximately 1,500 vaccine baits to wild white-tailed deer. Results from this project will be available in 2025.

Human Health and Safety

NWRC develops and evaluates new tools and techniques to address human health and safety issues related to wildlife disease and aviation safety. Since 1995, the Agency has been working cooperatively with Federal, State, and local agencies, universities, and other partners to prevent the spread and reduce the prevalence of the rabies virus (RABV) in specific wildlife populations. Each year, APHIS and cooperators distribute oral rabies vaccine baits to immunize target wildlife populations within control zones to prevent the spread of raccoon RABV.

NWRC develops new tools and techniques, and evaluates disease management strategies, to support APHIS' National Rabies Management Program and its mission to prevent the spread of wildlife rabies and protect U.S. public health, agriculture, and natural resources. When a breach in a rabies management zone occurs, APHIS and its partners, respond to prevent the spread of RABV to new areas and to eliminate the local outbreak. In 2024, APHIS continued researching enhanced field diagnostic tools, wildlife rabies management methods, a modeling and risk assessment to improve prevention, control, and elimination of RABV. APHIS uses enhanced rabies surveillance to determine the incidence, geographic, and temporal distribution of RABV, utilizing a point system to prioritize different types of surveillance samples. In 2024, the NWRC reevaluated the point system prioritization of rabies surveillance samples. The point system assigns values to different types of surveillance samples based on various ecological factors, allowing the program to prioritize the collection and testing of higher-value samples. NWRC researchers determined that samples from deceased wildlife were four times more valuable for rabies detection than originally considered. Additionally, the implementation of a point system increased the number of positive samples detected by 64 percent. In 2024, APHIS' National Rabies Management Program optimized sample prioritization based on the study conducted at NWRC, significantly enhancing the efficiency in detecting RABV and rapidly responding to breaches in the rabies management zone.

Partnerships and Technology Transfer

The Federal Technology Transfer Act of 1986, allows Federal laboratories and industry to form partnerships that enhance the development of new technologies and move them to the marketplace to meet public and consumer needs. APHIS regularly partners with Federal and State entities, private companies, international groups, and non-governmental organizations to encourage the development and licensing of new wildlife damage management products to manage wildlife conflicts. NWRC partners with universities and small businesses to develop and enhance frequently used technologies including wildlife damage management devices, baits, formulations, and vaccines. In 2024, NWRC furthered its partnership efforts to make sure its research and development activities had a path for commercial development and operational management with the following: 7 Confidentiality Agreements, 3 Data Sharing Agreements, 16 Material Transfer Agreements, 13 Material Transfer Research Agreements, 6 Cooperative Research and Development Agreements, 2 Invention Disclosures, 5 Provisional Patent Applications, and 3 patents issued.

Selected Examples of Recent Progress – Regulatory Enforcement:

1. Animal and Plant Health Regulatory Enforcement

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

In 2024, APHRE initiated 1,283 new cases, issued 535 official warnings, issued 606 pre-litigation settlements resulting in the collection of $1,947,817 in stipulated penalties, and obtained administrative orders assessing $829,179 in civil penalties.

To support animal health, APHRE initiated 88 cases, issued 158 official warnings, issued 37 pre-litigation settlements resulting in the collection of $134,938 in stipulated penalties. In 2024, for example, APHRE negotiated a pre-litigation settlement in the amount of $50,000 to resolve violations involving moving sheep and goat's interstate without proper health certificates or official identification. APHRE also negotiated a pre-litigation settlement in the amount of $8,500 for violations involving imported cattle without the proper documentation.

To support plant health, APHRE initiated 27 cases, issued 24 official warnings, negotiated 16 pre-litigation settlement agreements resulting in the collection of $115,175 in stipulated penalties, and obtained one administrative order assessing $1,400 in civil penalties. In 2024, for example, APHRE negotiated a pre-litigation settlement agreement in the amount of $31,500 for violations related to the import of plant products from India without the required permits and treatment. APHRE also negotiated a pre-litigation settlement in the amount of $9,375 in 1 case involving the unauthorized interstate distribution of plants from Oregon and Connecticut to numerous locations across the country.

To support AQI animal and plant health activities, APHRE initiated 878 cases, issued 219 official warnings, issued 513 pre-litigation settlement agreements, resulting in the collection of $1,231,989 in stipulated penalties, and obtained three administrative orders resulting in the assessment of $203,000 in civil penalties. In one case, working through USDA's Office of the General Counsel (OGC), APHRE obtained a Decision and Order assessing a $160,000 civil penalty involving fraudulent activity and falsified phytosanitary certificates for multiple shipments containing prohibited plant and fruit products. APHRE also negotiated pre-litigation settlement agreements with express carriers totaling $118,125 for releasing shipments to consignees in violation of agricultural inspection hold orders placed by CBP.

To support animal welfare, APHRE initiated 209 cases for alleged violations of the Animal Welfare Act (AWA), issued 134 official warnings, issued 39 pre-litigation settlements resulting in the collection of $449,475 in stipulated penalties, obtained 19 administrative orders resulting in the assessment of $606,583 in civil penalties, and suspended or revoked 16 licenses. In 2024, for example, APHRE negotiated pre-litigation settlement agreements totaling $306,550 for violations of the AWA standards by research facilities. In 1 case, working with OGC, APHRE obtained a Consent Decision and Order permanently revoking a dealer's AWA license and assessing a civil penalty of $312,000.

To support horse protection, APHRE obtained 9 administrative orders resulting in the assessment of $18,196 in civil penalties and the disqualification of 8 individuals from participating in activities regulated under the Horse Protection Act (HPA). In one case, working with OGC, APHRE obtained a Decision and Order assessing each respondent a penalty of $3,000 and a one-year disqualification period for entering a sore horse at a show in Kentucky.

To support biotechnology regulation, APHRE initiated 1 case and issued 1 pre-litigation settlement resulting in the collection of $16,240 in stipulated penalties. In that case, APHIS negotiated a settlement agreement after identifying unauthorized planting of genetically modified soybeans in two locations.

APHRE will continue to post copies of AWA and HPA enforcement records on its website: Animal Welfare and Horse Protection Actions. Animal Welfare and Horse Protection Actions.

2. Biotechnology Regulatory Services

APHIS' biotechnology regulatory system safeguards American agriculture and agriculturally important resources through fostering the safe research, development, and commercialization of

innovative new agricultural products. Under the Plant Protection Act's (PPA) authority, APHIS oversees plants and certain other organisms developed using genetic engineering (modified plants and modified organisms) that may pose a pest risk to plants. Biotechnology regulations allow APHIS to place requirements on field testing, importation, and interstate movement of modified plants and organisms, unless a modified plant is exempt from regulation, or the Agency reviews a modified plant and determines it is unlikely to pose a plant pest risk.

Regulatory Changes

In 2024, APHIS continued its operations under the revised biotechnology regulations (7 CFR part 340) that were published in May 2020, making significant improvements to its regulatory and business processes. Since the implementation of the revised regulations, the number of regulatory review requests received and the proportion from small and mid-sized developers has more than tripled. The revised regulations reduced regulatory burdens, allowing small to mid-sized developers to compete in the biotechnology marketplace, unlike the legacy regulations that favored large developers. In 2024, APHIS conducted two business process improvement projects and updated resources to help developers more efficiently prepare and submit permit applications for modified plants and microbes. As a result of these process improvements, APHIS reduced the overall time to issue import, and interstate movement permits by approximately 29 percent. APHIS also published a federal register notice proposing five additional modifications plants can contain and qualify for regulatory exemption.

Authorizations

Developers must obtain an authorization for the movement—importation, interstate movement, or environmental release—of modified plants and organisms unless exempt from regulation or the Agency has reviewed a modified plant and determines it is unlikely to pose a plant pest risk. As part of the authorization process, APHIS evaluates potential risks associated with regulated activities and imposes specific permit conditions to ensure confinement of modified plants and organisms. In 2024, APHIS issued 875 authorizations to 281 organizations (academia, developers of all sizes, and government research groups) to use novel plants and organisms developed using genetic engineering. The Agency completed 99 percent of authorizations within target timeframes specified in the regulations despite experiencing a 10 percent increase in permit applications relative to 2023.

Regulatory Review of Modified Plants for Nonregulated or Exempt Status

Under the current regulations, developers may request a Regulatory Status Review (RSR) to learn whether a modified plant is subject to the regulations. The RSR process evaluates a modified plant relative to an appropriate non-modified counterpart to determine whether the modified plant requires oversight based on its characteristics, rather than on the process used to develop the plant. In 2024, APHIS received 58 RSRs, 96 percent of which were requests by small-to-medium sized developers and public institutions, in contrast to the legacy regulations where these groups represented just 25 percent of all reviewed products. APHIS issued 63 responses to RSR requests, including requests that occurred in 2023, but were not issued until 2024, for field canola, rice, sugar beet, cotton, soybean, corn, potato, hemp, and wheat; fruits and vegetables such as mustard, banana, sweet orange, grapefruit, cowpeas, and blackberry; as well as cover crops like pennycress and camelina which could help transform U.S. agriculture and make cover cropping more economically viable for farmers. These responses included 11 crops that had never been reviewed under the legacy petition process. APHIS reduced the average response time for an initial review of an RSR request by 145 days in 2024.

Additionally, APHIS' Confirmation Request process allows developers to voluntarily request a confirmation from APHIS that a modified plant qualifies for an exemption and therefore, is not subject to regulation. In 2024, APHIS issued 44 response letters confirming a modified plant's exempt status within an average of 56 days, approximately 64 days faster than the timeframe

specified in the regulations. All but one of these confirmations benefited small or medium-sized developers, expediting innovative product development for agricultural use and domestic and international markets, including, for example, blackberry and black raspberry with a thornless trait, pennycress with altered plant maturation time, soybean with altered seed composition, yellow pea with altered antinutrient composition and tomato with altered fruit nutrient composition.

Compliance and Inspections

APHIS requires developers to comply with permit requirements to help ensure that modified plants and organisms remain confined and do not persist in the environment. APHIS inspects fields, equipment, and other associated facilities to ensure regulated activities meet the requirements outlined in the permit. In 2024, APHIS conducted 542 inspections. These inspections resulted in the issuance of 466 notices of compliance and 76 notices of noncompliance with APHIS' biotechnology regulations and permit requirements. As part of a business process review, APHIS evaluated its inspection process and implemented improvements that enabled it to reduce the overall time to issue these noncompliance notices by 81 percent. APHIS also maintains other compliance evaluation processes (self-reporting, late reporting, etc.), which resulted in issuance of 15 notices of compliance and 142 notices of noncompliance. When compliance incidents or patterns of noncompliance occur, APHIS assesses the nature and seriousness of the noncompliance and determines appropriate steps to follow up, ranging from issuing regulatory correspondence to requesting an investigation and seeking sanctions for alleged noncompliance.

APHIS continues to strengthen its oversight of regulated field trials. In support of this, in 2024, APHIS published a draft Guide for Submitting Data for Reports and Notices in APHIS eFile. This guidance provides a resource for developers holding permits under 7 CFR part 340 to better understand the data requirements when submitting reports and notices in APHIS' eFile system. Additionally, as part of business process improvements, APHIS issued 85 percent of noncompliance notices within 14 days, shortening the response time between when a noncompliance is detected and when the developer receives the notice of noncompliance issues.

Partnerships

APHIS continues to work with the Environmental Protection Agency (EPA) and the Food and Drug Administration (FDA) to share information about and improve regulatory oversight of modified plants and organisms. In 2024, APHIS collaborated with EPA and FDA on implementing Executive Order 14081, "Advancing Biotechnology and Biomanufacturing Innovation for a Sustainable, Safe, and Secure American Bioeconomy" by publishing information on the Unified Website for Biotechnology Regulation regarding the regulatory roles, responsibilities, and processes of each agency, and a plan to implement regulatory reform that will improve the clarity, efficiency, and predictability of risk-based regulatory pathways for safely bringing new products to market. APHIS also continues to collaborate with EPA and FDA on modernizing the Unified Website, including developing and releasing an interactive tool that assists developers in determining the regulatory pathway for their modified microbe.

APHIS engages in capacity building efforts for foreign regulatory officials and scientific advisors by conducting presentations, participating in international forums, and serving on committees. In 2024, APHIS delivered 15 presentations to a range of international organizations, regulators, reviewers, and scientists from over 40 countries and economies and participated in 12 bilateral engagements between regulators and scientists from the United States and Brazil, China, Colombia, the EU Commission, Georgia, India, Japan, Pakistan, South Korea, Spain, Taiwan, and Thailand. APHIS also supported the Organization for Economic Cooperation and Development (OECD) Working Party for the Harmonization of Regulatory Oversight in Biotechnology by providing feedback on proposals and draft documents for seven ongoing OECD projects, including documents to evaluate the need to develop a unique identifier system for transgenic animals. Global progress in biotechnology regulations this year included: a decision by India's Genetic

Engineering Appraisal Committee to recommend the importation of modified alfalfa from the United States; the re-establishment of dialog on biotechnology with China, the first since 2018; and Europe's proposed regulations for new genomic techniques that are consistent with U.S. biotechnology regulations.

Selected Examples of Recent Progress – Emergency Management:

1. Emergency Preparedness & Response

The Emergency Preparedness and Response (EPR) program improves APHIS' capability to prevent, prepare for, respond to, and recover from animal health emergencies. The program's goal is to respond to an animal health event within 24 hours from the time APHIS determines that a federal emergency response is needed to manage an agricultural outbreak. Through this program, APHIS and the Centers for Disease Control and Prevention (CDC) jointly manage the Federal Select Agents Program (FSAP), which oversees the possession, use, and transfer of biological select agents and toxins that have the potential to pose a severe threat to public, animal or plant health, or to animal or plant products.

Preparedness, Partnerships, & Planning

APHIS' National Preparedness and Incident Coordination Center develops animal health emergency management guidelines to protect U.S. animal agriculture through collaborative, science- and risk-based strategies, and creates dynamic, real-world learning scenarios to build response capabilities of emergency responders to help maintain response readiness. In 2024, APHIS continued to sustain animal health readiness capacity by maintaining 5 Incident Management Teams (IMT) with 28 volunteer first-responders per team. These teams deploy anywhere in the U.S. to respond rapidly and effectively to animal health disease events. IMT members participate in training and workshops on the Incident Command System, animal disease, and information technology.

In 2024, the EPR program continued to provide map and geospatial support for the outbreak of highly pathogenic avian influenza (HPAI), African swine fever (ASF), New World Screwworm (NWS) and included situation reports and map products for incident coordination and briefings. For example, the program developed products that displayed ineligible trade zones for all HPAI confirmed cases. The program also improved interactive map tools to support trade between the U.S and Canada, verifying that exported poultry products did not travel within restricted zones.

In 2024, APHIS continued a Ready Response Corps pilot program to expand its emergency response capacity and alleviate the strain on the Agency's workforce during animal disease emergencies. The Ready Response Corps is designed to bolster APHIS' ability to address animal disease threats while continuing to achieve its mission. The Agency has filled 9 of the 12-animal health professional positions that will be placed in geographic areas at high risk for outbreaks affecting larger or more complex poultry operations. These highly trained professionals will deploy and support national level response in areas where large livestock and poultry operations exist, allowing for increased response capacity and close collaboration with State animal health officials and industry partners.

In 2024, APHIS updated the Emergency Management Response System (EMRS) on the Microsoft Power Apps platform. EMRS is a web-based application used for the reporting of routine investigations of foreign animal diseases (FADs), surveillance and control programs, State-specific disease outbreaks, and national animal health emergency responses (all-hazards). The migration of data and business process for the EMRS to the Power Apps platform entails more than 1,000 workflows and dialogs, and more than 16 million records. This transition will provide many beneficial features such as improved user experience through streamlined and efficient information capture, enhanced mobile capabilities, and additional reporting tools.

The EPR program also protects the health and safety of Agency personnel. Respirators are vital in protecting workers from significant hazards including insufficient oxygen and harmful pollutants. They are also needed in case of an avian influenza outbreak or an emergency response that requires hazardous chemicals. To comply with regulations instituted by the Occupational Safety and Health Administration, APHIS trains employees as respirator fit-testers and annually fit-tests any employees who may use a respirator. The Agency was able to train 179 personnel at the end of 2024 of the 1,856 employees. The Agency also maintained and calibrated 33 testing units in 2024 to ensure they met requirements and replaced 10 outdated Porta Count Kits, which are used for respirator fit testing. The newer models are completely redesigned and provide a new user interface and industry-first features that comprise the most powerful fit test instrument available.

APHIS enhanced animal emergency response coordination in 2024 through a new partnership with Zoological Disaster Response, Rescue, and Recovery to assist the exotic animal industry during natural disasters. The partnership coordinates and manages before, during, and after significant natural emergency incidents an emergency response network composed of over 180 zoos, aquariums, sanctuaries, and other related facilities in 38 States. In 2024, APHIS continued working with the Zoo and Aquarium All-Hazards Partnership (ZAHP), a collaborative effort between USDA and the American Association of Zoo Veterinarians. The effort provided outreach to more than 680 entities including zoos, aquariums, wildlife parks, sanctuaries, rehabilitation facilities, science centers, professional associations, hobbyist groups, private owners, private veterinary practitioners, and State, Federal, and local emergency management agencies. ZAHP activities included webinars, and other events, covering topics such as HPAI impacts on zoos, biosecurity and resilience. ZAHP also presented an online emergency preparedness seminar which focused on applications of the Incident Command System and building resilience in animals during exhibition and emergencies. In 2024, APHIS continued collaborating with States to strengthen their ability to assist animals in an emergency with enhanced contingency planning. The Agency participated in industry seminars on contingency planning and emergency preparedness and has planned three tabletop exercises for 2025. These exercises will focus on emergency scenarios in small rural zoos affected by natural disasters in California and North Carolina. In 2024, APHIS also assisted government and non-governmental partners to develop and interpret policy and guidance for pet care during an emergency. Finally, effective January 3, 2022, all Animal Welfare Act licensees are required to have contingency plans for the humane handling, treatment, transportation, housing, and care of animals in the event of an emergency or disaster.

Response Efforts

In 2024, the Federal Emergency Management Agency activated Emergency Support Function #11 coordinators 13 times to respond to, or provide support for, incidents including wildfires, hurricanes, severe storms/tornados, and flooding. APHIS personnel processed 1,664 resource requests for 1,016 unique responders to support 27 agricultural and all-hazards incidents. For example, APHIS supported response efforts involving animal diseases and natural disasters including response and recovery associated with hurricanes Beryl, Debby, Ernesto, Francine, and Helene. The Agency's National Incident Management System Training and Exercise Program. APHIS National Training and Exercise Program delivered 13 courses and organized an additional 13 contracted courses across the country to prepare APHIS emergency responders and IMTs for emergency deployments.

Safeguarding of Select Agents

APHIS and the CDC jointly administer the select agents and toxins regulations as FSAP. To eliminate potential conflicts of interest, the CDC inspects USDA APHIS facilities, and APHIS inspects CDC facilities that possess select agents. APHIS' Division of Agricultural Select Agents and Toxins (DASAT) ensures that registered facilities promptly address non-compliances and take corrective actions. At the end of 2024, 230 entities were registered with FSAP; 193 were registered with the CDC and 37 were registered with APHIS. In 2024, DASAT completed 72

inspections consisting of 58 verification inspections, 10 registration renewal inspections, 4 amendment inspections, 1 new registered entity inspection, and 1 Effluent Decontamination Systems (EDS) inspection. An EDS inspection is a device that decontaminates or sterilizes biologically active or biohazardous materials in fluid and liquid waste material wastewater. Two of the total number of inspections were combinations of verification and amendment inspections. DASAT conducted 67 onsite inspections and 5 remote inspections. Additionally, 49 of the inspections APHIS conducted were joint inspections with CDC.

APHIS' DASAT also collaborates with other agencies that have laboratories registered with the FSAP. In 2024, APHIS was accompanied by the Department of Homeland Security on two inspections, the Department of the Army Inspector General on one inspection, and the Food and Drug Administration on one inspection. BSL-4 inspections involve dangerous and exotic agents that pose a high risk of laboratory infections and life-threatening disease for which there are no vaccines or treatments. Six of the 72 inspections conducted by DASAT in 2024 were BSL-4 inspections. DASAT identified deficiencies during these inspections and notified the inspected entities so that they can take swift corrective action. DASAT also worked with the Federal Bureau of Investigation (FBI), which conducts security risk assessments for the program, to evaluate individuals requesting access to the select agents and toxins. In 2023, FSAP facilitated 2,796 FBI security risk assessments with 8,599 approved individuals and restricted the access of 16 individuals based on FBI investigations, preventing potential misuse or handling of the select agents and toxins by individuals who may be bad actors. Security risk assessment numbers for 2024 will be available in January 2025. In addition, DASAT provided final responses to a recent Office of Inspector General audit for all 11 audit recommendations. FSAP continued to coordinate with representatives from APHIS and the Agricultural Research Service (ARS) overseeing the transition of the National Bio and Agro-Defense Facility in Kansas to provide guidance on select agent registration in 2024. APHIS provided input on certain National Security Council initiatives to help inform policy makers about the role of the select agent program, as well as on select agent regulatory standards and the select agent program's facility registration approval process.

Modeling and Monitoring

APHIS uses epidemiologic and economic models to better understand historical events, estimate consequences, and inform strategic, logistical, and budgetary decisions by evaluating varying interventions related to animal health. In 2024, the Agency continued to develop modeling applications and disease-spread scenarios to explore the impact of alternative control strategies on the severity and duration of simulated, national-level ASF, foot and mouth disease, and HPAI outbreaks. These scenarios support field responder training exercises and strengthen surveillance strategies before a potential outbreak as well as during an outbreak. APHIS and ARS used these model scenarios to inform emergency response planning and evaluate the effectiveness of applying network-based controls during simulated foot and mouth disease outbreaks. In 2024, APHIS applied these models to guide decision-making and support resource planning associated with ASF outbreaks in the United States and ongoing HPAI outbreaks in North America. In 2024, APHIS also maintained models for classical swine fever, bluetongue virus, and virulent Newcastle disease. Through partnerships with Kansas State University and Oklahoma State University, APHIS developed and leveraged economic models to evaluate costs for outbreak response under varying levels of outbreak severity and response strategies.

Foreign Animal Disease Investigations

In 2024, APHIS conducted 2,008 foreign animal disease investigations, of which 1,141 were vesicular disease investigations. Vesicular diseases are viral diseases that affect various livestock animals, primarily swine and cattle. The most concerning vesicular disease is foot and mouth disease, which is the highest consequence foreign animal disease in terms of regulatory intervention and economic consequences. Several vesicular diseases exhibit similar clinical signs

and can only be differentiated through laboratory testing. In addition, 274 of the investigations were poultry investigations.

SAFE TRADE AND INTERNATIONAL TECHNICAL ASSISTANCE

Current Activities

APHIS monitors animal and plant health throughout the world and uses this information to set effective agricultural import policies to prevent the introduction of foreign animal and plant pests and diseases. APHIS and the Department of Homeland Security cooperate to enforce these policies 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. The Agency also provides scientific and technical support in resolving sanitary (animal) and phytosanitary (plant) trade barriers.

APHIS negotiates animal and plant health certification requirements, assists U.S. exporters in meeting foreign regulatory requirements, ensures requirements are proportional to risk without being excessively restrictive, and provides any necessary technical information to support the safety of U.S. agricultural products destined for foreign markets.

Selected Examples of Recent Progress in Facilitating Safe Trade:

1. Agriculture Import/Export

   APHIS works with other Federal agencies, States, foreign governments, industry, and academia to protect U.S. agriculture while facilitating the safe trade of animals and animal products. APHIS' animal health experts ensure that U.S. import requirements safeguard U.S. livestock health and negotiate requirements for the export of U.S. animals and animal products worldwide. These requirements are based on compliance with international standards, importing country regulations, sound scientific principles, and fair-trading practices for animals and animal products. In addition, APHIS sets quarantine, testing, and/or 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 conducts activities related to the 2008 Farm Bill amendments to the Lacey Act, which prohibits the importation of any plants, 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. A 2012 study by the United Nations Environmental Programme estimated the value of illegal logging, including processing, to be between $30 to $100 billion dollars, or 10 to 30 percent of the global wood trade. The Lacey Act amendments are designed to help combat this illegal logging by encouraging importers to research their supply chains and be aware of the laws governing products they purchase in other countries. APHIS' role is to evaluate and implement existing regulations, provide guidance to importers regarding the required declaration, perform compliance checks, provide enforcement agencies with declaration information to assist their investigations, and maintain declaration records.

   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 evaluation process minimizes the risk of introducing foreign animal diseases through importation and is consistent with international trade requirements. In 2024, APHIS completed several evaluations and published regulatory actions based on those evaluations in the Federal Register. These regulatory actions establish interim restrictions on the importation of animals and animal products to the United States due to various disease outbreaks in other countries. To ensure countries have appropriate surveillance,

prevention, and control measures in place, APHIS conducts site visits around the world to minimize the likelihood of introducing foreign animal diseases into the United States.

APHIS ensures that import regulations are effective and science-based and works with U.S. businesses and importers to facilitate safe trade. In 2024, APHIS continued work with States in 2024, to better understand State-level disease control options and how they can support trade. The Agency implemented a customer-friendly veterinary permitting assistant tool to support the new integration of the eFile system for all live animal and animal product permitting needs. Through eFile, users can manage applications, registrations, permits, and licenses online. Additionally, APHIS issued 25,385 import, transit, and interstate permits for live animals, animal products, organisms, and vectors in 2024. These include new permits, renewals, and amendments.

Exports

To open, re-open, and maintain U.S. access to worldwide export markets, APHIS negotiates science-based conditions with trading partners for various commodities that protect their country while also facilitating trade. In 2024, APHIS negotiated or re-negotiated 14 export protocols for animal products (4 new markets, 3 re-opened markets, and 7 expanded markets). To complete export requests, APHIS conducted voluntary inspections of approximately 1,029 U.S. manufacturing facilities to maintain, expand, or open export markets in many countries.

In 2024, APHIS opened, expanded, retained, or reopened 101 live animal export markets. This included working with Colombia to reopen the market for U.S. poultry and egg products after a 4-month market closure, a market valued at $105 million annually. A major success for APHIS has been the development of regionalization protocols for avian influenza with trading partners for U.S. poultry products, including top markets such as Mexico, the Philippines, and Taiwan. These arrangements have allowed U.S. poultry product exports to continue to many countries despite the ongoing outbreaks of highly pathogenic avian influenza. Additionally, in 2024, APHIS continued to take a proactive approach with African swine fever (ASF) and developed zoning and regionalization protocols with trading partners to ensure that exports of swine or swine products will continue from unaffected areas if ASF should be detected. APHIS established an ASF protection zone, consisting of Puerto Rico and the U.S. Virgin Islands to safeguard the United States from an ASF incursion in the Caribbean. Ten countries have acknowledged the ASF protection zone and provided written agreement to accept U.S. exports of swine or swine products from the remainder of the U.S. if ASF is detected in the protection zone.

APHIS also assisted export markets by participating in industry stakeholder meetings, provided technical support to the Office of the U.S. Trade Representative for World Trade Organization (WTO) cases, coordinated or supported audits with trade partners with whom we have requested new market access, and engaged in bilateral trade meetings. In addition, APHIS developed information packages and questionnaire responses from various countries to maintain, expand, or open export markets as well as to release held shipments. In 2024, APHIS endorsed approximately 365,000 export health certificates for animal products, livestock, poultry, germplasm, and pets.

APHIS utilizes a two-tiered approval system for the issuance and endorsement of U.S. origin veterinary export health certificates for live animals, including germplasm. A USDA Accredited Veterinarian qualifies the animal for export, performing all required pre-export examinations, tests and treatments, and issues (completes and signs) the veterinary export health certificate. After the export certificate is issued, it is sent to APHIS' Veterinary Services as the U.S. Competent Authority for Animal Health for review and endorsement. In 2024, APHIS continued to streamline this process and increase the number of live animal health export certificates issued electronically by expanding the system capabilities for the Agency's online Veterinary Export Health Certification System (VEHCS). VEHCS capabilities include digital signature, multiple user roles, a certificate upload feature, certificate re-issuance, and inclusion of supporting documents and payment

information. APHIS continues to expand the number of countries and commodities for which electronic certification is available. In 2024, APHIS participated in a World Organization for Animal Health working group and Inter-American Institute for Cooperation on Agriculture to further international standard-setting for electronic certification in animals/animal products. In 2020, APHIS issued a notice to the WTO indicating the acceptance of electronic USDA Accredited Veterinarian signature for the issuance of all live animal export health certificates submitted to APHIS for endorsement. Since issuing this notice, APHIS' digital endorsement for live animal export certificates is currently accepted by 47 countries.

Lacey Act

In 2024, APHIS received 2.7 million Lacey Act declarations electronically or on paper (the vast majority were received electronically through the Department of Homeland Security's Customs and Border Protection's (CBP) Automated Cargo Environment system). Since implementing the 2008 amendments to the Lacey Act, APHIS has added products to the declaration requirement/enforcement schedule in phases. On May 31, 2024, APHIS published a notice in the Federal Register announcing that Phase 7, requiring the declaration for all remaining plant product Harmonized Tarif Schedule (HTS) codes that are not 100-percent composite materials, will be effective on December 1, 2024. Phase 7 covers several hundred HTS codes and includes items as varied as industrial or medicinal plants, furniture, handbags, plywood, laminated wood, tools, matches with natural wood stems, products of natural cork, products of bamboo and rattan, footwear, and more. APHIS conducted extensive outreach with stakeholders and industry covered under Phase 7, including attending numerous trade events and webinars, and answered questions from more than 2,200 individuals in 2023 and 2024. APHIS received 11 comments on the products to be covered under Phase 7 of the enforcement plan during the public comment period, which ended on July 30, 2024. In response to the comments, APHIS published a Stakeholder Registry announcement on September 20, 2024, making adjustments for four specific HTS codes based on these public comments.

APHIS and its Federal partners (including other USDA agencies, CBP, the U.S. Department of Justice, and the U.S. Fish and Wildlife Service) continued to expand and improve Lacey Act compliance programs. In 24, APHIS issued 204 Letters of Noncompliance to importers who submitted declarations with errors or inconsistencies to allow them to correct the issues. APHIS and its partners completed five surveys and one audit of importers with suspect import documentation. Letters of Noncompliance were issues to three of the companies. APHIS provided 31 reports of declaration data to multiple interagency law enforcement partners; data for regulatory counterparts in Cameroon, Peru, and Vietnam; and data to assist the implementation of the upcoming Convention on International Trade in Endangered Species protections for Ipe and Cumaru tree species.

2. Overseas Technical & Trade Operations

Through the Overseas Technical and Trade Operations (OTTO) program, APHIS facilitates market access for U.S. farmers and ranchers to export their products to other countries by addressing animal and plant health-related issues that impede or prevent trade of U.S. agricultural products. APHIS uses its technical expertise to develop science-based agreements with other countries to promote U.S. exports, and internationally recognized scientific standards and guidelines for animal and plant health regulations to help ensure implementation of uniform sanitary and phytosanitary (SPS) trade regulations globally. To accomplish these goals, the Agency collaborates with USDA's Foreign Agricultural Service (FAS), the Office of the U.S. Trade Representative and other Federal technical agencies to ensure a coordinated effort on trade-related issues and provide direct benefits to U.S. producers. These efforts facilitated the export of U.S. agricultural products, which totaled $174.4 billion in fiscal year 2024 (Outlook for U.S. Agricultural Trade, November 2024).

APHIS uses its strong scientific base and team of technical experts located in the United States and abroad to advocate on behalf of U.S. agriculture and successfully resolve SPS trade barriers.

APHIS technical experts build strong working relationships with host-country counterparts and use their scientific knowledge to address counterpart concerns, confirm that U.S. commodities are safe to import and remove trade barriers for American agricultural exports. These conversations take place via ongoing discussions, technical bilateral meetings, and multilateral fora. APHIS has scientists, including veterinarians, entomologists, botanists, and plant pathologists, stationed throughout the world in more than 30 countries who collaborate with their foreign counterparts on animal and plant health issues to support U.S. exports and the establishment of science-based international animal and plant health standards that facilitate trade and reduce animal and plant health-related risks.

Examples of APHIS' 2024 successes in creating new market access include U.S. rice to Ecuador, Texas grapefruit to South Korea; and California peaches and nectarines to Vietnam. APHIS also opened markets for U.S. live cattle, day-old chicks, and hatching eggs to Mozambique and bovine meat and bone meal to Ecuador and Peru. APHIS works to retain or reopen markets that are threatened or closed due to changing requirements in other countries or pest and disease outbreaks in the United States. In February 2024, Colombia reopened its markets to U.S. poultry and egg products after closing them in August 2023 over concerns related to highly pathogenic avian influenza (HPAI). U.S. poultry product exports to Colombia were valued at nearly $105 million in calendar year 2022 and in 2024 have reached more than $50 million following the reopening. Showing the success of APHIS' efforts over the last several years to implement agreements regarding regionalization for animal disease emergencies, many trading partners continued to not impose restrictions on U.S. poultry products from counties that did not experience avian influenza outbreaks in 2024. Worldwide exports of U.S. poultry meat products remained strong in calendar year 2023, with a value of $5.5 billion, similar to the level in calendar year 2022 ($5.9 billion) despite the historic outbreak of HPAI globally. Past successes also continue to add value for U.S. exporters. APHIS reached an agreement with our counterparts in Mexico in 2022, to expand access to the market for U.S. potato producers. Exports have grown each year, increasing from approximately $56 million in 2021, to $87 million in 2022, to $121 million in 2023.

APHIS must continually address SPS issues to ensure continued smooth trade for U.S. exporters, even for markets that are open to U.S. agricultural products. APHIS works with foreign counterparts to clarify or streamline certification requirements, making it easier and less costly for U.S. exporters to move their products overseas. When shipments are delayed at foreign ports, APHIS negotiates the overseas process to get products released and moving again. APHIS successfully secured the release of 323 shipments worth approximately $55 million in 2024. Examples of these detained shipments that were released through our interventions on the ground included a shipment of breeding cattle to Turkey worth $9 million, shipments of day-old chicks to Korea and Thailand worth more than $1 million, a shipment of citrus to Chile worth nearly $600,000, and breeding cattle to Azerbaijan worth $857,000.

Building relationships in emerging markets often requires field visits, or training of foreign government officials, to build their capacity to put in place scientifically sound SPS requirements. During 2024, APHIS' International Visitor Center hosted 22 foreign engagements related to U.S. regulatory processes, agricultural trade, and drought impacts on animal and plant health, reaching 213 foreign officials from the European Union, Canada, Chile, the Caribbean region (Bahamas, Barbados, Curacao, Dominican Republic, Haiti, Suriname, Trinidad and Tobago) Congo, Côte d'Ivoire, Ethiopia, Gabon, Georgia, Ghana, Guatemala, Honduras, India, Japan, Korea, Mexico, Morroco Netherlands, Sudan, Thailand, Uganda, Uzbekistan, and Zambia. Through a cooperative agreement with Tuskegee University, APHIS facilitated the delivery of a technical workshop on science-based risk analysis for 68 participants from 13 countries in Africa. APHIS also hosted a virtual training seminar on plant health capacity building for 20 officials with Timor-Leste's National Department of Quarantine and Biosafety as that country works to meet the sanitary and phytosanitary regulatory requirements necessary to join the World Trade Organization and Associate of Southeast Island Nations. These activities help other countries improve technical

regulatory capacity and prevent the spread of serious animal diseases and plant pests that could jeopardize the safe trade of agricultural products and threaten U.S. agriculture.

APHIS emphasizes use of scientific principles as a basis for international trade decisions to help ensure the same rules apply to countries around the world and foster a safe, successful trading environment. To achieve this level playing field and ensure pest and disease mitigation, APHIS works with international standard-setting bodies such as the World Organisation for Animal Health (WOAH), formerly abbreviated as OIE, and the International Plant Protection Convention (IPPC) to develop SPS standards and guidelines for trade and encourages other countries to adopt these internationally recognized and science-based regulatory guidelines. APHIS also participates on the Committee for SPS. Measures of the World Trade Organization, where the U.S. delegation meets to discuss technical trade issues and to promote harmonization with IPPC and WOAH standards. APHIS increases U.S. agricultural exports by advocating for science-based international standards acceptable to the United States and uses those standards when negotiating for market access for U.S. products. This safeguards domestic production from foreign diseases and pests, while promoting safe trade of U.S. agricultural commodities. In 2024, APHIS participated in the Commission on Phytosanitary Measures (CPM; the IPPC's governing body) meeting to adopt four international standards and one recommendation to help harmonize international trade and prevent pest introductions. Additionally, APHIS continues to participate in key IPPC committees, including those focused on standard setting, ePhyto, pest outbreaks, and One Health. In the animal health arena, WOAH adopted 39 international standards in 2024, in areas such as disease surveillance and notification, disease diagnostics, and control. Additionally, APHIS contributed to ongoing negotiations for the SPS aspects of a new generation of trade agreements, including the Indo-Pacific Economic Framework for Prosperity agreement; the U.S.-Taiwan Initiative on 21st Century Trade; and the U.S.-Kenya Strategic Trade and Investment Partnership.

APHIS continued its comprehensive succession planning efforts, with special emphasis on developing the foreign service cadre and implementing an annual overseas rightsizing effort. The recruitment, assessment, and developmental process emphasized applicants' animal and plant health science backgrounds while also increasing new officers' knowledge of all APHIS mission areas, USDA partners such as FAS, and understanding of U.S. embassy protocols. The training program further develops Foreign Service Trainees' diplomatic, cross-cultural, and leadership skills. Through this succession effort, APHIS is augmenting its current overseas foreign service cadre, many of whom are eligible for retirement in the next 5 to10 years. As a result of these efforts, APHIS has deployed foreign service personnel to China, Senegal, and Japan. Additionally, APHIS annually conducts a workforce planning process to evaluate resource allocation overseas, assess which locations are optimal, and determine the necessary staffing required to support the Agency's mission, strengthening APHIS' ability to address SPS and other issues overseas in traditional and emerging markets. Through this process, APHIS identified Africa as an area of focus and added a locally employed staff member in Kenya. APHIS continued expanding its presence by adding a foreign service officer in Kenya and two foreign service officers in Senegal in 2024.

ANIMAL WELFARE

Current Activities

The Agency ensures 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) through inspection, education, and enforcement efforts. Animal welfare activities include inspection of certain establishments that handle animals intended for research, exhibition, wholesale pet trade, or transported in commerce. During these inspections, APHIS reviews the animals, premises, facilities, husbandry practices, programs of veterinary care, records, and animal handling procedures. APHIS also administers the HPA, as amended, which prohibits the showing, sale, auction, exhibition, or transport of sore horses. Program personnel

evaluate the performance of industry-licensed inspectors and conduct unannounced inspections at horse shows, exhibitions, sales, and auctions.

Selected Examples of Recent Progress in Animal Welfare:

1. Animal Welfare

APHIS' Animal Welfare Program has the unique Federal role of ensuring the humane care and treatment of animals. More than fifty years ago, in 1966, the Animal Welfare Act (AWA) was signed into law. Since that time, APHIS, acting through the Animal Care Program and its predecessors, has protected millions of regulated animals used in research, exhibition, and the pet trade as well as those transported in commerce. Each year, the program evolves to ensure licensing, registration, inspection, permitting, outreach, and enforcement activities are responsive to current needs. In 2024, the program oversaw more than 17,500 licensees and registrants.

Licensing and Inspection Activities

The AWA requires all facilities that use animals regulated under the Act to obtain a license or registration with APHIS. APHIS works closely with potential applicants to ensure they understand requirements for a license. APHIS also conducts between one to three pre-licensing inspections to evaluate compliance prior to issuing a license. In 2024, APHIS conducted 913 pre-licensing inspections and issued 675 new licenses. The Agency determines initial compliance by conducting unannounced inspections within three months of issuing the license. At the first unannounced inspection, 97 percent of these newly licensed facilities were substantially compliant, with no critical AWA citation found.

Since November 2020, licensees must demonstrate compliance during an announced inspection before APHIS will renew the license. The Agency used a phased approach to implement these new requirements and completed the phased approach in 2024. In support of this new requirement, APHIS conducted 1,595 re-license inspections in 2024. Only facilities found to be in compliance were issued a 3-year license.

To assess ongoing compliance with the AWA, Agency officials examine and inspect animals, premises, facilities, husbandry practices, programs of veterinary care, records, and animal handling procedures. Inspectors perform different types of inspections, such as announced inspections, which include pre-licensing, re-licensing, and new facility site inspections, as well as unannounced inspections, which include routine and focused inspections. In 2024, APHIS conducted 9,760 inspections in total. Of these, approximately 6,300 inspections were routine unannounced inspections, with 96 percent of the facilities found to be substantially compliant. Additionally, APHIS conducted approximately 540 focused unannounced inspections. Focused inspections are typically conducted to follow up on issues related to a noncompliant incident found during routine inspection. The focused inspection will determine if a facility has addressed the previously identified issue or if there is an ongoing risk to an animal's health.

In 2023, APHIS finalized the Standards for Birds Not Bred for Use in Research rule that establishes new welfare standards for birds regulated under the AWA. The regulation change became effective on August 21, 2023, for facilities with mammals that were already licensed under the AWA. Facilities that were not currently licensed were required to be in compliance by February 21, 2024. In 2024, APHIS oversaw approximately 1,490 licensees with birds. Since the rule went into effect, APHIS conducted 2,729 announced and unannounced inspections at facilities with birds, covering approximately 420,000 birds. During the first year of enforcing the regulation change, a majority of the violations were due to facilities lacking a required avian enrichment plan. APHIS worked with facilities and published guidance on avian enrichment plans to assist licensees and registrants in understanding the requirements. As a result, the number of facilities in compliance increased. The Agency will continue to inspect and assess compliance of facilities with regulated birds in 2025.

Permitting Activities

Since 2014, APHIS requires that dogs imported into the United States for resale are healthy, vaccinated, and are over six months of age, with limited exceptions. Importers are required to demonstrate proof of age, vaccination, and health of dogs imported for resale before the dogs enter the country by obtaining a permit. In 2024, APHIS issued 2,295 permits covering 6,089 dogs entering the United States. The Agency continues to collaborate with U.S. Customs and Border Protection to address suspected incidents of importing underaged dogs and the illegal entry of dogs into the United States. The Agency has created procedures to refer problematic importers and those suspected of violating the AWA for investigation. Permitting has further facilitated the safe and timely entry of dogs into the United States, while making an impact on monitoring illegal live dog importation and holding those importers who do not follow the AWA accountable. Of the 7,038 dogs reviewed for importation into the United States for the purposes of resale or adoption, approximately 13.5 percent of the dogs were found not in compliance and denied an import permit in 2024.

Registered Research Facilities Activities

APHIS collaborates with the National Institutes of Health and the Food and Drug Administration to help oversee the welfare of animals used in research. While each Agency has distinct authorities and areas of responsibility, we work together to ensure laboratory animals receive the level of care required under Federal regulations. All three Agencies require research facilities to have an Institutional Animal Care and Use Committee (IACUC). This oversight body is empowered to conduct facility inspections, investigate complaints of inhumane animal care, and approve or suspend animal research activity. Of the more than 17,500 entities regulated under the AWA in 2024, 900 are research facilities. In 2024, APHIS conducted more than 1,200 unannounced inspections of research facilities.

Since 2016, USDA's Agricultural Research Service (ARS) has voluntarily registered its animal research facilities with APHIS to promote animal welfare and has established fully functioning IACUCs. APHIS has registered 40 ARS research facilities under the AWA. APHIS monitors the health and welfare of animals housed at ARS facilities using our unannounced inspection process. In 2024, APHIS conducted 53 unannounced inspections at all ARS facility sites and all facilities were found in compliance.

Outreach Activities

In 2024, the Agency hosted or assisted with over 17 live, virtual, or hybrid education and outreach events focused on animal welfare or various components of the AWA. Of note, this included an antimicrobial webinar for attending veterinarians and a bat welfare symposium to increase stakeholder education and outreach. In total, the Agency was able to connect with over 2,700 individuals across 49 states and 40 countries to discuss topics related to animal welfare.

Enforcement Activities

Under the law, APHIS has the authority to confiscate any AWA-regulated animal that is in a condition of unrelieved suffering. APHIS works with the State, Federal and local partners to intervene quickly to ensure animals are relocated to a facility where they will receive humane care according to Federal standards. In 2024, APHIS confiscated no animals.

When APHIS inspectors discover conditions or records that are noncompliant with the regulations, the Agency may establish a deadline for corrective action and increase the frequency of unannounced inspections to determine whether the facility made the necessary modifications. Continued, serious noncompliance may warrant an investigation that can result in sanctions ranging from monetary penalties to suspension or revocation of the facility's license, after notice and an opportunity for a hearing.

In 2024, APHIS initiated 209 enforcement cases for alleged violations of the AWA, issued 134 official warnings, issued 39 pre-litigation settlements resulting in the collection of $449,475 in stipulated penalties, obtained 19 administrative orders resulting in the assessment of $606,583 in civil penalties, and suspended or revoked 16 licenses. For example, in 2024, APHIS negotiated pre-litigation settlement agreements in the amount of $306,550 to resolve alleged violations of the AWA standards by research facilities. In one case, working through the Office of the General Counsel (OGC), APHIS obtained a Consent Decision and Order permanently revoking a dealer's AWA license, assessing a civil penalty of $312,000.

Regulatory Changes

In 2024, APHIS reviewed 214,246 comments pertaining to an 2023 Advanced Notice of Proposed Rulemaking seeking input on potential changes to the AWA. After reviewing public input, APHIS drafted proposed regulatory language on standards for handling captive wild and exotic animals at licensed exhibitors, training of personnel who handle wild and exotic animals at licensed facilities, and changes to all regulated animals' environments to promote their psychological well-being. A draft of the proposed rule is expected to be published in early 2026.

2. Horse Protection

Since 1970, APHIS has enforced the Horse Protection Act (HPA), a federal law aimed at ending the cruel and inhumane practice of soring and preventing unfair competition by making it unlawful to show, sell, or transport sore horses. Soring is a practice in which people apply mechanical devices and/or caustic chemicals to a horse's pasterns, which causes the horse to experience pain or distress while walking or moving. This practice is used primarily in training Tennessee Walking Horses, racking horses, and related breeds to produce a high stepping gait, which is prized at some competitive horse shows and other events. USDA conducts oversight of the program through evaluation of the performance of industry-licensed inspectors and conducting unannounced inspections at horse shows, exhibitions, sales, and auctions.

Inspection Activities

Under the HPA, the management of horse shows, exhibitions, sales, and auctions are responsible for ensuring that sored horses do not unfairly compete alongside horses that are not sore. If a horse is found to be sore, management has the responsibility of disqualifying them from participating in HPA-covered events. Management may use third-party inspectors that USDA-certified horse industry organizations (HIOs) train and license to inspect horses for compliance with the HPA. These third-party inspectors are known as Designated Qualified Persons (DQPs).

APHIS attends a select number of HPA-covered events each year to observe DQP performance and inspect horses for HPA compliance. In 2024, APHIS attended 60 horse events, inspected 2,031 horses, and of those inspected, identified 597 horses suspected of noncompliance with the HPA. The DQPs attended 187 HPA events and inspected 42,944 horse entries. In total, DQPs identified 610 HPA non-compliances, and management disqualified 588 entries.

Additionally, in 2024, APHIS continued to monitor for prohibited objects in horseshoes through digital radiograph imaging, implemented use of iris scan technology to verify horse identity, and pursued ultrasound technology and on-site testing of the swabs collected for prohibited substance testing. APHIS continues to provide event attendance related data on the APHIS website: Horse Protection Act.

In 2024, APHIS published a Horse Protection Final Rule in the Federal Register based on the comments received in response to a proposed rule published in 2023. APHIS' final rule will make substantive changes that strengthen current HPA regulations, including substantially increasing the degree of APHIS oversight of third-party inspectors. It also removes all regulatory requirements for HIOs that are affiliated with events and employ the third-party inspectors. The proposed changes allow APHIS to screen, train, and authorize qualified persons to conduct

inspections at horse shows, horse exhibitions, horse sales, and horse auctions to ensure compliance with the HPA. APHIS anticipates the new rule will be effective February 1, 2025, however the authority for training and authorization of the new Horse Protection Inspectors took effect on June 7, 2024. Therefore, in 2024, APHIS accepted applications for HPIs in support of the regulation change and provided training to inspectors to promote consistency in compliance inspections.

Enforcement Activities

To enforce regulations pertaining to the HPA, APHIS worked with OGC to obtain administrative orders disqualifying 11 people and businesses from participating in activities regulated under the HPA for a period of 6 months to 32 months, with civil penalties totaling $34,946. In addition, APHIS initiated 45 new cases for alleged violations of the HPA and referred 84 cases to OGC for administrative action, resulting in 18 administrative complaints. Additional actions, civil penalties, and fines related to these cases are still pending at this time. APHIS will continue to post copies of enforcement records (such as initial decision and orders, default decisions, consent decisions, and administrative complaints) on its website: Animal Welfare and Horse Protection Actions.

AGENCY MANAGEMENT

Current Activities

The Agency Management programs support the daily operations of APHIS and provide a safe and secure work environment. These programs provide the information technology, space, and telecommunications infrastructure that gives Agency employees the tools they need to carry out their responsibilities. These programs also oversee and implement precautionary security measures for continued mission operations while ensuring the safety of APHIS people and facilities. In addition, these programs support 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

APHIS' Information Technology Infrastructure (AITI) is comprised of the hardware, software, cloud computing and cyber-security infrastructure that provides Agency employees with office automation tools, internet access, and access to mission-critical information technology (IT) programs and administrative applications. APHIS maintains, enhances, and operates the IT infrastructure to support Agency business, conduct research and analysis, carry out administrative processes, record program activities, and deliver program services. AITI objectives and priorities are to continually improve sharing of information across the Agency; improve integrity and accessibility of information, processes, and resources available to assist programs in emergencies; and improve APHIS' cyber-security. APHIS uses AITI funding to maintain annual software license and hardware agreements, cloud services, and for regular life-cycle replacement of enterprise hardware. The 2024 accomplishments listed below support these objectives.

License Renewal

APHIS supported approximately 9,700 users including contractors with license renewals so they can access and legally use the enterprise software in conducting business.

Availability

APHIS supported internal and external stakeholders by providing optimal levels of service. The Agency continued to maintain 99 percent availability for its key computing systems in 2024. The AITI program also maintained application availability outside of the normal operational hours, on weekends, and holidays to ensure availability of systems.

Cloud Services

As a requirement of the Federal government's Data Center Optimization Initiative, APHIS has completed migration of all business applications from on-site data centers to the remote cloud servers. As of April 2019, APHIS closed all on-site Agency data centers. To date, APHIS remains in phase three of its cloud migration plan. Phase three focuses on further program data consolidation and enabling the ongoing development of cloud applications for new program mission needs. The Agency originally planned to complete the consolidation phase in 2023; however, system complexities delayed its completion. APHIS is targeting 2025, to complete the consolidation phase, following the final migration of program data to the cloud. In 2024, APHIS initiated several cloud optimization efforts resulting in greater efficiency and cost savings. Several major system redesigns also took place and will result in a reduction of costly software licensing. It is expected that these efforts will extend through and beyond 2025. APHIS continued utilizing the ability to telework as many employees elect to work remotely, in addition to working in physical office sites in 2024. As a result, cloud services have allowed the Agency to continue monitoring and accessing business applications remotely as well as offer seamless IT support for APHIS employees. In keeping with Departmental guidance, the Agency made strides via Microsoft cloud services on a project to process thousands of public comments in response to federal regulations, which historically required significant manual effort. APHIS worked closely with Program, Department, and Microsoft partners to implement a comprehensive solution that leverages MS Azure tools, designed and developed to be scalable, reusable, and to provide automation to traditionally manual tasks. All of these efforts posture APHIS for implementation of Artificial Intelligence capabilities when resources become available.

Cyber-Security

APHIS maintained the current version of the National Institute of Standards and Technology and Federal Information Security Management Act testing standards to continue protecting the Agency's cyber security infrastructure and reducing vulnerabilities within our systems. APHIS also introduced Agency led intrusion detection and prevention capabilities, via integration of web application firewall platforms, further increasing network security monitoring and protection. In 2024, this security system continued its success in providing technological threat insight, allowing the Agency to detect and block attempts of unauthorized access to APHIS systems at a faster and more accurate rate. Improved vulnerability management capabilities achieved through service and technology enhancements resulted in APHIS reducing all identified vulnerabilities by over 33 percent, with over 50 percent of those mitigated being high or critical in severity.

Security Monitoring

APHIS successfully discovered and prevented multiple cybersecurity attacks via the integration of new security monitoring tools. The Agency prioritized the protection of high value asset systems and kept those applications secure and available to our customers by averting successful attacks despite the constant probing by malicious actors. Application development also benefited by incorporating secure coding best practices and by integrating over one hundred projects into a security scanning platform. The Agency can now test existing and developed code in real-time to identify and mitigate potential security vulnerabilities and to reduce risks to our public and internal facing web applications. APHIS also developed and delivered privacy safety program improvements where employees received training on federal data privacy laws, data protection responsibilities including how to handle Personally Identifiable Information, and procedures related to records management in an effort to protect confidential information that could potentially identify a specific individual's citizenship, legal status, gender, race and/or ethnicity, and protect against the fraudulent use of bank account, credit card, driver license, passport, social security, and telephone numbers as well as date of birth details. The Agency also incorporated technical security monitoring best practices through the integration of penetration testing remediation

assistance services. APHIS has expanded internal security toolsets and added much needed cybersecurity expertise via both federal and contractor resources.

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 is responsible for overseeing safety programs, physical security, and Agency-wide readiness in response to agricultural and all-hazard emergencies. The program utilizes a government-wide approach to agricultural health issues affecting the Nation through preparedness, personnel security, and an array of safety initiatives. This includes providing 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 APHIS employees, visitors, and stakeholders from harm, acts of terrorism, and violence. In addition, this program supports part of the USDA's 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 government employees located overseas.

The POS program provides numerous security training courses for Agency employees. In 2024, the program provided training to almost 1,600 employees, including seminars relating to active shooter response, situational awareness, de-escalation, First Amendment Audit Training, and travel safety. The program also provided multiple security briefings for employees who work along the U.S.-Mexico border.

APHIS investigates, educates, assesses, and mitigates internal and external security threats directed at agency facilities, programs, and personnel. For example, APHIS focuses on employee security at or near the Mexican border, investigating threats and responding to requests for protection for APHIS employees who enforce regulations in this challenging environment. In 2024, APHIS investigated 51 external threats to its employees and 9 workplace violence incidents. APHIS also hosted twelve Workplace Violence training events, with an overall attendance of 531 employees.

The Homeland Security Presidential Directive-12 (HSPD-12) and Interagency Security Committee (ISC) directives create the standard for secure and reliable forms of identification for facility and network access and compliance regarding physical security at Federal facilities. In 2024, the POS program completed physical security assessments at 37 facilities using the updated ISC criteria and USDA reporting format. As a result, the POS program provided security upgrades and repairs to 23 facilities. The POS program is also responsible for issuing, activating, or updating approximately 8,590 personal identification verification cards to USDA/APHIS and other federal personnel including contractors. In 2024, the POS program provided support to 14,361 MRP employees to ensure the Agency was in compliance with HSPD-12 and ISC standards.

APHIS security specialists investigate threats and respond to requests for protection throughout the country for APHIS veterinarians and inspectors who are enforcing regulations in challenging environments. In support of safety precautions for APHIS employees who enforce the Animal Welfare Act (AWA) and Horse Protection Act (HPA), the POS program provided 39 inspections of regulated AWA entities, and 63 HPA events.

The program also works with other USDA agencies, the U.S. Department of Justice, U.S. Department of Homeland Security, the U.S. Department of State, and local law enforcement agencies to ensure that the appropriate organization takes the lead, contributes to program costs, and integrates security where employees are co-located overseas. In 2024, APHIS had approximately 300 full-time employees based in countries around the world to facilitate

agricultural trade and monitor pest and disease threats. The Security Embassy Construction Counterterrorism Act's Capital Security Cost Sharing Program requires the Agency to help fund the construction of new Embassy compounds based on the number of authorized positions, and APHIS provides a portion of the funds in the Physical and Operational Security line item to the U.S. Department of State for this cost. This program provides safe and secure diplomatic facilities for the Agency's overseas personnel.

3. Rental and Department of Homeland Security Payments

The Rental and Department of Homeland Security (DHS) Payment's account supports the Agency's costs associated with General Services Administration (GSA) leased facilities. The account funds approximately 208 locations associated with GSA leases and DHS payments. The funding allows APHIS programs to continue carrying out activities that safeguard the health and value of U.S. agriculture and natural resources, without diverting fiscal resources from operations to cover these costs. APHIS continues efforts to reduce and consolidate its office spaces. In 2024, APHIS decreased its rentable square foot (RSF) footprint, resulting in an overall reduction of 176,013 RSF that equates to two percent reduction in RSF over the last year.

This account also funds the DHS/Federal Protective Service (FPS) basic and building specific security costs. In 2020, DHS/FPS began implementing a modified security billing process that was fully implemented by the end of 2022. This new security billing process uses the previous five years of actual security costs to develop an average basic security assessment billed to APHIS annually. These basic security costs, which include law enforcement activities and security alarm monitoring and dispatch, are projected to increase by five percent in 2025, and ten percent in 2026. The increase is due to inflationary increases in costs for labor, supplies, and material. In addition to the basic security costs, APHIS is billed security costs for building specific services required to implement and maintain security requirements in accordance with standards set by the Interagency Security Committee, including contract guards and security equipment.

EMERGENCY FUNDED PROGRAMS

Selected Examples of Recent Progress in Emergency Funded Programs:

1. African Swine Fever

African Swine Fever (ASF) is a highly contagious and deadly viral disease of domestic and wild pigs. There is no treatment or vaccine available in the United States. Currently, the only way to stop ASF is to depopulate all affected or exposed swine populations. Early detection is the key to controlling, containing, and eliminating ASF. While ASF has never been found in the United States and does not threaten public health, an introduction would devastate U.S. pork producers, their communities, and the economy, as well as the security of the pork supply. Research by Iowa State University has estimated that an ASF introduction could result in $75 billion in losses to the industry, including a cut of 60,000 jobs, and pork prices could plummet by half and stay low for 3 years, with impacts for up to 10 years.

Protecting the health of domestic livestock herds to ensure profitability and supporting trade is a high priority for the Department. USDA confirmed ASF in the Dominican Republic (DR) in July 2021, and in Haiti in September 2021. In September 2021, APHIS received $500 million in emergency transfer funds to assist with the response to these detections, establish a protection zone in Puerto Rico (PR) and the U.S. Virgin Islands (USVI), and actions to prevent the introduction of the disease in the United States. To provide the best protection against further ASF spread in the region, APHIS is assisting with a containment program in the DR and Haiti, while simultaneously bolstering domestic preparedness and response efforts.

Continental U.S. Prevention Efforts

APHIS has numerous interlocking safeguards in place to prevent ASF from entering the United States and has been working closely with States and industry to develop and refine plans to rapidly respond and mitigate impacts in case of an outbreak. These safeguards include a surveillance program to rapidly detect ASF and serve as an early warning system; the ability to test large volumes of diagnostic samples through the National Animal Health Laboratory Network; enhanced work with the Department of Homeland Security's U.S. Customs and Border Protection (CBP) at ports of entry targeting cargo, passengers and products from ASF-affected countries; increased detector dog teams to sniff out illegal products at key U.S. commercial sea and airports; and added import restrictions on pork and pork products from ASF-affected countries. APHIS' focus on domestic preparedness emphasizes surveillance and diagnostics, traceability, garbage feeding controls, depopulation tools and methods, and enhancing pre-clearance and arrival inspections. These priorities were identified through direct discussions with the industry and States and in close collaboration with the National Pork Producers Council. APHIS collaborated with Federal, State and industry organizations to establish the vision and framework for an official USDA led U.S. Swine Health Improvement Plan. This initiative began as a pilot program and will establish a voluntary program for U.S. swine producers who meet and maintain defined standards around sampling, biosecurity and traceability to attain ASF- and CSF-monitored status. Similar to the National Poultry Improvement Program, this program's overarching goal is to elevate the health of the U.S. swine herd and support expedited reestablishment of international trade in the face of a disease outbreak.

Since August 2, 2021, APHIS has tested 15,757 samples from higher risk domestic herds and 40,619 case-compatible commercial swine samples from veterinary diagnostic laboratories and slaughter facilities in the contiguous United States for ASF. Starting in 2023, and continuing in 2024, APHIS enhanced surveillance efforts by identifying opportunities to boost engagement within the exhibition swine industry through partnerships with the National Pork Board and Ohio State University. Based on the high risk of disease introduction through people and cargo moving from Hispaniola, APHIS has continued antigen-based surveillance of feral swine in Alabama, California, Florida, Georgia, Louisiana, Mississippi, Oklahoma, South Carolina, Tennessee, and Texas. The Agency has also included the States along the U.S.-Mexico border in enhanced feral swine surveillance activities and has expanded antibody-based surveillance across the entire feral swine invaded range, sampling 2,050 feral swine for antibodies in 2024. Additionally, APHIS tested more than 8,000 feral swine samples for ASF in these 10 States.

APHIS continued to increase the National Veterinary Stockpile in 2024, by purchasing additional personal protective equipment and sampling supplies, as well as depopulation and disposal equipment, including incinerators, captive bolt devices, animal handling equipment and feral swine traps to boost preparedness and response capabilities. Leveraging Federal, State, industry and academic partnerships, APHIS continues to revise and update guidance documents within the ASF Response Plan, providing strategic guidance before and during an ASF outbreak for responders across all levels.

Protection Zone Efforts

APHIS continued to enforce an ASF protection zone in PR and USVI under the parameters outlined by the World Organisation for Animal Health in 2023. This protection zone, along with existing comprehensive import restrictions and safeguards, strengthen the Agency's ability to protect the U.S. swine herd while avoiding trade restrictions by countries that recognize the protection zone if ASF is detected in either PR or the USVI. APHIS conducts an ongoing pre-departure inspection program in PR to prevent pests and diseases from entering the continental United States in passenger baggage inspected and cargo and works with CBP to conduct similar inspections in the USVI. To support the ASF protection zone, APHIS enhanced pre-departure activities by adding temporary staff, canine detector teams, and x-ray machines, as well as conducting training for staff inspecting animal products in addition to the ongoing focus on plant pests and diseases. In 2024, the Agency conducted 2,308 Smuggling Interdiction and Trade Compliance (SITC) market

surveys in the protection zone to identify potential regulated or prohibited products and ensure its removal from the marketplace. The SITC market surveys resulted in 34 seizures (21 of the products originating from China; 7 products originating from Argentina; 4 products originating from Peru; and 2 products originating from Uruguay), weighing a total of 28,028 pounds in 2024. SITC also conducts trade verification activities at express courier locations in the continental United States as a backstop to inspection activities in the protection zone. Since the establishment of the protection zone, APHIS has intercepted and destroyed more than 207,000 pounds of pork and pork products in the protection zone--products that otherwise would have reached the U.S. mainland, threatening swine production in the Continental United States.

Illegal boat landings pose a potential pathway for ASF as these landings can facilitate the illegal introduction of pork products into the protection zone. APHIS responds to reported illegal boat landings within the protection zone and recovers animal products. When inspectors find prohibited pork products, they dispose of them in accordance with approved safeguarding practices.

Since the establishment of the protection zone, APHIS has intercepted and destroyed over 150,000 pounds of pork and pork products in the zone--products that otherwise would have reached the U.S. mainland, threatening swine production in the Continental United States. In addition, APHIS staff removed feral swine in PR and the USVI, for over 5,500 animals in the last three years. APHIS samples feral swine and continues to remove feral swine as well as test for possible ASF introductions. APHIS maintained the protection zone by enhancing surveillance efforts through the collection of on-farm and slaughter samples from premises in PR.

International Efforts

In 2024, APHIS continued to assist the DR in their response efforts, including providing advice and assistance on the response effort's transition from the goal of eradication to an ongoing management program with efforts to prevent ASF from spreading outside the DR. To increase producer cooperation and more timely disease reporting during the initial phase of the response effort, APHIS provided funding for indemnity payments for depopulated swine. As of September 2024, the indemnity program provided more than $15 million for the compensation of producers affected by ASF. The compensation program ended in October 2024. APHIS is continuing to support the DR's activities to prevent the movement of ASF, including supporting predeparture inspections of travelers leaving the DR for the United States. APHIS deployed detector dogs in the DR to improve predeparture activities and currently supports 31 dogs working across 4 of the major airports in the DR which have led to the detection, confiscation, and incineration of more than 14,000 pounds of pork products. To improve the handling and disposition of international garbage, and have a better biosecurity in the country, APHIS is providing a total 12 incinerators, 6 small incinerators for smaller international airports and land border crossings between the DR and Haiti and 6 larger-scale incinerators for higher risk airports or maritime ports. The smaller incinerators and three large-scale incinerators are operational (as of October 2024), and three more are under construction. APHIS also conducts outreach activities as a part of its international efforts where APHIS leveraged radio, traditional, digital, and social media outlets to discourage DR residents from travelling to the United States with pork products.

APHIS is also continuing to enhance regional surveillance and emergency preparedness in the Caribbean to ensure that any outbreaks in new areas would be detected. APHIS hosted two in-person training events in 2024, related to ASF surveillance and diagnostics. The training included seminars from subject matter experts from the United States, the United Kingdom, the Philippines, and Spain with hands-on training in performing pen-side diagnostic tests and reached 35 participants from 18 countries. Caribbean partners began passive surveillance in August 2024, with Barbados. The Agency also continued to support enhanced feral swine removal operations in the Caribbean to prevent the introduction and spread of the disease through cooperative agreements with Organismo Internacional Regional de Sanidad Agropecuaria and Inter-American Institute for Cooperation on Agriculture.

Outreach Efforts

APHIS continued outreach, effectively executing and managing contracted outreach campaigns geared toward international and domestic travelers, producers, and veterinarians. These campaigns increase awareness about preventing an introduction of ASF in the U.S. In 2024, APHIS managed two outreach campaigns to raise awareness of ASF. The "Protect Our Pigs" and "Pigs Don't Fly" outreach campaigns have been amplified by other Federal government agencies and State departments of agriculture. The international traveler campaign, "Pigs Don't Fly", ran digital and social media ads at the top 25 busiest U.S. airports and through search engine marketing, urging travelers not to bring pork and pork products back into the United States from abroad. Physical and digital signage was also placed in eight airports — JFK, LAX, Miami, Chicago O'Hare, Atlanta, Newark, Houston, and San Juan — where passengers were most likely to bring prohibited pork products to the United States. Additional campaign outreach through social and digital media; print ads in publications like the Journal of the American Veterinary Medical Association and Iowa Pork Producer; geographically targeted radio ads; and outreach at events like the American Royal Livestock Show and the Minnesota State Fair, were also utilized in 2024. These activities will continue in 2025 and include specific efforts to target hard-to-reach audience segments such as youth and Protection Zone residents.

2. Bovine Tuberculosis

In 2024, APHIS obligated $206,688 in Commodity Credit Corporation funds (CCC) on tuberculosis (TB) eradication activities. APHIS uses a mix of depopulation and test-and-removal strategies to address bovine TB-affected herds. These strategies consider herd size, potential indemnity costs, State and owner preferences, genetics, and the probability of removing infection. During 2024, APHIS in cooperation with State animal health agencies continued to manage two TB-positive herds under test-and-remove protocols, both of which were released from quarantine in 2024. As of October 1, 2024, there are no herds under quarantine for TB. APHIS used CCC funds to conduct test-and-remove protocols in accordance with each herd's management plan.

The detection of TB-affected cattle and herds demonstrates the effectiveness of APHIS' surveillance system. To respond to TB detections, APHIS works closely with State animal health officials to quickly identify any cattle that may have come into contact with the infected herds and conduct thorough trace back investigations. Through these slaughter surveillance efforts, the program detected TB in four cattle in 2024. APHIS found that of the four positive animals, the animal in Michigan remained in the state, the animal in Texas was traced back to Mexico, the animal in Nebraska was traced back to Montana, and the animal in South Dakota the animal was traced back to Nebraska. State animal health officials work closely with the herd owners involved, as well as the State dairy industry, to ensure the disease is quickly contained, and affected owners can return to normal business practices as soon as possible.

3. Highly Pathogenic Avian Influenza

In 2024, APHIS obligated approximately $668 million in emergency funding to address nationwide detections of highly pathogenic avian influenza (HPAI). HPAI is an internationally reportable disease when in commercial flocks. It is a serious disease that requires rapid response because it is highly contagious, often fatal to poultry, and can spread rapidly, causing a loss of farm income and potential negative trade impacts. On February 8, 2022, APHIS confirmed the presence of HPAI in a commercial turkey flock in Indiana, the first confirmed case of HPAI in U.S. commercial poultry since 2020. As of September 30, 2024, APHIS has confirmed the presence of HPAI in more than 1,176 commercial and backyard flocks in 48 States, affecting 101 million birds. Of the affected flocks, 667 were backyard flocks and 509 were commercial flocks. This is largest animal health outbreak in U.S. history. The last HPAI confirmation in 2024 was made on September 16, 2024, during hunter harvest in Yuma, Arizona. As of the end of 2024, APHIS had provided approximately $21,000 in financial assistance to producers.

In 2024, APHIS coordinated the collection and laboratory analysis of 52,247 wild bird samples from wild waterfowl in priority watersheds in all four flyways. This total consisted of 42,433 samples from routine targeted surveillance, 5,341 spring enhanced surveillance samples, and 4,473 samples from targeted wild bird surveillance around HPAI-infected dairy and poultry premises. The sample collection from HPAI-infected dairy and poultry premises was funded through HPAI emergency funds, while the sample collections from routine surveillance and the spring enhanced surveillance were funded though the Avian Health line item. As of September 30, 2024, there had been approximately 10,000 wild bird detections among across 49 States and Washington, DC. Genetic sequencing of these samples revealed multiple introductions of HPAI viruses from outside the United States and helped inform whether poultry outbreaks resulted from point source introductions or lateral farm-to-farm spread.

In October 2023, APHIS initiated a pilot project to establish Wildlife Biosecurity Assessments in Iowa, Minnesota, North Dakota, and South Dakota to evaluate the accessibility of wildlife to domestic poultry populations as it relates to wildlife interactions and disease transmission. These assessments were implemented in all four States with multiple goals including identifying wildlife prevalence near poultry facilities, identifying physical repairs and exclusions needed to stop interaction between wildlife and domestic poultry, identifying habitat management and other technical assistance recommendations that could be implemented to reduce attractiveness to wildlife, and conducting limited wildlife control in areas with excessive wildlife in and around poultry barns.

The United States has the strongest AI surveillance program in the world. The surveillance program includes wild bird populations, live bird markets, backyard flocks, and National Poultry Improvement Plan program participants, which consists of nearly all commercial facilities in the United States. APHIS has been working with its partners to respond to detections by following Federal and State HPAI response plans, which include implementing quarantine restrictions, depopulating affected flocks, eliminating the virus from affected premises, and conducting surveillance in surrounding areas. APHIS' response plan for HPAI in birds is based on the concept of stamping out, with the goal of eradicating the virus from domestic poultry. The current outbreak is unprecedented, largely since wild birds have continued to serve as the reservoir for the virus as opposed to the lateral spread in the 2015 outbreak. APHIS' primary prevention tools are related to farm-level biosecurity. In addition to ensuring that farm facilities are physically secure from pests, including wild birds, producers also focus on limiting movements of people and equipment onto farms and establishing lines of separation so that the birds are not exposed to potentially contaminated materials. APHIS requires that certain commercial facilities implement biosecurity plans before being eligible for indemnity payments. These biosecurity plans have proved to be especially important for the current response since the rate of lateral spread is much lower than previously observed. The current outbreak would have been several times larger if lateral spread occurred as frequently as it did in 2015.

Dairy Cattle

APHIS confirmed the first detection of HPAI in a Texas dairy herd on March 25, 2024. As of September 30, 2024, HPAI had been confirmed in 320 herds across 14 States. Since the initial detection of HPAI in dairy cattle, USDA has worked quickly with Federal and State partners to trace animal movements, assess disease prevalence in herds, initiate various testing activities to confirm the safety of the meat and milk supplies, and roll out numerous support programs for dairy producers. Evidence to date points to a single spillover event in Texas in March 2024, and shows that continued transmission is largely due to the interstate and regional movement of livestock, people, and equipment. Milk from infected animals is being diverted or destroyed so that it does not enter the food supply.

On April 24, 2024, APHIS announced a Federal Order requiring testing for all dairy cattle before interstate movement and mandatory reporting of positive Influenza A cases in livestock. Following

the Federal Order, USDA established the Dairy Herd Status Program, a voluntary program that offers dairy producers the option to monitor their herds via weekly bulk milk samples before moving them interstate, without having to test each individual animal. This helps support ongoing HPAI testing to better understand the virus, reduce the risk of further spread, and meet movement restrictions. APHIS aims to test every dairy operation in the country to fully understand exactly how prevalent HPAI is in the U.S. dairy herd. Dairy producers who choose to enroll their herds agree to weekly herd testing. After three consecutive weeks of negative test results for HPAI the herd receives a monitored unaffected herd status. Continued weekly bulk tank sample testing with negative results and participation in the Dairy Herd Status Program allows the herd to maintain the monitored unaffected herd status and move animals' interstate without additional individual animal premovement testing currently required under the Federal Order. Incentives to sign up for weekly testing include free rapid influenza A testing kits, personal protective equipment for farmers and farm workers, equipment and supplies to aid in testing and improve biosecurity, enhanced cleaning and disinfecting options, and biosecurity assessments. At the end of 2024, 64 dairy herds were enrolled in the program.

In addition to the voluntary Dairy Herd Status Program, APHIS offered financial support to help dairy producers enhance biosecurity and offset costs associated with Influenza A testing, veterinary expenses, personal protective equipment purchases, milk disposal, and milk losses. Producers would choose which incentives work best for their operation, but could include: a free 20-pack of rapid influenza A tests that producers can use to help quickly determine if HPAI is present, Personal Protective Equipment (PPE) or reimbursing for laundry service to ensure farm workers do not bring infected clothing home, equipment and supplies that will aid in testing and improved biosecurity, such as an in-line sampler to easily allow for random samples from bulk milk tanks, enhancing cleaning and disinfecting at dairy operations, payments to dispose of milk in a bio secure fashion, reimbursing producers for the cost of supportive veterinary care for cattle testing positive for H5N1, and biosecurity assessments to draft a premises biosecurity plan.

4. Fruit Fly

Fruit flies in the family Tephritidae pose the greatest risk to U.S. agriculture. This family of fruit flies includes Mediterranean fruit fly (Medfly), Mexican fruit fly (Mexfly), Oriental fruit fly (OFF), and many others—including two species that triggered quarantines for the first time in the U.S., Zeugodacus tau fruit fly (tau fruit fly) in July 2023 and Queensland fruit fly (QFF) in October 2023. In 2024, the Secretary transferred $103,483,103 in emergency funding to APHIS for exotic fruit fly outbreaks in the United States, as well as a Medfly outbreak in Guatemala and Mexico that threatened the international suppression zone that protects the U.S. from the northward spread of Medfly. APHIS obligated $83.675 million during the fiscal year for emergency response efforts.

California and Texas Response

In California, APHIS and the California Department of Food and Agriculture (CDFA) responded to and eradicated seven outbreaks for four different fruit fly species (Medfly, OFF, QFF, and tau fruit fly). The quarantines, which covered more 1,200 square miles, were centered in residential areas, but four included commercial agriculture, impacting a variety of orchards and groves covering more than 10,800 acres (16.9 square miles). APHIS and CDFA implemented emergency response procedures, which include five main tools to control the outbreaks: 1) delimitation trapping of detections to determine the extent of the incursions; 2) control of fruit fly populations through the use of chemical treatments (GF 120 bait sprays), elimination trapping for adults, and ground drenches for immature stages; 3) sterile Medfly aerial dispersal; 4) host removal and host movement control to prevent the multiplication and spread of fruit flies; and 5) outreach to increase awareness of how the public can help eradication programs and prevent future outbreaks.

The OFF and Medfly are species more typically detected in the U.S., and therefore APHIS has standard protocols for responding. However, this was the first time that tau fruit fly and QFF

detections have triggered quarantines in the U.S. APHIS implemented procedures similar to those for OFF but deployed an additional 16,500 traps that required additional personnel. APHIS provided approximately $60 million through cooperative agreements to CDFA for the response, enhanced surveillance, and outreach on the risks associated with exotic fruit flies. APHIS also deployed 495 Agency employees to assist with the response. APHIS staff and cooperators placed and regularly serviced over 9,300 traps. For the Medfly outbreak, APHIS increased sterile male Medfly production and released 316 million files over the course of the quarantine and APHIS personnel picked, removed, and destroyed over 1.4 million pounds of citrus. The last area of the seven areas was released from quarantine on August 11, 2024. However, APHIS confirmed two new exotic fruit fly outbreaks in California in September and October 2024. Additionally, APHIS is responding to five Mexfly outbreaks in the Lower Rio Grande Valley of Texas, home to the Texas citrus industry, which faces continual Mexfly pressure from endemic populations in Mexico. The response effort is ongoing for these outbreaks in California and Texas.

Mexico and Guatemala Response

In 2024, APHIS responded to a Medfly outbreak in Chiapas, Mexico, and neighboring areas of Guatemala that threatened the buffer that APHIS and cooperating countries established against the northward spread of the pest. The program provided $6.959 million to the Moscamed Commission to increase sterile insect production and release and other control activities. The program increased sterile fly production by 320 million pupae weekly, improving mission critical production and release facilities, equipment, and increasing suppression activities. The program also strengthened regional Medfly suppression efforts and cross-border cooperation by providing Mexico's sterile Medfly production facility in Chiapas 3,276 liters of heat-treated eggs, increasing output by 100 million pupae per week and enhancing pupae weight, a critical quality control indicator. Mexico strengthened Medfly control efforts by increasing weekly production by 15 percent, expanding surveillance, and reallocating resources to the northern frontlines of the infestation in Chiapas, Mexico. Additionally, Mexico committed $4 million to support the production and release of 220 million Medfly pupae per week along the Guatemala-Mexico border for an eight-month period. The program will continue enhanced control measures for several years to control Medfly populations and maintain the buffer against northward spread.

5. Rabies

In 2024, APHIS redirected $18.8 million in emergency transfer fund balances from prior emergencies to address rabies outbreaks that led to contingency actions in Alabama, Maine, and Vermont as well as six high-risk areas. Contingency actions are considered an emergency response activity as timely management response is essential to reducing the risk of further rabies spread. In prior years, APHIS has been able to support contingency actions using appropriated funding, but increasing operating costs, the depletion of the previously existing vaccine bait stockpile, and an increasing number of contingency actions has depleted these available resources. With available funding, APHIS will double vaccine bait density as well as increase bait distribution to twice a year for three consecutive years to restore the integrity of the oral rabies vaccination zone. In 2024, APHIS obligated $3.0 million in emergency transfer funds to begin replenishing the rabies vaccine bait stockpile and for bait distribution efforts.

FARM BILL PROGRAMS

Selected Examples of Recent Progress in Farm Bill Programs:

1. Farm Bill – Plant Protection Act, Section 7721

The Agricultural Act of 2014, consolidated two of APHIS' Farm Bill programs under Section 10007: Plant Pest and Disease Management and Disaster Prevention Program (PPDMDPP) and the National Clean Plant Network (NCPN). This authority was codified in Section 7721 of the Plant Protection Act (PPA) and authorizes permanent funding for the PPDMDPP and NCPN at $75 million

per year. Through the program, APHIS funds projects that enhance our ability to safeguard agriculture and facilitate safe agricultural trade. Cooperators nationwide use this funding to strengthen pest exclusion systems, optimize domestic pest management and eradication programs, keep commodities moving in commerce without spreading pests and diseases, and expand market opportunities abroad for U.S. products. This work is critical to the USDA mission on many fronts, helping American agriculture thrive across the country and around the world. Since 2009, USDA has supported more than 5,520 projects and provided more than $870 million in funding through the PPDMDPP, including projects funded in 2024. Starting in 2024, APHIS set aside up to $4 million annually in PPDMDPP funding to support Tribes, Tribal organizations and universities, as well as minority-affiliated institutions and organizations. Collectively, these projects allow USDA and its cooperators to strengthen and safeguard the nation's agricultural infrastructure against invasive plant pests and diseases. In addition, the NCPN provides reliable sources of pathogen-free planting stock of high-value specialty crops. Since 2009, the NCPN, through its agreements program, has provided close to $88 million for 337 clean plant programs plus supporting initiatives in 18 States and Puerto Rico. The NCPN supports commodities, including fruit trees, grapes, citrus, berries, hops, sweet potatoes, and roses.

Plant Pest and Disease Management

APHIS and cooperators have identified six major strategic goal areas (the first with two sub-goals) to implement Plant Pest and Disease Management efforts: 1A) enhancing plant pest/disease analysis; 1S) enhancing plant pest survey; 2) targeting domestic inspection activities at vulnerable points; 3) enhancing pest identification tools and technology; 4) safeguarding nursery production; 5) conducting targeted outreach and education; and 6) enhancing mitigation and rapid response capabilities. The program funded 378 overarching projects in 2024, supporting 476 cooperative agreements, interagency agreements, and internal projects. The agreements support activities conducted by a variety of Federal, State, academic, Tribal, and private entity stakeholders.

Enhance Plant Pest/Disease Analysis, Goal 1A

Under this goal, APHIS supports projects that compile, synthesize, or evaluate data to inform or enhance risk and pathway analysis, surveillance methodology, or resource prioritization. Examples include the development of analytical models to identify and prioritize exotic pests for survey and response and improving risk modeling and monitoring for invasive pests. Overall, in 2024, the program provided approximately $2 million for 14 agreements and internal projects in this goal area.

Enhance Plant Pest Survey, Goal 1S

Under this goal, APHIS supports surveys for multiple high-risk pests not known to be established in the United States and pests of concern to cooperators. These surveys protect and help agricultural producers and nursery owners avoid control costs through more rapid and thorough detection of invasive pests that threaten their operations. Examples of plant pest surveys funded through goal 1S include Asian defoliator moths, cyst nematodes, and exotic bark beetles. Commodity surveys, including those focused on citrus, solanaceous plants, nursery stock, grapes, and orchards, are also funded through goal 1S. Overall, the program provided approximately $12.8 million for 200 agreements and internal projects in this goal area in 2024.

Target Domestic Inspection Activities at Vulnerable Points, Goal 2

Under this goal, APHIS supports domestic inspection activities at high-risk sites (e.g., warehouses and parcel facilities), inspects regulated articles moving interstate, and uses trained canine detection teams to improve detection capabilities. Developing these cooperative efforts with State agriculture regulatory agencies helps minimize impacts on producers and distributors of agricultural commodities. In 2024, the program continued to support canine team efforts in

California, Florida, and Guam. The use of canine teams enhances the capacity for early detection and better response to exotic pests found during surveys; increases liaisons between State and Federal cooperators by reviewing, developing, and implementing educational programs; provides additional resources at high-risk areas within the State for inspection; and benefits inspections at parcel service locations to enhance interdiction efforts. Overall, the program provided approximately $6.3 million for six agreements and internal projects in this goal area in 2024.

Enhance Pest Identification Tools and Technology, Goal 3

Under this goal, APHIS supports the ongoing development of improvements in pest identification and detection. This includes improved identification capacity and taxonomic understanding of groups of organisms, taxonomic support for surveys targeting high-consequence pests, and the development of pest detection technology. Funding supported identification improvements for pests, including invasive hornet species, plant parasitic nematodes, Ralstonia, spotted lanternfly, and fruit flies. The program provided approximately $5 million for 54 agreements and internal projects in support of this goal in 2024.

Safeguard Nursery Production, Goal 4

Under this goal, APHIS supports projects to develop science-based best management practices and risk mitigation practices to exclude, contain, and control regulated pests from the nursery production chain, and to develop and harmonize audit-based nursery certification programs. These activities help small producers and distributors establish best management practices for mitigating pest risks, reducing operational costs, and enhancing the value of nursery stock they produce. Examples of projects funded in 2024 include the development of integrated pest management methods and regulatory treatment tools to suppress and slow the spread of box tree moth, including evaluation of trap and lure efficacy and the effectiveness of mating disruption as an eradication tool. Funding was also provided to survey and test all certified blocks of Prunus spp. within Washington State to improve the practices of the nursery industry to best identify and remove little cherry disease (LCD) infected plant material from mother blocks (scion and rootstock). This project assesses the incidence of the causal agents of LCD and develops updated Standard Operating Procedures for LCD surveillance and certification to boost confidence among nursery producers and consumers that healthy material is available to replace production orchards infected with LCD. The program provided approximately $2 million for 18 agreements and internal projects in this goal area in 2023.

Conduct Targeted Outreach and Education, Goal 5

Under this goal, APHIS works to engage the public in early detection efforts by strengthening existing volunteer networks. APHIS emphasizes efforts that can lead to behavior changes among the public and the regulated community to prevent the introduction or spread of high-consequence pests into and throughout the United States. 2024 projects in this goal area included projects addressing capacity needs in Native American Tribes by enhancing awareness and knowledge to prevent the introduction and spread of high-consequence pests into and throughout Tribal lands in Maine, Washington, and Wisconsin. Several projects continued in 2024 including nationwide campaigns raising awareness of invasive species, such as the PlayCleanGo Campaign to stop the spread of invasive species through recreational activities, the Hungry Pests campaign that educates and engages the public on preventing the spread of invasive pests, a variety of projects in multiple States targeting awareness of forest pest outreach, northern giant hornet (formerly referred to as Asian giant hornet) community outreach and education, and multiple outreach campaigns for spotted lanternfly (SLF). Overall, the program provided $4.5 million for 61 agreements and internal projects in this goal area in 2024.

Enhance Mitigation and Rapid Response Capabilities, Goal 6

Under the goal of enhancing mitigation capabilities, APHIS provides technical assistance prior to, during, and immediately following a plant pest outbreak, develops new mitigation tools and strategies, and increases emergency preparedness through the development of New Pest Response Guidelines and Incident Command System training. Some of these efforts provide continued support for developing new methods or treatments for economically significant pests, including spotted lanternfly, fruit flies, wood boring and bark beetles, mollusks, and coffee berry borer, among others. These efforts also support the development of biological control projects for pests including Brazilian peppertree, spotted wing drosophila, box tree moth, roseau cane scale, and emerald ash borer, among others. Under this goal area, the program also supported rapid response activities for a variety of pest and disease outbreaks, including Oriental, Medfly, and Queensland fruit fly outbreaks in California, coconut rhinoceros beetle in Hawaii, and mollusks in Delaware, Florida, New York, and Washington. APHIS also supported the nationwide effort to survey for and control spotted lanternfly throughout the East Coast and mid-west, including Delaware, Indiana, Maryland, Massachusetts, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Rhode Island, Virginia, and West Virginia, and box tree moth monitoring and regulation activities in Massachusetts, Michigan, New York, and Ohio. Overall, the program provided $29 million for 123 agreements and internal projects in this goal area in 2024.

National Clean Plant Network (NCPN)

In 2024, APHIS used $7.75 million in PPA 7721 funds to provide NCPN support to qualified clean plant centers through a cooperative agreements program. The application process allowed stakeholders to offer input into projects proposed for funding through pre-proposals, which are designed to help clean plant centers prioritize and harmonize their resourcing requests. As a result, APHIS entered into agreements for 22 projects with clean plant centers and supporting initiatives in 15 States and Puerto Rico. The clean plant centers that receive NCPN funding use the resources to: 1) diagnose for harmful pathogens that cause disease in covered specialty crops; 2) apply therapeutic measures to eliminate these pathogens in plant varieties; 3) establish plantings of clean plant 'starter' material and make this material available to nurseries and growers; 4) work with nurseries and growers in education/outreach programs to communicate the economic value to industry of using clean nursery stock; 5) advance quality management initiatives to strengthen confidence in program processes and products further, and 6) engage in the process of governing a network of collaborative clean plant centers. These activities result in clean plant centers providing sources of healthy source stock for fruit trees, grapes, citrus, berries, hops, sweet potatoes, and roses. This healthy planting stock is available to nurseries, growers, breeders, and others, ensuring that they have access to high-quality clean plant material necessary to sustain their industries, maintain productivity, and prevent losses due to plant diseases.

Annual deliverables from clean plant centers include:

Fruit Trees – Maintain approximately 950 clean fruit tree accessions in foundations (collections of pathogen-tested plant materials) that have delivered about 60,000 cuttings and 320,000 seeds on an annual basis.

Grapes – Maintain approximately 2,700 selections of clean grapevine accessions in foundations and distribute more than 60,000 clean grape-wood cuttings, buds, plants, or seed to industry per year.

Berries – Maintain 350 accessions in tissue culture and screenhouse foundations. Annual nursery sales of 800 million plants in California and 200 million in Florida are from plants originally sourced from NCPN centers.

Citrus – Maintain approximately 2,700 clean citrus tree accessions in foundations and deliver about 575,000 units of budwood and seed annually. Almost all commercial citrus nursery stock is derived from NCPN material.

Hops – Maintain 50 clean hop selections in foundations that are used to accommodate about 30 percent of the world's need for clean hops. The program distributes about 930 propagative units to industry annually; each unit can be expanded rapidly in tissue culture to provide thousands of plants for planting.

Sweet potato – Maintain about 440 sweet potato accessions and deliver over 930,000 clean plant units, including seed, slips, plants, and tissue culture plants annually.

Roses – Maintain over 850 rose selections in foundations and associated collections and distribute over 80,000 clean scion and rootstock cuttings annually.

2. Farm Bill – Animal Disease Prevention and Management, Section 12101

The Animal Disease Prevention and Management Program was authorized by Section 12101 of the Agriculture Improvement Act of 2018 (P.L. 115-334). It created the National Animal Disease Preparedness and Response Program (NADPRP) and the National Animal Vaccine and Veterinary Countermeasures Bank (NAVVCB) and expanded on the National Animal Health Laboratory Network (NAHLN). The bill provided the first four years of funding ($120 million for 2019 to 2022) to remain available till expended, and provides $30 million each year thereafter, beginning in 2023. APHIS has the discretion to distribute the total funding among the three programs, with some exceptions. In 2024, APHIS obligated $29.8 million of Farm Bill funds for the 3 programs. For the NAVVCB, Congress directed the Agency to prioritize the acquisition of sufficient quantities of foot-and-mouth disease (FMD) vaccine antigen concentrate. Through NADPRP, APHIS partners with States, Tribes, producer organizations, universities, and others to enhance local, regional, and national capabilities to prevent, prepare for, and respond to animal health emergencies. The Farm Bill funds provided to the NAHLN are in addition to appropriated funds that support the NAHLN. These three programs are critical in supporting APHIS' efforts to protect the health and improve the quality, productivity, and economic viability of U.S. livestock, helping farmers and ranchers provide high-quality agricultural products to domestic and international consumers. The NAHLN Coordinating Council, the NADPRP Consultation Board, and other leaders in animal health and laboratory diagnostics provide recommendations for the types of projects that are necessary and are targeted to where they can make the most impact.

The NADPRP addresses the increasing risk of the introduction and domestic spread of animal pests and diseases affecting the economic interests of the U.S. livestock and related industries, including the maintenance and expansion of export markets. APHIS offers annual competitive funding opportunities and enters into cooperative agreements with States, universities, industry groups, and other entities to carry out high-value projects to improve animal disease emergency preparedness efforts. The Agency consults with stakeholders to identify annual funding priority topics, nominate proposal reviewers, and provide input on funding recommendations. This consultation is accomplished through the NADPRP Consultation Board and through interactions with APHIS and stakeholders at livestock sector meetings, and meetings with State animal health officials. The NADPRP Consultation Board is comprised of 16 animal health leaders who represent the program's eligible entities, including State animal health officials, livestock industry organizations, universities, and Tribal organizations. In 2024, APHIS awarded $16.2 million for 73 cooperative agreement projects led by 19 States, 20 land-grant universities, and three livestock producer organizations to enhance our nation's ability to rapidly respond to and control animal disease outbreaks. In August 2024, the Agency announced that an additional $370,000 would be awarded to four Tribal partners for four projects. The award was made in October 2024. These projects help States and Tribes develop and practice plans to quickly control disease outbreaks, train responders to perform critical activities to control animal disease outbreaks, increase producers' use of biosecurity practices, educate livestock owners on preventing disease, and support animal movement decisions in animal disease outbreaks, among others. Since 2019, APHIS has provided more than $53 million to support more than 260 new animal disease prevention and preparedness projects.

The NAVVCB has significantly increased the U.S. stockpile of FMD vaccine, its top priority, and provides the flexibility to stockpile other countermeasures and diagnostics to serve as an insurance policy in case of an outbreak of a high-consequence foreign animal disease. APHIS awarded contracts to private companies to help supply the vaccine to the Bank. While the Agency is confident in its ability to exclude FMD from the country, vaccines are a vital part of the Agency's strategy to eradicate the disease and can be a critical tool to allow America's farmers and ranchers to recover quickly should the disease be introduced into the United States. Vaccine use will depend on the circumstances of the incursion and will require careful coordination with affected animal industries. Vaccination helps control infection spread by reducing the amount of virus shed by animals and controlling clinical signs of illness. While an outbreak would temporarily disrupt international markets, vaccination would allow animals to move through domestic production channels. APHIS will leverage the infrastructure of the National Veterinary Stockpile to distribute vaccine, should it be needed. In 2024, APHIS invested an additional $5 million in FMD vaccine antigen concentrate for two priority strains. In addition, the Agency announced and closed a source sought notice for market research into available diagnostic products for African Swine Fever, Classical Swine Fever, and FMD. Subject-matter experts are reviewing submissions for 66 distinct products to consider for future purchases. APHIS also invested $621,500 in 2024 to replenish supplies of classical swine fever vaccine.

The NAHLN is a nationally coordinated network and partnership of Federal, State, and university-associated animal health laboratories that provide animal health diagnostic testing to detect endemic and high-consequence pathogens in U.S. food animals. This effort is vital to protecting animal health, public health, and the U.S. food supply. The NAHLN laboratories serve as an early warning system for detecting animal diseases and pathogens, and they provide surge capacity during an outbreak and recovery response. Rapidly diagnosing and detecting the extent of an outbreak plays a key role in limiting the impact on producers. In 2024, APHIS awarded $5 million in non-competitive funding to all NAHLN laboratories for operational support and an additional $1 million for 7 projects that focus on enhancing laboratory information management systems, improving laboratory surge capacity, increasing technical expertise, and standardizing information management processes.

3. Farm Bill – Feral Swine Eradication and Control Pilot Program, Section 2408

The Feral Swine Eradication and Control Pilot Program (FSCP) was authorized by Section 2408 of the Agriculture Improvement Act of 2018 (P.L. 115-334), also referred to as the Farm Bill. The Farm Bill provided $75 million in mandatory funding for fiscal years 2019 through 2023, and an additional $15 million in fiscal year 2024, to establish a feral swine eradication and control pilot program. This funding was equally divided between the Natural Resources Conservation Service (NRCS) and APHIS ($7.5 million each in 2024). The objective of FSCP was to pilot collaborative efforts that address the threat feral swine poses to agriculture, native ecosystems, and human and animal health. Feral swine is an invasive species that damage agricultural crops, degrade natural systems, and carry diseases that can be passed on to livestock and humans. Feral swine occur across the United States, but the heaviest concentrations are found in sections of the Southeastern region and stretch as far west as Texas and Oklahoma with high populations also found in California.

Pilot areas were identified collaboratively by NRCS and APHIS personnel in consultation with State technical committees. FSCP was delivered within pilot areas through three coordinated components. First, APHIS worked directly to control feral swine populations. Second, NRCS provided funding to partner organizations to provide technical and financial assistance to agricultural producers for on-farm trapping and other means of feral swine control. Partner organizations also provided other services including pre- and post-project damage assessments and other means to assess progress in control efforts. Finally, NRCS provided technical and financial assistance for restoration of damage caused by feral swine after those populations were controlled.

Delivery of FSCP was prioritized to States that had the highest and most damaging feral swine populations. APHIS has an existing program for controlling the feral swine that has proved effective in addressing emerging populations in conjunction with States. The pilot program established by the Farm Bill was designed to build upon and expand work already being conducted by APHIS' National Feral Swine Damage Management Program to remove feral swine while reducing damages in areas with high population densities in partnership with local government, the private sector, industry, and academia.

Over the last five years, USDA funded 34 projects in 12 States (Alabama, Arkansas, Florida, Georgia, Hawaii, Louisiana, Mississippi, Missouri, North Carolina, Oklahoma, South Carolina, and Texas). Projects lasted for one to six years, and all projects concluded at the end of 2024. The Agency collected data on the types and number of agriculture and property resources protected, as well as damage data to those resources, as part of the effort to best determine the economic impacts of feral swine and various control methods. Analysis of this data was completed in 2024, and results will be published in 2025.

Table APHIS-16. Summary of Key 2024 Emergency Funded Programs/Farm Bill Activities (thousands of dollars, FTEs)

Emergency/Activity	Total Available in 2024	Total Obligations in 2024
Bovine Tuberculosis	10,329,050	206,688
African Swine Fever	368,790,348	45,476,475
Avian Influenza	1,440,627,455	668,525,678
Exotic Fruit Fly	103,483,103	83,718,729
Rabies	18,814,773	3,078,228
Screwworm	109,800,000	54,343,922
Farm Bill – Plant Protection Act, Section 7721	70,725,000	70,652,808
Farm Bill – Animal Disease Prevention and Management, Section 12101	36,400,628	29,565,875
Farm Bill – Feral Swine Eradication and Control Pilot Program, Section 2408	7,500,000	7,498,937
Total	$2,166,470,357	$963,067,339

a/Total Available included account recoveries, where applicable.

OTHER APPROPRIATED FUNDED ACTIVITIES

Selected Examples of Recent Progress in Other Appropriated Funded Activities

1. American Rescue Plan

In 2021, Congress provided USDA $300 million through the American Rescue Plan (ARP) Act to conduct monitoring and surveillance of susceptible animals for SARS-CoV-2, addressing the longstanding need to strengthen our ability for early detection of emerging and zoonotic diseases in animals. APHIS is leading efforts to better understand and address SARS-CoV-2 in animals, bringing together our experts on wildlife diseases, livestock, companion, and zoo animals, and partnering with other agencies that protect human and environmental health to take a coordinated approach to the global problem of SARS-CoV-2. These efforts include learning more about the virus, which animals it affects, and how it is spreading to new locations or species. APHIS used the funding provided to build national capacity to potentially prevent or limit the next zoonotic disease outbreak, or the next global pandemic. Leveraging partnerships and external innovations, tools, and capacity are critical to the success of the ARP program.

In 2024, APHIS recovered approximately $19 million in unspent ARP funding from cooperators and re-obligated $15.871 million to continue projects for advancing detection, surveillance, and prevention strategies of SARS-CoV-2 in animals. These projects leverage partnerships, while working toward the goal of preventing or minimizing the next pandemic. APHIS continued to support laboratory capacity investments, an agreement with Johns Hopkins University Applied Physics Laboratory to enhance zoonotic and emerging disease surveillance tools and capabilities, and additional surveillance in cervids, Norway rats, and wild carnivore species, among other projects with the recovered funds. Some of these previously funded projects will be completed next year and results will be available at the end of 2025.

Project Updates

In 2024, APHIS continued to oversee cooperative agreements for animal surveillance, testing, research, and disease prevention efforts. These investments further our understanding of how the SARS-CoV-2 virus behaves in different animals, how it moves between animals and people, and what we can do to interrupt the chain of transmission. Through these agreements, APHIS continued to study the susceptibility of certain mammals to SARS-CoV-2 to help identify species that may serve as reservoirs or hosts for the virus such as white-tail deer and mink, as well as understand the origin of the virus, and predict its impact on wildlife and livestock animals and the risks of cross-species transmission. These ongoing efforts have generated more than 175,000 samples over 270 species across every State, 3 U.S. territories, and 5 Tribal lands. Specifically, some of the samples collected have informed SARS-CoV-2 research. This research is enhancing APHIS' understanding of the behavior of the SARS-CoV-2 virus within hosts, its transmission to both humans and animals, and its evolution. APHIS is using this research to develop and implement projects that focus on monitoring and surveillance of susceptible animals for SARS-CoV-2. These surveillance projects will assist APHIS in implementing management strategies that will ultimately reduce the potential of the virus from entering wildlife species, livestock, and companion animals, and prevent transmission to other animals or people.

APHIS continued to work with the Johns Hopkins Applied Physics Laboratory to enhance zoonotic and emerging disease surveillance tools and capabilities by expanding data integration, advance analysis, and reporting capabilities of large scientific data volumes. With recovered funding, APHIS invested an additional $4 million into John's Hopkins Applied Physics Laboratory. The funding provided additional support for building a high computing environment to create a universal system for laboratory messaging across external and internal laboratories. These investments allow for faster results to facilitate earlier detection of SARS-CoV-2 and emerging zoonotic threats and a coordinated response through an enhanced national surveillance system. These investments are essential to meeting increased diagnostic demands, collaborating with

government, universities, and industry partners, and supporting early warning systems that make APHIS a key zoonotic disease partner.

In 2024, APHIS expanded stakeholder engagement to increase collaboration with State and Federal agencies, Tribes, academic institutions, and private organizations. APHIS has a website to help stakeholders and the public stay up to date on the Agency's ongoing SARS-CoV-2 surveillance projects: SARS-CoV-2 in Animals. The website provides valuable data on testing and surveillance and, over time, will provide an important link by sharing guidance based on the outcomes of ARP work and linking to valuable information from other partners. Visitors of the site can obtain background information on the ARP and APHIS' ARP Strategic Framework, as well as summaries of ARP-funded surveillance projects and other activities.

ACCOUNT 2: BUILDING AND FACILITIES

APPROPRIATION LANGUAGE

The appropriations language follows (new language underscored):

Building 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. 2268a, $1,000,000, to remain available until expended.

LEAD-OFF TABULAR STATEMENT

Table APHIS-17. Lead-Off Tabular Statement (In dollars)

Item	Amount
Enacted, 2025	$1,000,000
Change in Appropriation	-
Budget Estimate, 2026	1,000,000

PROJECT STATEMENTS

Table APHIS-18. Project Statement on Basis of Appropriations (thousands of dollars, FTEs)

Item	2023 Actual	2024 Actual	2025 Estimated	2026 Estimated	Inc. or Dec.	Chg Key
Discretionary Appropriation:						
Buildings and Facilities	$3,175	$1,000	$1,000	$1,000	-	-
Total Appropriation	3,175	1,000	1,000	1,000	-	
Recoveries, Other	569	236	-	-	-	
Bal. Available, SOY	29,087	28,199	27,242	27,242	-	
Total Available	32,831	29,435	28,242	28,242	-	
Bal. Available, EOY	-28,199	-27,242	-27,242	-27,242	-	
Total Obligations	4,632	2,193	1,000	1,000	-	

Table APHIS-19. Project Statement on Basis of Obligations (thousands of dollars, FTEs)

Item	2023 Actual	2024 Actual	2025 Estimated	2026 Estimated	Inc. or Dec.
Discretionary Obligations:					
Buildings and Facilities	$4,632	$2,193	$1,000	$1,000	
Total Obligations	4,632	2,193	1,000	1,000	-
Balances Available, EOY:					
Buildings and Facilities	817	610	610	610	-
GP 743 Fruit Fly Rearing Facility	27,382	26,632	26,632	26,632	-
Total Bal. Available, EOY	28,199	27,242	27,242	27,242	-
Total Available	32,831	29,435	28,242	+28,242	-
Less:					
Recoveries, Other	-569	-236	-	-	-
Bal. Available, SOY	-29,087	-28,199	-27,242	-27,242	-
Total Appropriation	3,175	1,000	1,000	1,000	-

JUSTIFICATION OF CHANGES

Buildings and Facilities Program ($1,000,000 requested in the 2025 President's Budget).

The Buildings and Facilities (B&F) program addresses facility needs in support of the Agency's mission to protect 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. APHIS' Facility Condition Index (FCI) drives the projects; the FCI 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 at less than 0.10, meaning that the cost to make repairs is less than 10 percent of the estimated replacement value for the facility.

This program plays 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. The program manages the implementation of scheduled facility improvements, safety, 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 assist with the development of project plans, attend on-site construction progress meetings/reviews, and APHIS collects performance data through contractor reports and on-site verification.

In 2022-2024, APHIS awarded 30 design/construction tasks associated with projects at a cost of approximately $9.09 million and completed 31 construction projects. Approximately 50 percent of these projects were major renovations, and the remaining were for minor repairs. To ensure the construction modifications comply with requirements for Federally operated facilities, the program performed Facility Condition Reassessments inspections before deeming projects complete.

Approximately 99 percent of B&F funding supports indefinite delivery, indefinite quantity contracts (e.g., architect and engineering support), and construction contracts. These contracts, which provide indefinite supplies or services during a fixed period, help streamline the contract process and expedite service delivery. The remaining funds support operating costs.

The B&F program allows APHIS to centrally coordinate and prioritize these types of projects. Without necessary maintenance and repairs to facilities there could be program delays, environmental impacts, and noncompliance with State and local laws and codes. 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, sustainable, and high-performing facilities.

GEOGRAPHIC BREAKDOWN OF OBLIGATIONS

Table APHIS-20. Geographic Breakdown of Obligations (thousands of dollars, FTEs)

State/Territory/Country	2023 Actual	FTE	2024 Actual	FTE	2025 Estimated	FTE	2026 Estimated	FTE
Colorado	$45	-	$548	-	$150	-	$150	-
Hawaii	-	-	13	-	-	-	-	-
Idaho	98	-	-	-	-	-	-	-
Iowa	-	-	121	-	150	-	150	-
Maryland	991	-	-	-	-	-	-	-
Montana	-	-	373	-	-	-	-	-
New York	-	-	124	-	100	-	100	-
Texas	3,479	-	750	-	500	-	500	-
Utah	19	-	-	-	-	-	-	-
Virginia	-	-	37	-	100	-	100	-
NORTH AMERICA:								
Canada	-	-	227	-	-	-	-	-
Obligations	4,632	-	2,193	-	1,000	-	1,000	-
Bal. Available, EOY	28,199	-	27,242	-	27,242	-	27,242	-
Total, Available	32,831	-	29,435	-	28,242	-	28,242	-

CLASSIFICATION BY OBJECTS

Table APHIS-21. Classification by Objects (thousands of dollars, FTEs)

Item No.	Item	2023 Actual	2024 Estimated	2025 Estimated	2026 Estimated
	Other Objects:				
25.2	Other services from non-Federal sources	$4,630	$2,099	$1,000	$1,000
25.4	Operation and maintenance of facilities	-	35	-	-
25.7	Operation and maintenance of equipment	-	53	-	-
26.0	Supplies and materials	2	6	-	-
	Total, Other Objects	4,632	2,193	1,000	1,000
99.9	Total, new obligations	4,632	2,193	1,000	1,000

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STATUS OF PROGRAMS

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. These projects and activities allow other programs and employees to focus on APHIS' mission of protecting the health and value of agriculture and natural resources nationwide. The goal of the B&F program is to systematically address the Agency's needs for maintaining and repairing existing facilities as well as constructing new facilities. This program plays a vital role in maintaining APHIS' facilities so that employees can carry out their responsibilities safely and efficiently. Maintaining the condition and functionality of these facilities is an ongoing process that demands significant management of capital resources. Many of APHIS' facilities have specialized functions that support various Federal, State, and local government programs, as well as stakeholders and customers. B&F projects ensure that APHIS' programs are conducted at safe, sustainable, and high-performance facilities that support the Agency's mission.

APHIS' B&F program maximizes its efficiency through comprehensive construction projects. The Agency spends approximately 99 percent of B&F funding on construction contracts and contractual agreements of services for a specified length of time. More specifically, these contracts provide an indefinite quantity of supplies or services during a fixed time period, help streamline the contract process and expedite service delivery. The remaining B&F funds support information technology projects (i.e. Facilities Capital Planning and Management software).

Facilities Condition Assessment

APHIS assigns each facility with a Facility Condition Index (FCI). The FCI is the sum of repair costs divided by the replacement value of the facility. APHIS uses the FCI scores to determine each year's priority projects. 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.

Since 2000, APHIS has used a comprehensive Facilities Condition Assessment (FCA) 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. To implement the Facilities Condition Assessment program, APHIS contracted a consulting firm to assess the relative condition of assets and facilitating comparisons both within and among APHIS' facilities. The consulting firm calculated an FCI for each facility by program and Agency. In 2024, APHIS completed eight FCA's and awarded six contractual FCA requests.

Summary of Current Projects

Each year, the B&F program schedules facility improvements, and conducts security, construction, and maintenance activities. Contractors perform inspections and tests to substantiate that the supplies or services conform to contract requirements. In addition, APHIS annually contracts a third-party design firm to validate the work to ensure it aligns with previously approved plans and specifications. APHIS typically identifies on-site certified personnel to perform the Contracting Officer's Representative (COR) services. The Agency's engineering staff attends construction progress meetings and APHIS collects performance data through contractor reports and on-site verification.

As of October 2024, APHIS' B&F funding supported 26 active projects. In 2024, APHIS awarded 18 design/construction tasks associated with projects at a cost of approximately $1.30 million and completed eight construction projects. Approximately 60 percent of these projects were major renovations. Construction progress and final inspection reports are performed to ensure construction modifications are in accordance with the design plans and in compliance with the Federally operated facility requirements.

Some of the ongoing projects requiring major or minor renovations include replacing the HVAC system (Building 6414) and the Combined Underground Utility Upgrades at Moore Air Base (MAB),

Mission, TX, as well as upgrading the electrical service at a National Centers for Animal Health (NCAH) Building in Ames, IA. Progress on these projects in 2024 are summarized below:

Moore Air Base, Building 6414 HVAC System

This project includes replacing existing chilled water piping and air handling units that have reached their life expectancy for optimal usage. The construction contract was awarded in 2021, construction began in 2022 and continued through 2024. The project is expected to be completed by the end of 2025.

Moore Air Base, Combined Underground Utility Upgrades

This project will address the repairs needed for an 80+ years old infrastructure to ensure current and future agency mission operations can continue. The scope of this project includes the installation of a new sanitary sewer system, electrical upgrades, and changes to an antiquated communication infrastructure at MAB in Mission, TX. A construction contract was awarded for this project in 2022. In 2023, the construction contract was modified to include the installation of Raw water and Stormwater lines. Construction efforts began in 2023 and continued through 2024. Construction efforts are expected to be completed by the end of 2025.

National Centers for Animal Health (NCAH) Building #21 Electrical Service Switchover, Ames, IA

The primary objective of the project is to switch the electrical service for Building #21 from Ames Municipal Power to Alliant Energy. The NCAH were previously split between two power territories, which led to operational challenges. The switch will provide a more robust, consistent power supply with redundant back-up to the whole NCAH campus. Reliable power is critical to maintaining services and safeguarding personnel in the facility. The construction contract was originally awarded in 2023, and construction was completed in March 2024.

AGENCY-WIDE PERFORMANCE

Introduction

OBPA leads the Department in performance management including evaluation, evidence, and risk management; it also chairs the Performance, Evaluation, Evidence Committee (PEEC) and the Enterprise Risk Management (ERM) committee. APHIS is a member of both the PEEC and ERM committees which is comprised of individuals from different Mission Areas and backgrounds throughout USDA. Partnerships with the Chief Data Officer and Statistical Officer allow for greater insight and advisement on data access, data quality, and statistical methods. APHIS' Policy and Program Development unit spearheads its efforts in Strategic Planning, Performance, Evidence and Evaluation, and Enterprise Risk Management, works directly with OBPA and senior leadership, and actively engages with both internal and external stakeholders.

Alignment to USDA Strategic Plan

APHIS activities contribute to the success of USDA's overall mission to provide leadership on food, agriculture, natural resources, rural development, nutrition, and related issues using sound public policy, the best available science, and effective management, to the benefit of all Americans. USDA is currently developing the 2026-2030 Strategic Plan and will report alignment in the 2027 Explanatory Notes.

SUMMARY OF PERFORMANCE

USDA is currently developing the 2026-2030 Strategic Plan, including new KPIs. A more detailed report of the performance plan can be found at USDA Performance.