

2017 President's Budget  
Office of the Chief Economist

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## OFFICE OF THE CHIEF ECONOMIST

### Purpose Statement

The Office of the Chief Economist (OCE) was created by the Secretary of Agriculture on October 20, 1994, under the authority of the Department of Agriculture Reorganization Act of 1994, Public Law 103-354.

OCE advises the Secretary of Agriculture on the economic implications of Department policies, programs and proposed legislation. OCE serves as a focal point for the Nation's agricultural economic intelligence and projections; risk analysis; climate change issues; and cost-benefit analysis related to domestic and international food and agriculture. OCE also supports the development of technical guidelines that outline science-based methods to measure the environmental services benefits from conservation and land management activities; provides analysis for the Department's renewable energy, bioenergy, and biobased product programs; and is responsible for coordination, review and clearance of all commodity and aggregate agricultural and food-related data used to develop outlook and situation material within the Department.

Activities include: policy and program analysis; regulatory reviews; information dissemination; market surveillance; coordination of assessments of international and domestic agricultural developments; improvement of forecasting techniques; coordination of weather, climate and remote sensing activities; coordination of sustainable development activities; coordination of global climate change research and issues; support for the development of environmental services markets; energy policy analysis and coordination of energy research and issues; and analysis of issues and developments affecting agricultural labor.

OCE produces, on a daily, weekly, and monthly basis, regularly scheduled information releases to advise the Secretary and the public on developments affecting agricultural markets and the rural economy. The office coordinates interagency development of forecasts and projections by drawing together a variety of experts to assure objective and sound analysis. The office uses memos and briefings to advise the Secretary of the consequences of market developments, program changes, and legislative proposals. The office provides economic analysis of Department policy positions to the Congress and the public.

The office participates in the development of reviews, clears all regulatory impact and risk analyses of Departmental significant, economically significant, and major rules to ensure they are based on objective, appropriate, and sound economic and risk analyses.

The office provides economic and policy analysis and helps to coordinate Departmental research in the areas of renewable energy, bioenergy, and biobased products and markets.

The office coordinates USDA's global climate change research program; conducts policy analysis on global climate change issues; supports the development of technical guidelines that outline science-based methods to measure the environmental services benefits from conservation and land management activities in order to facilitate the participation of farmers, ranchers, and forest landowners in emerging environmental services markets; coordinates activities with other Federal agencies; represents USDA on U.S. delegations to international climate change discussions; oversees Department-wide efforts to integrate climate change adaptation planning and actions into USDA programs, policies, and operations; and facilitates communication and outreach to producers and agricultural interest groups.

OCE Headquarters is located in Washington, D.C. As of September 30, 2015, there were 48 full-time permanent employees, all stationed in Washington, DC.

OCE did not have any Office of Inspector General or Government Accountability Office evaluation reports during the past year.

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Available Funds and Staff Years (SYs)

(Dollars in thousands)

Item	<u>2014 Actual</u>		<u>2015 Actual</u>		<u>2016 Enacted</u>		<u>2017 Estimate</u>	
	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs
Salaries and Expenses:								
Discretionary Appropriations.....	\$16,777	48	\$17,377	48	\$17,777	54	\$17,592	55
Mandatory Appropriations.....	1,000	-	927	-	932	-	1,000	-
Rescission.....	-	-	-	-	-	-	-	-
Sequestration.....	-	-	-	-	-	-	-	-
Total Available.....	17,777	48	18,304	48	18,709	54	18,592	55
Lapsing Balances.....	-336	-	-212	-	-	-	-	-
Obligations.....	17,441	48	18,092	48	18,709	54	18,592	55
<u>Obligations under other USDA appropriations:</u>								
Annual Outlook Forum.....	93	-	74	-	85	-	95	-
Joint Data Procurement .....	19	-	19	-	19	-	19	-
National Science Foundation .....	427	-	427	-	427	-	427	-
Climate Change .....	150	-	150	-	150	-	150	-
Environmental Markets .....	700	-	700	-	700	-	700	-
Alternative Bioenergy Pathways.....	-	-	-	-	40	-	35	-
Climate Hubs Coordinator.....	-	-	120	-	122	-	125	-
Coordinating Program Analysis.....	93	-	-	-	-	-	-	-
Payment for Staff Details.....	-	-	108	-	-	-	-	-
Total, Other USDA.....	1,482	-	1,598	-	1,543	-	1,551	-
Total, OCE.....	18,923	48	19,690	48	20,252	54	20,143	55

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Permanent Positions by Grade and Staff Year Summary

Item	2014 Actual	2015 Actual	2016 Enacted	2017 Estimate
	Wash. D.C.	Wash. D.C.	Wash. D.C.	Wash. D.C.
SES.....	6	6	6	6
SL.....	2	2	2	2
GS-15.....	20	20	20	20
GS-14.....	10	10	11	12
GS-13.....	4	4	3	3
GS-12.....	1	1	2	2
GS-11.....	3	3	2	2
GS-10.....	3	3	3	3
GS-9.....	3	3	4	4
GS-8.....	1	1	1	1
GS-7.....	1	1	0	0
Total Perm. Positions.....	54	54	54	55
Unfilled, EOY.....	5	6	0	0
Total, Perm. Full-Time Employment, EOY.....	49	48	54	55
Staff Year Est.....	48	48	54	55

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The estimates include appropriation language for this item as follows (new language underscored; deleted matter enclosed in brackets):

Salaries and Expenses:

For necessary expenses of the Office of the Chief Economist, [~~\$17,777,000~~] \$17,592,000, of which \$4,000,000 shall be for grants or cooperative agreements for policy research under 7 U.S.C. 3155[, and of which \$1,000,000, to remain available until September 30, 2017, shall be for the purpose set forth under this heading in the explanatory statement described in section 4 (in the matter preceding division A of the consolidated Act)].

Lead-Off Tabular Statement

Budget Estimate, 2017.....	\$17,592,000
2016 Enacted.....	<u>17,777,000</u>
Change in Appropriation.....	<u><u>-185,000</u></u>

Summary of Increases and Decreases

(Dollars in thousands)

	2014 <u>Actual</u>	2015 <u>Change</u>	2016 <u>Change</u>	2017 <u>Change</u>	2017 <u>Estimate</u>
Discretionary Appropriations:					
Office of the Chief Economist.....	\$16,777	\$600	\$400	-\$185	\$17,592

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

Program	<u>2014 Actual</u>		<u>2015 Actual</u>		<u>2016 Enacted</u>		<u>Inc. or Dec.</u>		<u>2017 Estimate</u>		
	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs	
Discretionary Appropriations:											
Office of the Chief Economist.....	\$16,777	48	\$17,377	48	\$17,777	54	-\$185	(1)	+1	\$17,592	55
Mandatory Appropriations:											
Biodiesel Fuel Education Program.....	1,000	-	927	-	932	-	+68	(2)	-	1,000	-
Total Adjusted Approp.....	17,777	48	18,304	48	18,709	54	-117		+1	18,592	55
Rescission and Transfers (Net).....	-	-	-	-	-	-	-		-	-	-
Total Appropriation.....	17,777	48	18,304	48	18,709	54	-117		+1	18,592	55
Total Available.....	17,777	48	18,304	48	18,709	54	-117		+1	18,592	55
Lapsing Balances.....	-336	-	-212	-	-	-	-		-	-	-
Total Obligations.....	17,441	48	18,092	48	18,709	54	-117		+1	18,592	55

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

Program	<u>2014 Actual</u>		<u>2015 Actual</u>		<u>2016 Enacted</u>		<u>Inc. or Dec.</u>		<u>2017 Estimate</u>		
	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs	
Discretionary Obligations:											
Office of the Chief Economist.....	\$16,441	48	\$17,165	48	\$17,777	54	-\$185	(1)	+1	\$17,592	55
Mandatory Obligations:											
Biodiesel Fuel Education Program.....	1,000	-	927	-	932	-	+\$68	(2)	-	1,000	-
Total Obligations.....	17,441	48	18,092	48	18,709	54	-117		+1	18,592	55
Lapsing Balances.....	336	-	212	-	-	-	-		-	-	-
Total Available.....	17,777	48	18,304	48	18,709	54	-117		+1	18,592	55
Rescission.....	-	-	-	-	-	-	-		-	-	-
Sequestration.....	-	-	-	-	-	-	-		-	-	-
Total Appropriation.....	17,777	48	18,304	48	18,709	54	-117		+1	18,592	55

Justification of Increases and Decreases

Base funds will allow the Office of the Chief Economist (OCE) to continue to advise the Secretary and Departmental officials on the economic implications of the Department policies, programs, and proposed legislation; and serve as the focal point for the Department's economic intelligence, analysis and review related to domestic and international food and agriculture markets. The base funding also allows OCE to provide advice and analysis on bioenergy, sustainable development, agricultural labor, climate change, and environmental markets. In addition to Departmental Administration funding used for human resources operational services, current year and budget year base funds will also be used to support expedited and enhanced classification, staffing and processing efforts.

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- (1) A net decrease of \$185,000 and increase of 1 staff years (\$17,777,000 and 54 staff years available in 2016).

Funding changes are requested for the following items:

- (a) An increase of \$140,000 for pay costs which includes \$29,000 for annualization of the fiscal year 2016 pay increase and \$111,000 for the anticipated fiscal year 2017 pay increase.

This proposed funding level is needed to cover pay and benefit cost increases for existing staff. This will ensure adequate resources are available to continue to provide a full range of advice to the Secretary and Department officials on the economic implications of Department policies, programs, and proposed legislation. If funding for pay costs is not received, OCE would either leave an open position unfilled or would reduce spending in the climate and environmental markets programs to offset the increased salary and benefit costs.

- (b) An increase of \$175,000 and 1 staff year to establish a Food Loss and Waste Reduction Coordinator (no funding and staff available in 2016).

Creation of a USDA Food Loss and Waste Reduction Coordinator in the Immediate Office of the Chief Economist will increase the impact of the Department's efforts to reduce food loss and waste in the United States. Food loss and waste, which is estimated by USDA at about 30 percent of the food supply at the retail and consumer levels, imposes a strain on the Nation's food security, resource use, and climate-change mitigation efforts. USDA has played a pivotal role in helping to quantify the problem in the United States and mobilize public and private resources to reduce it. The incumbent will work across the Department to coordinate food loss and waste reduction initiatives, manage the U.S. Food Waste Challenge database and website, serve as a spokesperson for USDA on food loss and waste, work with other Federal agencies and non-governmental organizations on national outreach, and work with business to stimulate economy-wide changes to better reduce, recover and recycle food loss and waste.

First, food waste is a food security issue – wholesome food that is wasted could help feed families in need through donations to food pantries and soup kitchens. In addition, wasted food distorts attitudes about the affordability of healthy diets. In 2008, the annual amount of uneaten food in homes and restaurants was valued at roughly \$390 per U.S. consumer – on average more than a month's worth of food expenditure. Reducing food waste would help meet the Department's objectives to increase food security and improve diet quality.

Second, food waste is a natural resource issue – in 2010, 133 billion pounds of food in U.S. retail food stores, restaurants, and homes (worth approximately \$161 billion) never made it into consumers' stomachs. All of the resources that went into producing that wasted food – including the land, labor, water, pesticides, and fertilizers – could have been saved or gone to uses of higher value for society. It took approximately 22 million acres of land to produce this amount of food. Reducing food waste in the United States will advance the Department's natural resource conservation objectives.

The Department's food waste initiatives span across all USDA mission areas, with initiatives such as those targeting food waste recovery in marketing and inspection programs, food waste reduction and composting at schools, consumer education about safe food storage and waste reduction, research to prolong safe food storage and research to develop new products from culls and food processing by-products. USDA also partners with other Federal agencies, non-governmental organizations and business to stimulate greater food waste reduction activities across the country. In June 2013, USDA joined with Environmental Protection Agency to launch the U.S. Food Waste Challenge, calling on others across the food chain—including producer groups, processors, manufacturers, retailers, communities, and other government agencies – to join the effort to reduce, recover, and recycle food waste in the United States. As of June 2015, over 4,000 business locations were participating in the Challenge. The U.S. Food Waste Challenge provides a solid base for USDA to build industry partnerships.

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The amount requested would fund 1 new position’s salary and related expenses.

- (c) An increase of \$500,000 to fund the new initiative, Preparing Rural America for Climate Change, which will provide for the development of the necessary analytic capacity within the Department to provide projections of greenhouse gas emissions and carbon sequestration from agricultural and forest lands (no funding or staffing available in 2016).

The work under this initiative will enable USDA to assess the benefits of expenditures on conservation and energy programs that reduce greenhouse gas emissions and track progress in meeting domestic goals for greenhouse gas mitigation. Developing this new analytic capacity supports the President’s Climate Action Plan by encouraging and supporting smarter, climate-resilient investments in conservation and other areas.

Climate Change Program Office (CPPO) will develop capacity to make consistent projections of Greenhouse Gas emissions and carbon sequestration from agricultural and forest lands for use in domestic planning and international reporting. CCPO will support updating these projections and periodically reporting this information. Projections will be prepared for all major greenhouse gas source and sink categories within the agriculture and forest sectors. Consistent methodologies will be used that build on efforts of the Economic Research Service and Forest Service work. Projections will be consistent with the USDA Agricultural Long-Term Baseline Projections published by the Office of the Chief Economist. The greenhouse gas projections will be needed to meet new reporting requirements under the United Nation’s Framework Convention on Climate Change and will improve USDA’s efforts to track progress and assess performance on climate change.

A recent GAO report recommended USDA develop performance measures that better reflect the breadth of USDA’s climate change efforts. GAO called on USDA to include climate change metrics in annual performance plans and to track these performance metrics in annual reports. The enhanced analytic capability provided through this new program will result in improved climate change metrics for the Department and will enable better monitoring and tracking of progress in accomplishing climate change related goals.

- (d) A decrease of \$1,000,000 appropriated for a one-time contract with an independent organization to provide assistance with implementation and establishment of an Undersecretary for Trade and Foreign Agricultural Affairs as required by the Agricultural Act of 2014.

OCE will reduce base operating spending in the amount of \$1 million. The Consolidated Appropriations Act, 2016 (P.L. 113-114) directed OCE, within 60 days of completion of the report required in 7 U.S.C. 6935(b) (3) by the Secretary, to enter into a one-time contract with an independent organization to provide assistance with implementation and establishment of an Undersecretary for Trade and Foreign Agricultural Affairs as required by the Agricultural Act of 2014.

Geographic Breakdown of Obligations and Staff Years (SYs)

(Dollars in thousands)

State/Territory	2014 Actual		2015 Actual		2016 Enacted		2017 Estimate	
	Amount	SYs	Amount	SYs	Amount	SYs	Amount	SYs
District of Columbia.....	\$17,441	48	\$18,092	48	\$18,709	54	\$18,592	55
Lapsing Balances.....	336	-	212	-	-	-	-	-
Total, Available.....	17,777	48	18,304	48	18,709	54	18,592	55



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Classification by Objects

(Dollars in thousands)

	2014	2015	2016	2017
	<u>Actual</u>	<u>Actual</u>	<u>Enacted</u>	<u>Estimate</u>
<b>Personnel Compensation:</b>				
Washington D.C.....	\$6,284	\$6,236	\$6,958	\$7,182
11 Total personnel compensation.....	6,284	6,236	6,958	7,182
12 Personal benefits.....	1,702	1,778	1,999	2,065
13.0 Benefits for former personnel.....	9	-	-	-
Total, personnel comp. and benefits.....	<u>7,995</u>	<u>8,014</u>	<u>8,957</u>	<u>9,247</u>
<b>Other Objects:</b>				
21.0 Travel and transportation of persons.....	238	228	185	210
22.0 Transportation of things.....	5	1	2	2
23.1 Rental payments to GSA.....	-	2	2	2
23.3 Communications, utilities, and misc. charges...	222	262	230	235
24.0 Printing and reproduction.....	65	42	50	55
25 Other contractual services.....	130	88	723	524
25.1 Advisory and assistance services.....	1,826	1,571	425	425
25.2 Other services from non-Federal sources.....	6,669	7,623	7,824	7,572
26.0 Supplies and materials.....	270	235	276	285
31.0 Equipment.....	21	26	35	35
Total, Other Objects.....	<u>9,446</u>	<u>10,078</u>	<u>9,752</u>	<u>9,345</u>
99.9 Total, new obligations .....	<u><u>17,441</u></u>	<u><u>18,092</u></u>	<u><u>18,709</u></u>	<u><u>18,592</u></u>
<b>Position Data:</b>				
Average Salary (dollars), ES Position.....	\$175,000	\$174,495	\$176,000	\$177,500
Average Salary (dollars), GS Position.....	\$124,000	\$119,906	\$123,000	\$124,000
Average Grade, GS Position.....	14.6	14.5	14.6	14.6

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Shared Funding Projects

(Dollars in thousands)

	2014	2015	2016	2017
	<u>Actual</u>	<u>Actual</u>	<u>Enacted</u>	<u>Estimate</u>
<b>Working Capital Fund:</b>				
Administration:				
Beltsville Service Center.....	\$15	\$10	\$14	\$14
Mail and Reproduction Management.....	85	91	114	100
Integrated Procurement System.....	14	18	11	11
Procurement Operations.....	-	30	24	23
Subtotal.....	114	149	163	148
Communications:				
Creative Media & Broadcast Center.....	42	72	51	41
Finance and Management:				
NFC/USDA.....	12	13	13	12
Controller Operations.....	12	-	-	13
Financial Systems.....	13	25	26	26
Subtotal.....	37	38	39	51
Information Technology:				
NITC/USDA.....	12	10	18	20
International Technology Services.....	-	115	58	55
Telecommunications Services.....	125	26	19	40
Subtotal.....	137	151	95	115
Correspondence Management.....	28	21	19	20
Total, Working Capital Fund.....	358	431	367	375
<b>Departmental Shared Cost Programs:</b>				
1890's USDA Initiatives.....	1	1	2	2
Classified National Security Information.....	-	1	1	1
Continuity of Operations Planning.....	1	1	1	1
Emergency Operations Center.....	1	1	1	1
Hispanic-Serving Institutions National Program.....	1	1	1	1
Human Resources Transformation (inc. Diversity Council).....	1	1	1	1
Identity & Access Management (HSPD-12).....	3	4	4	4
Medical Services.....	2	4	5	5
Personnel Security Branch.....	2	2	2	2
Pre-authorizing Funding.....	2	2	2	2
Sign Language Interpreter Services.....	3	-	-	-
TARGET Center.....	-	1	1	1
Virtual University.....	1	1	1	1
Total, Departmental Shared Cost Programs.....	18	20	22	22
<b>E-Gov:</b>				
Enterprise Human Resources Intigration.....	1	1	1	1
E-Rulemaking.....	1	1	-	-
E-Training.....	1	1	1	-
Geospatial Line of Business.....	-	-	6	13
Integrated Acquisition Environment - Loans and Grants.....	1	1	-	-
Integrated Acquisition Environment.....	-	-	1	-
Total, E-Gov.....	4	4	9	14
Agency Total.....	380	455	398	411

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### Status of Programs

The Office of the Chief Economist (OCE) advises the Secretary of Agriculture on the economic implications of Department policies, programs, and proposed legislation. OCE serves as the focal point for: the Nation's agricultural economic intelligence and projections related to agricultural commodity markets; risk analysis and cost-benefit analysis related to international food and agriculture; energy issues related to the agricultural economy; sustainable development; agricultural labor; global climate change; and environmental markets. OCE is responsible for coordination, review and clearance of all commodity and aggregate agricultural and food-related data used to develop Departmental outlook and situation material.

#### Current Activities:

OCE provides policy and program analyses and advice for the Secretary on major issues affecting agriculture and rural America. The Immediate Office (IO) addresses issues on: trade agreements and disputes; developments in agricultural commodity markets, such as effects of global weather developments and changes in production and trade patterns; economic issues related to plant and animal diseases; farm programs; crop insurance improvements; sustainable development in agriculture and rural communities; climate change and agriculture; conservation programs; ecosystem services markets; and agricultural labor.

The World Agricultural Outlook Board's (WAOB) primary mission is to provide reliable and objective economic forecasts for farmers and other participants in the food and fiber system. Key WAOB activities are coordinating USDA forecasts of domestic and international agriculture; providing economic analysis related to global commodity markets; monitoring markets and agricultural weather; and disseminating relevant information.

OCE clears all USDA significant, economically significant and major regulations for their regulatory impact analyses and risk analyses. OCE's Office of Risk Assessment and Cost-Benefit Analysis (ORACBA) reviews and approves statutorily required risk assessments for all major USDA regulations. ORACBA is a focal point for Departmental activities related to risk analysis, including: inter-Departmental activities; risk communication; education on risk analysis methods; regulatory reviews to ensure cost-effective, less burdensome regulations; and the integration of economic analysis and risk assessment.

The Office of Energy Policy and New Uses (OEPNU) conducts and coordinates economic analyses and evaluates policies of energy and biobased product issues across USDA and is responsible, with the National Institute of Food and Agriculture (NIFA), for implementing the Biodiesel Fuel Education Program. OEPNU conducts research on biofuel's net energy balance, biobased product markets, life-cycle analyses, renewable energy technologies, and more recently the use of fracking technology and implications for land values. OEPNU, along with other USDA agencies and the Department of Energy, participates in the Biomass Research and Development Initiative. OEPNU also coordinates and provides information, data, production and best management practices, as well as market and policy expertise, for feedstocks being evaluated by the Environmental Protection Agency (EPA) under the Renewable Fuel Standards.

The Climate Change Program Office (CCPO) coordinates the Department's climate change activities, represents the Department with other Federal Departments and Agencies, and provides analysis and advice on issues related to climate change for the Office of the Secretary. CCPO is responsible for coordinating the implementation of the USDA Climate Change Adaptation Plan. CCPO assesses and evaluates the Department's response to climate change. CCPO works with USDA Agencies to identify annual performance metrics and include them in Annual Performance Reports. CCPO coordinates USDA contributions to the quadrennial U.S. National Climate Assessments, required under the 1990 Global Change Research Act. CCPO works with USDA agencies to integrate climate change and greenhouse gas reduction considerations into their activities, to establish program and research priorities, and to coordinate actions to address the risks of climate change and mitigation responses. CCPO facilitates USDA participation in the U.S. Global Change Research Program.

The Office of Environmental Markets (OEM) facilitates the Department's efforts to support the participation of farmers and rural land owners in emerging markets for greenhouse gases, water quality, wetlands, biodiversity, and other ecosystem services. OEM is working to develop science-based practical solutions for quantifying ecosystem services, consistent policies, and coordinated infrastructure for environmental markets. OEM focuses on advancing environmental market opportunities for farmers, ranchers, and rural land owners. OEM supports the USDA Market-

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Based Environmental Stewardship Coordination Council in strategic planning and priority setting, emphasizing the development of USDA tools and metrics and generating market demand for environmental goods and services.

### Selected Examples of Recent Progress:

Agricultural Policy. IO staff provided assistance and analysis to Departmental agencies implementing commodity, conservation, renewable energy and other programs by reviewing and providing analysis of proposed program regulations, participating in inter-agency working groups, and helping to ensure effective and efficient program development. For example, the IO participated in the development and analysis of Departmental budget proposals; Conservation Reserve Program enrollment alternatives; options to assist dairy producers; sugar and other farm program issues; and the effects of climate change legislation on agricultural production, commodity prices, farm income, and retail food prices. The Chief Economist, Deputy Chief Economist, and OCE analysts assisted the Department with its response and analyses of the outbreak of high path avian influenza (HPAI) in 2015. OCE continues to develop economic analysis to help the Department with HPAI planning activities.

The Chief Economist and Deputy Chief Economist continue to serve on the Department's Farm Bill Conveners and Principal working groups, which coordinate Departmental policy regarding Farm Bill programs and policies. The Deputy Chief Economist and IO staff assisted with the review and development of cost benefit analyses for the many USDA regulations. In addition, the Deputy Chief Economist provided assistance to the Department by reviewing and negotiating language for important rulemakings and actions by other agencies that affect agricultural and forest production in the U.S. For example, the Chief Economist, Deputy Chief Economist, and other IO staff coordinated research and policy analysis with EPA on the renewable fuel standards. IO staff is responsible for clearing all USDA risk analyses and economically significant rules.

The Chief Economist and the World Board Chair represent the United States at the G20's Agricultural Market Information System initiative, which met three times in 2015 to discuss global supply and demand factors affecting commodity markets. The Chief Economist was elected to Chair the G-20's Agricultural Market Information System (AMIS) for 2015/16.

Agricultural Labor Activities. IO staff provided analyses and information focused on the unique characteristics of agricultural production, including the diversity in the demand for labor across agriculture, the seasonal demand for labor, the recent labor shortages faced by agricultural producers, and the role of temporary workers in the agricultural sector. IO staff monitors proposed regulations and acts of Congress for possible impacts on the agricultural labor force. IO staff made several presentations describing the benefits of immigration reform to agriculture, and the current scarcity of agricultural labor. These presentations focused on the Border Security, Economic Opportunity, the Immigration Modernization Act (S.744), and current labor force conditions. IO staff is concluding a cooperative agreement that analyzes the economic impacts to agriculture resulting from changes in U.S. immigration including an analysis of the impacts of the passage of S.744. Results will be released in 2016.

World Trade Organization (WTO) and Trade Policy Support. During 2015, IO staff supported USDA WTO activities by providing economic analysis, and position papers, especially in the area of domestic support in key emerging markets, preparations for the Bali Trade Ministerial, and developing a negotiating strategy in 2014. The Deputy Chief Economist and IO staff supported the Office of the United States Trade Representative (USTR) in the Country of Origin Labeling case brought before the WTO. The Chief Economist and IO staff supported the Under Secretary for Farm and Foreign Agricultural Service's Office and USTR in the negotiations with Brazil under the Framework Agreement for resolving the WTO cotton/Export Credit Guarantee Program dispute. IO staff also coordinated USDA's response to Peru's trade challenge to U.S. cotton support and the inter-agency process to prepare U.S. domestic support notifications to the WTO.

Analytical Assistance to Congress and Other Federal Agencies. The Chief Economist was a chief witness at a Congressional hearing on pollinators. He also accompanied the Secretary at Congressional appropriations hearings. A total of 7 Congressional briefings and meetings were conducted in 2015 by the Chief Economist on the Farm Bill, WTO, drought, and economic outlook. IO staff conducted many additional briefings and analyses for Congress on issues such as climate change, WTO disputes, WTO domestic support notifications, weather and market situation and outlook, the Farm Bill, outlook for farm income, biofuels, and biobased products. The Chief Economist assisted the Department and Congressional staff on Farm Bill implementation on a number of topics including: dairy policy, crop insurance, and international trade issues.

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Crop Insurance. The Chief Economist, as Chairman of the Board of Directors of the Federal Crop Insurance Corporation (FCIC), presided over six public board meetings during 2015. The board approved a series of new programs and program changes in 2015 including: Clary Sage, hybrid rice seed, lime trees, and hybrid sweet corn. In addition, the FCIC proposed a new rule concerning functioning of the Board and the Risk Management Agency (RMA) regarding new product submissions based on language from the 2014 Farm Bill.

Outreach Activities. The Chief Economist, Deputy Chief Economist, and IO staff made numerous speeches, including to the European Commission Outlook 2015 Conference in Brussels, Organization for Economic Co-operation and Development (OECD), Food and Agriculture Organization (FAO), European Union (EU) Commission, opening session of the USDA Agricultural Outlook Forum, Informa Spring Outlook Conference, American Association of Agricultural Economists Annual Meeting, National Farmers Union and Farm Bureau, US Grains Council, U.S. Meat Export Federation, International Agricultural Trade Research Consortium, United Fresh Produce Association, Carnegie Mellon University, Institute of Food Technologists, as well as presentations to numerous visiting farm groups. The Chief Economist also chaired the steering committee for USDA's 2015 Agricultural Outlook Forum.

Sustainable Development Activities. During 2015, OCE coordinated the Department's contributions to the interagency process on the United Nation's (UN) post-2015 Development Agenda and the Sustainable Development Goals, including analysis of impacts on U.S. agricultural and food sectors. An OCE staff member served as the U.S. representative on the Sustainable Food Systems Program of the 10-Year Framework of Programs and as the U.S. point of contact for the U.N. Commission on Genetic Resources for Food and Agriculture. OCE staff took the lead in writing the U.S. Country Report on Biodiversity for Food and Agriculture.

OCE staff led the analysis and formulation of the USG position and negotiations in Turkey on the G20 Agricultural Ministers' Communiqué and G20 Action Plan on Food Security and Sustainable Food Systems. OCE staff coordinated with USDA officials and prepared the analysis for the National Security Staff for the U.S. position on food loss and waste and led the negotiations in Turkey on the G20 Platform on Food Loss and Waste, which was the primary new deliverable of the Agricultural Communiqué and Action Plan.

In 2015, OCE staff continued to lead and coordinate USDA initiatives to reduce food loss and waste. Most notably, in 2015 OCE staff worked to support the joint announcement by USDA and the EPA setting the first national goal to reduce food loss and waste—a 50 percent reduction by 2030. OCE staff worked with EPA experts to coordinate baseline measures and this goal helps to position USDA as a leader, both domestically and internationally, in the fight to reduce, recover and recycle food loss and waste.

Climate Change Adaptation Planning. In 2015, USDA worked with agencies to implement the USDA Climate Change Adaptation Plan. The plan includes specific actions and process that will improve resilience and reduce risks from climate variability and change. CCPO helped Agencies identify specific metrics and performance indicators to gauge progress in implementing the Plan.

USDA Regional Climate Hubs. CCPO provided technical support and guidance to the network of seven new Regional Climate Hubs and three Sub-Hubs. These hubs serve as a resource for USDA programs and field offices on climate preparedness and planning. In 2015, with guidance from CCPO, the Hubs completed eight Regional Climate Assessments and initiated work to support the implementation of the USDA Building Blocks for Climate Smart Agriculture and Forestry. The Regional Hubs continued to provide support to USDA programs in addressing climate risks and have partnered with Land Grant and Public Institutions in coordinating research and extension of options for reducing risks and vulnerabilities.

National Climate Assessment. In 2015, CCPO completed a major scientific assessment on the effects of climate change on global food security and its implications for the United States. The report, entitled *Climate Change, Global Food Security and the U.S. Food System* was prepared as part of the United States National Climate Assessment. The report will be released to the public in December 2015. The report identifies the risks that climate change poses to global food security and the challenges facing farmers and consumers in adapting to changing climate conditions.

Building Blocks for Climate Smart Agriculture and Forestry. CCPO led the Department's efforts to respond to a challenge to reduce greenhouse gas emissions by 26-28 percent by 2025. CCPO worked with agencies and

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professionals from across the Department to define USDA's response. USDA announced in April, 2015 a set of ten Building Blocks for Climate Smart Agriculture and Forestry. These actions will reduce greenhouse gas emissions by over 120 million tons in 2025. The reductions will generate almost \$2 billion in annual social benefits as calculated using conservative social cost of carbon values from EPA. CCPO oversaw the development of this approach and planned efforts consistent with USDA authorities and resources and established a series of recommendations to improve performance metrics and accountability.

Climate Change Analysis and Advice. CCPO continued to serve as a Department-wide coordinator for agriculture, rural, and forestry-related climate change issues and activities. CCPO led an inter-agency coalition which prepared integrated greenhouse gas projections for forestry and agricultural sources. CCPO responded to many requests from the White House Council on Environmental Quality (CEQ) and the Department of State to provide information, data, and analysis on greenhouse gas emissions, carbon sequestration, and trends. The new system for estimating and projecting greenhouse gases is able to quantify the greenhouse gas benefits on the 10 USDA Building Blocks for Climate Smart Agriculture and Forestry.

Global Change Task Force. The Director of CCPO continued to chair the USDA Global Change Task Force, utilizing the task force to ensure that all USDA agencies with a responsibility for climate change are kept informed of Departmental and Administration priorities and are included in reviews, assessments, analyses, and communication efforts. Task force participants include the Agricultural Research Service, Economic Research Service, National Agricultural Statistics Service, National Institute of Food and Agriculture, Forest Service, Natural Resources Conservation Service, Farm Service Agency, Foreign Agricultural Service, Risk Management Agency, Animal and Plant Health Inspection Service, and Agricultural Marketing Service, among others.

International Climate Change Negotiations. CCPO continued to represent the Department in international climate change negotiations. CCPO provided technical support on issues related to climate change, forestry, and agriculture for the Department of State, and represented the Department in bilateral and multilateral meetings, such as meetings under the United Nations Framework Convention on Climate Change. International diplomacy efforts accelerated in 2015 as countries prepared to finalize a major new agreement designed to govern international climate actions in the post-2020 period. CCPO continued USDA's efforts to formalize a new international partnership called the Global Alliance on Climate Smart Agriculture. The new Alliance was announced by Secretary Vilsack at the United Nations in September, 2014. The Alliance includes 20 country partners, groups like the World Bank and Food and Agriculture Organization, and numerous non-governmental and academic organizations and institutions.

Supply and Demand Monitoring and Reporting. WAOB continued publishing the monthly *WASDE* report, a Principal Federal Economic Indicator report, providing official world and U.S. supply and utilization estimates and forecasts for grains, oilseeds, and cotton and official estimates and forecasts for U.S. sugar, red meat, poultry, eggs, and milk. All *WASDE* reports were released as scheduled in 2015. WAOB staff cleared all USDA economic outlook reports released in 2015. WAOB issued 12 monthly *WASDE* reports, 50 weekly *White House Memos* on the current situation in U.S. agricultural markets, and 235 *Daily Highlights of Agricultural Developments*. Post-lockup briefings were presented monthly to the Secretary and multiple radio interviews were recorded each month by WAOB staff. During 2015, the *WASDE* report was downloaded an average of 171,086 times per month from the OCE website and about 23,500 times per month from the USDA-Cornell website (a site operated by Cornell University through a partnership with USDA). In addition, 15,443 subscribers to a Cornell-managed Listserve system received the *WASDE* report every month.

Baseline Projections. In February 2015, WAOB oversaw publication of the inter-agency 10-year baseline economic projections, providing timely insight and strategic planning information for the President's Budget, agricultural producers, other agribusinesses, and policy officials.

Briefings and Media Events. The WAOB Chairman and other Interagency Commodity Estimate Committee (ICEC) Chairs recorded approximately 30 interviews for USDA radio, and along with other WAOB staff, delivered numerous speeches and briefings explaining USDA's commodity situation and outlook projections to industry groups. WAOB staff also provided briefings on USDA's commodity analysis program to visiting foreign delegations from Argentina, Brazil, China, India, and Mexico, among others. WAOB meteorological staff also regularly made contributions to television, radio, and print media interviews on a variety of topics, including generally favorable Midwestern growing conditions in 2015, ongoing drought in the western U.S., and the impacts of El Niño on domestic and international agricultural production.

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Weather Analysis. WAOB and the National Weather Service (NWS) jointly prepared and published 52 *Weekly Weather and Crop Bulletins (WWCB)*, while WAOB meteorologists issued 250 *Morning Weather Summaries*, prepared national agricultural weather summaries, and contributed to 52 weekly *U.S. Drought Monitors (USDM)*, produced jointly by WAOB, the National Oceanic and Atmospheric Administration, and the National Drought Mitigation Center in Lincoln, Nebraska. The weather components of the *Daily Agricultural Highlights* and the *Weekly Weather and Economics Briefing* were delivered as scheduled to the Office of the Secretary and other senior USDA staff. During 2015, the *WWCB* was downloaded an average of 36,187 times per week from the OCE website and 5,924 times per week from the USDA-Cornell website, while 7,159 subscribers received the bulletin through the Cornell Listserv service. The *Daily Agricultural Highlights* was downloaded an average of 241 times per day from the OCE website.

The *USDM* gained additional visibility and utility for drought disaster relief in 2015, following the passage of the new Farm Bill and the subsequent reauthorization of the Livestock Forage Disaster Program (LFP). LFP payouts, which were made retroactive to 2012, totaled \$3.85 billion through the end of October 2014. In addition, several new *USDM*-triggered initiatives that were introduced in 2012 continued in 2015. Specifically, in July 2012, the Secretary announced a simplified process for secretarial disaster declarations, reducing the time it takes to designate counties affected by drought disasters by an estimated 40 percent. Producers in drought-affected counties nearly automatically qualify for low-interest loans with a *USDM* designation of D3 to D4 (extreme to exceptional drought), or eight consecutive weeks of D2 (severe drought). As of November 10, 2015, a total of 739 U.S. counties—along with 267 contiguous counties and parishes—qualified for a Secretarial Disaster Designation based on the *USDM* depiction.

WAOB meteorologists prepared early warnings and assessments of significant weather events that affected agriculture for the Chief Economist and other senior USDA staff, including: the easing of drought on the Great Plains and the intensification of drought in California and other parts of the West, as well as weather conditions in the Midwest leading to record corn and soybean production. International highlights included: record summer crop production in Europe; late season reductions to summer grains and oilseeds in parts of Russian and Ukraine; the erratic nature of the Indian monsoon and subsequent reductions in grain, oilseed, and cotton production; abnormal dryness in China affecting 2015 corn production; dryness in Australia's wheat belt; and various weather events in South America attributed to a developing El Niño.

WAOB meteorologists were instrumental in the development of new agreements with the National Oceanic and Atmospheric Administration (NOAA) designed to reinforce the Department's commitment to work with other agencies to combat the impacts of drought on the Nation's agricultural communities. Elements of the agreement are considered vital to the launch of an interagency National Drought Resilience Partnership, which was first outlined in the President's Climate Action Plan in June 2013 as a method for helping communities manage drought-related risks. A key aspect of the agreement is the development of a National Soil Moisture Network, a collaborative effort between USDA, NWS, and the academic community. WAOB staff also actively partnered with the Office of the Federal Coordinator for Meteorological Support and Services (OFCM), which supports and monitors intergovernmental activities in weather and climate.

WAOB continued to actively support the World Meteorological Organization (WMO) Commission for Agricultural Meteorology (CAGM), which promotes the use of weather and climate information to improve sustainable food production worldwide. A WAOB meteorologist served on the eight-member WMO CAGM Management Group, which formulates commission policy, develops strategic plans, and evaluates program area progress. WAOB also continued as a leading contributor to the World Agrometeorological Information Service, a dedicated web server hosting agrometeorological data, products, and bulletins prepared by WMO member countries.

USDA Agricultural Outlook Forum. WAOB staff planned, coordinated, and chaired the program committee for USDA's 2015 Agricultural Outlook Forum: *Smart Agriculture in the Twenty-First Century—A Discussion on Innovation, Biotechnology, and Big Data*. Forum registration reached 1,873. The 2-day program included 27 sessions on major issues affecting rural America and agriculture, including commodity outlooks, the rural economy, climate and weather, food waste, pollinators, weather, drought and big data, international trade, food price and farm income trends, the bioeconomy, transportation, and food safety.

Analyses Reviewed. In 2015, ORACBA staff provided substantive reviews of economic analyses and regulations to improve nutrition, food access, and cost control in USDA food assistance and school feeding programs, organic

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agricultural production standards, poultry slaughter standards and importation of beef into the United States, as well as provided reviews of risk assessments supporting poultry slaughter modernization, importation of beef, and new regulations for mechanically tenderized beef. ORACBA provided guidance and analytical assistance on several rules under development prior to clearance. ORACBA staff regulatory reviews supported implementation of new programs and delivery of existing programs across all USDA mission areas. In 2015, ORACBA reviewed analyses for 16 USDA proposed and final rules, 22 EPA proposed and final rules, and scientific and economic documents, and 9 Food and Drug Administration (FDA) proposed rules, risk assessments, economic documents and an environmental impact statement, among others.

Risk Analysis Leadership and Consultation. ORACBA provided guidance to USDA agencies developing risk assessments and economic analyses related to nutrition assistance programs, agricultural marketing programs, foodborne pathogens, and plant and animal diseases. ORACBA provided a review of the FDA's risk assessments for production standards for produce and arsenic in various agricultural commodities. ORACBA participated in the scientific review of the EPA and Forest Service pesticide risk assessments. ORACBA also actively participated in the 18-agency Interagency Risk Assessment Consortium (IRAC) to enhance communication and coordination among the agencies with food safety responsibilities and promote scientific research that will facilitate risk assessments and co-sponsored a food safety workshop with IRAC. ORACBA also supported the Codex Committee on Food Hygiene as members serving on international expert panels on microbial (*Campylobacter and Salmonella*) risk assessment and served as a resource to the U.S. delegation to Codex. ORACBA supported the National Advisory Committee on Microbiological Criteria for Foods as members served as risk consultants for the Subcommittee on the Study of Microbiological Criteria as Indicators of Process Control and Insanitary Conditions.

During 2015, ORACBA staff provided scientific expertise and advice in support of food safety and trade; supported agencies conducting risk assessments and cost-benefit analyses; and provided analysis to USDA and other Federal agencies to evaluate environmental issues affecting agriculture and matters pertaining to agriculture and environmental quality (air and water quality), pesticide use, and endangered species. This included reviews of EPA chemical and pesticide risk assessments, and environmental effects associated with the FDA Food Safety Modernization Act Produce Rule. ORACBA provided advice on statistical approaches for sampling schemes for microbial pathogens in meat and poultry, and development of standards for assessing invasive species risk mitigation plans for biofuel feedstocks.

Risk Communication and Outreach. ORACBA continued to improve communication among USDA analysts concerning developments in risk assessment and economic analysis through publication of the monthly ORACBA Risk Calendar. ORACBA conducted seminars, workshops, and consultations on risk analysis for government groups and land-grant universities. ORACBA staff presented risk assessment results and regulatory analyses at professional meetings for government, industry, and university scientists and economists. ORACBA staff published articles on sampling methodology, trends in foodborne illnesses, development of microbial criteria for acceptance of food lots and revising weight of evidence approaches in chemical risk analysis.

Risk Assessment Education and Training. At the annual meeting of the Society for Risk Analysis, ORACBA staff presented research on risk-based sampling strategies, trends in foodborne illnesses and the application of adaptive management principles in environmental programs. At the annual meeting of the Society for Benefit-Cost Analysis, ORACBA staff presented research on consumer demand for organic products and chaired a session on Food and Water issues. ORACBA worked with the Joint Institute for Food Safety, the University of Maryland, and the FDA to promote both basic and advanced courses in risk assessment methods. ORACBA's Science, Policy and Risk Forum provided in person and webinar access to seminars on comparing human health risk values used in the EU and US, on objective risk analyses, retrospective review of the Mexican avocado importation economic analysis and trends in reported foodborne illnesses.

Biobased Products. OEPNU continued its involvement in biobased products research. Through its membership on the Biomass Research and Development Board – Operations Committee, OEPNU has provided leadership to the assessment of the bioeconomy, which includes biofuels, heat and power, and renewable chemicals and biobased products. OEPNU staff provided analyses prior to the announcement of the Biofuels Infrastructure Partnership program – a \$100 million CCC investment (to be matched by non-federal partners) to enable infrastructure development and provide consumers access to higher ethanol blends, participated in the grant writing team, and



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helped to evaluate applications. OEPNU staff provided U.S. leadership to the Organization for Economic Cooperation and Development's (OECD) Working Party (WP) on Biotechnology, Nanotechnology, and Convergent Technology (BNCT). This year was of particular importance because in 2014 a decision was made to merge the OECD WP on Biotechnology and WP on Nanotechnology into one, and a program of work for the WPBNCT was put in place. The OEPNU Director is the U.S. delegate to the WP and serves on the Bureau (advisory board) to the WP. OEPNU staff also continued to provide feedback to USDA's Departmental Management in the development of its labeling program for biobased products and biobased product designation for federal procurement—the BioPreferred program. Staff spoke at several industry, professional, and federal sponsored conferences, workshops, and meetings, including the Advance Bioeconomy Leadership Conference, Advanced Feedstock Leadership Conference, BioEnergy 2015, and office sponsored workshops on topics such as the bioeconomy, USDA Energy Title IX Programs, life cycle assessments, and USDA activities in the bioenergy/biobased product space.

Biodiesel Fuel Education Program. During 2015, OEPNU, along with NIFA, released a Request for Applications soliciting proposals for Biodiesel Education Grants. Eight applications were reviewed and two were selected for a total funding of \$960,000. A joint meeting was held in January to discuss work plans and coordinate 2015 educational events for the national Biodiesel Fuel Education Program – a program to educate the public and other stakeholders on the benefits of biodiesel. Twice a year OEPNU convenes a USDA inter-agency panel to review progress on program goals and develop an education outreach system that delivers useful and consistent information about the benefits of biodiesel. During FY 2015, OEPNU, along with NIFA, worked to increase biodiesel awareness among high school and college students and provide information on biodiesel accreditation to new participants in the biodiesel market.

Energy and Bioenergy Analysis. In 2015, OEPNU staff collaborated with academics and non-governmental organizations to provide research and analysis in support of the Chief Economist and the Office of the Secretary. OEPNU also sponsored conferences and workshops reaching out to and disseminating information to stakeholders, including Coordinating Research Council Workshop on Life-Cycle Analysis (LCA), which focused on technical issues associated with LCA of transportation fuels, the Biomass Research and Development Board – Federal Stakeholders Workshop to assess bioeconomy activities across the USG. In addition, OEPNU sponsored 5 new cooperative research projects in FY 2015. In collaboration with the U.S. Department of Energy, and the U.S. Navy, OEPNU: 1) provided technical support including analyses and assessments for the Defense Production Act initiative to stand-up alternative jet fuel production and the (USDA/Navy) Farm to Fleet program; 2) OEPNU with the EPA provided feedstock pathways information, data, and analyses for the RFS and related issues; 3) provided to REE status update information for the Biogas Opportunities Roadmap (a report to reduce methane gas emissions and improve energy independence); and 4) OEPNU staff provided leadership to and participated in multiple interagency working groups.

Work continued with Pennsylvania State University assessing the impact of fracking technology on land values. OEPNU also co-sponsored two events with CFARE seminar series on new developments in the Energy Agriculture Rural Development Nexus. Several article/publications were released in 2015 by OEPNU or based on OEPNU sponsored research. A major effort in 2015 was completing an 82 page, multi-chapter USDA/OCE publication titled *U.S. Ethanol: An Examination of Policy, Production, Use, Distribution, and Market Interactions*. The primary purpose of the report is to analyze the complex interaction of ethanol production with agricultural markets and government policies. The article “Renewable Energy and Economic Growth in US States: A Panel Dynamic Approach” was published in the fall issue of *The Journal of Energy and Development*. The paper, looking at links between agricultural and energy commodity volatilities, was submitted for publication in the *Journal of Energy Policy*. The paper for “The Impact of Fracking on Real Estate Values” was accepted for publication with revisions by the *Journal of Policy Analysis and Management*. The article "Long-Run and Short-Run Co-Movements in Energy Prices and the Prices of Agricultural Feedstocks for Biofuel" was published in the *American Journal of Agricultural Economics*.

Environmental Markets Analysis and Advice. In 2015, OEM focused on improving coordination and consistency of the tools and resources for environmental market development and implementation.

OEM worked closely with EPA to develop new tools and information resources to guide water quality trading, reduce costs in program design and implementation, improve environmental performance, and foster consistency and integrity across regional water quality trading efforts. OEM convened monthly meetings of the USDA Environmental Markets Workgroup and facilitated the an update of the USDA Environmental Markets Strategy with

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an increased emphasis on coordinating USDA tool and metric development and a new focus on generating market demand.

Tools, Guidelines for Quantifying Environmental Performance. In 2015, OEM continued efforts under existing agreements with several government agencies, universities and non-governmental organizations to develop economic, policy and scientific analyses to support emerging environmental markets. OEM and EPA completed the USDA – EPA Water Quality Trading Roadmap tool, a user-friendly interactive information support tool for water quality trading. The tool allows users to access national, state and regional water quality trading policies and support materials in one location. The tool uses USDA’s “Ask the Expert” query format and is available from the new USDA Markets website.

Chesapeake Bay Executive Order. OEM continued to lead environmental market development efforts under the Chesapeake Bay Executive Order Strategy. OEM convened monthly meetings of the Interagency Environmental Markets Team (EMT) to facilitate collaboration among 12 Federal agencies. OEM coordinated USDA review and comments on an EPA Technical Memoranda on Establishing Offset and Trading Baselines for Point and Nonpoint Sources Generating Credits in the Chesapeake Bay Watershed. OEM continues to lead environmental market development under the Chesapeake Bay Executive Order Strategy. OEM authored the Chesapeake Bay EMT whitepaper “Increasing Federal Coordination for Market-Based Approaches in the Chesapeake Bay Watershed.” The document served as the basis for updating the EMT Charter, which will now run through 2020.

Communication and Outreach. OEM hosted numerous webinars and trainings, and made several presentations to governmental agencies, commodity groups, farm organizations, and conservation groups on environmental market-related topics. OEM released the new USDA Environmental Markets Site in September 2015. The site connects environmental market-related information across the Department in one location, and provides linkages to existing online information covering environmental market topics.

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Summary of Budget and Performance

Statement of Department Goals and Objectives

The mission of OCE is to advise the Secretary of Agriculture on the economic implications of Department policies, programs and proposed legislation; to ensure the public has consistent, objective and reliable agricultural forecasts; to promote effective and efficient rules governing Departmental programs; to coordinate Departmental energy policy, programs, and strategies; coordinate Departmental climate change policy, programs, products, and strategies; and foster the development of environmental markets.

OCE has 5 strategic goals and 6 strategic objectives that contribute to 3 of the Department’s Strategic Objectives within 2 of the Department’s Strategic Goals.

**USDA Strategic Goal 1: Assist rural communities to create prosperity so they are self-sustaining, repopulating, and economically thriving.**

**USDA Strategic Objective 1.2: Increase agricultural opportunities by ensuring a robust safety net, creating new markets, and supporting a competitive agricultural system**

**USDA Strategic Objective 1.3: Contribute to the expansion of the bioeconomy by supporting development, production, and consumption of renewable energy and biobased products**

Agency Strategic Goal	Agency Objectives	Programs that Contribute	Key Outcome
Ensure the Secretary of Agriculture receives timely, independent, objective economic analyses on critical Departmental program and policy issues.	Provide economic intelligence and analysis to support Departmental policy and program decisions.	Chief Economist and Immediate Office (IO)	Senior USDA leadership understands markets and the economic impacts of policy options.
Improve the U.S. agricultural economy by facilitating efficient price discovery in agricultural markets.	Coordinate release of timely and objective agricultural commodity supply, demand, and price estimates.	World Agricultural Outlook Board (WAOB)	12 monthly World Agricultural Supply and Demand Estimates (WASDE) reports issued.
Support Departmental efforts to develop environmental markets.	Support development of guidelines for establishing a market infrastructure that facilitates market-based approaches to agriculture, forest, and rangeland conservation; and develop national water quality technical metrics for agriculture.	Office of Environmental Markets (OEM)	Make substantial progress in the development of technical water quality metrics and guidelines that can meet the needs of emerging environmental markets.
Coordinate Departmental energy policy, programs, and strategies.	Analyze renewable energy, biobased chemicals and products, and bioeconomy policies, programs, and markets.	Office of Energy Policy and New Uses (OEPNU)	Timely, objective energy policy analysis meets the needs of senior USDA leadership.

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Significant and economically significant regulations affecting the public are based on sound, objective, and appropriate risk assessments and economic analysis.	Review and support regulatory impact analyses and risk assessments for significant and economically significant USDA regulations.	Office of Risk Assessment and Cost-Benefit Analysis (ORACBA)	Significant and economically significant regulations proposed by USDA are based on sound scientific and economic analysis.
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Key Outcome: 12 monthly *Waste Agriculture Supply and Demand Estimates (WASDE)* reports issued.

Key Performance Measures and Targets:

Issue 12 monthly WASDE reports each year providing timely, comprehensive, objective agricultural commodity supply, demand, and price estimates and projections, providing a benchmark for U.S. and global markets to respond to expected changes in commodity supply and demand and thereby contributing to efficient price discovery in agricultural markets. The baseline and target performances are issuing 12 WASDE reports.

Annual Performance Goals, Indicators, and Trends	Actual				Target	Actual	Result	Estimate/Target	Target
	2011	2012	2013	2014	2015		2016	2017	
(WASDE) reports issued.	12	12	12	11	12	12	Met	12	12
Dollars (in thousands)	\$3,540	\$3,285	\$3,376	\$3,401	\$3,513	\$3,283	Met	\$3,551	\$3,633
Allowable Data Range for Met: Target is considered met if actual is within 5% of target.									
Data Source – Manual count of the number of reports released.									
Completeness of Data – Reports are counted, so the data is complete.									
Reliability of Data – The data collected is reliable. The data was counted not sampled.									
Quality of Data – The quality of data is satisfactory.									

Selected Past Accomplishments toward Achievement of the Key Outcome in FY 2015:

The Chief Economist and IO, World Agricultural Outlook Board, Office of Energy Policy and New Uses, and Office of Risk Assessment and Cost-Benefit Analysis supported Departmental programs across all mission areas by reviewing and providing economic analysis of proposed program regulations, participating in interagency working groups, helping to ensure effective and efficient program and policy development, coordinating the development and release of consistent and accurate market-sensitive agricultural commodity estimates in the monthly *WASDE* report, a Principle Federal Economic Indicator, supporting coordination of Departmental energy policy, programs, and strategies, and reviewing significant and economically significant regulations primarily intended to affect human health, safety or the environment to ensure they are based on appropriate risk assessments and economic analyses that can serve as a basis for selecting cost-effective management options for hazards managed by USDA.

Chief Economist and IO:

- Chief Economist and IO staff provided policy and program analysis and advice to the Secretary in the areas of international trade agreements, risk-sharing institutions, crop insurance, commodity and conservation programs, sustainable development, climate change, agricultural labor, and alternative/renewable energy;

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- The Chief Economist chaired the Board of Directors of the Federal Crop Insurance Corporation (FCIC), the Capper-Volstead Act Committee, and served on the USDA Energy Council;
- Provided regular oral and written briefings to the Secretary and other key leaders on legislation, market developments, and key economic events affecting agriculture, forestry, and rural America;
- Assisted the Secretary's communication office in developing speech text and in the use of economic information for speeches of top officials and in press releases and provided subcabinet officials with economic intelligence relevant to the administration of their program areas and USDA in general;
- Reviewed Congressional testimony of executive branch officials and Department correspondence for economic content, testified before Congress, and prepared analyses for members of Congress, their staffs, and various Committee staffs on the impacts of legislative proposals;
- Represented the Department on U.S. delegations to international discussions of sustainable development, international trade or other issues and served as a source of objective assessments of the effects of proposals made in international forums that would affect agreements, treaties or other obligations of the Department; and
- Led and coordinated cross-mission area work on sustainable development and agricultural labor markets, including chairing the USDA Council on Sustainable Development, representing USDA in international multilateral environmental negotiations, and other issues as requested by the Secretary.
- Chaired the G-20 Agricultural Market Information System Rapid Response Forum in 2015-2016.

### WAOB

- WAOB staff issued 12 monthly *WASDE* reports, 52 *Weekly Weather and Crop Bulletins*, 52 weekly *White House Memos* on the current situation in U.S. agricultural markets, and approximately 250 *Daily Highlights of Agricultural Developments* and *Daily U.S. Agricultural Weather Highlights*;
- Reviewed and assured consistency across the situation and outlook products issued by other USDA agencies, including written reports, market updates, special analyses, and long-range forecasts;
- Provided an annual comprehensive situation and outlook forum for agriculture that incorporates the viewpoints of and participation by analysts from USDA, academia, and the private sector; and
- Prepared numerous special economic reports and weather assessments for the Secretary and Chief Economist, as well as presenting weekly weather and market briefings to the Office of the Secretary and the Mission Areas. WAOB staff also spoke on U.S. and world agriculture situation and outlook at numerous domestic and international commodity industry meetings. WAOB staff also recorded over 100 radio and television interviews following the release of various WAOB or other key USDA reports.

### OEPNU

- Coordinated Departmental energy and biobased chemicals and products policy, programs, and strategies by providing assessments, reports, briefings, speeches, control letters, and analyses;
- Provided U.S. leadership to the Organization for Economic Cooperation and Development's Working Party on Biotechnology, Nanotechnology and Convergent Technology;
- Continued to provide feedback to USDA's Departmental Management's in developing its labeling program for biobased products and biobased product designation for federal procurement—the BioPreferred program;
- Together with USDA's National Institute of Food and Agriculture, OEPNU administers the Biodiesel Fuel Education Program;
- Collaborated with academics and non-governmental organizations to provide research and analysis in support of the Chief Economist and the Office of the Secretary, including sponsoring conferences and workshops reaching out to and disseminating information to stakeholders;
- In collaboration with Rural Development, the Department of Energy, the EPA, and the U.S. Navy, provided analyses and assessments for feedstock pathways for the Renewable Fuel Standards (RFS) and related issues, the Biogas Opportunities Roadmap (a report to reduce methane gas emissions and improve energy independence), and the Defense Production Act initiative to stand-up alternative jet fuel production;
- Coordinated Departmental interaction with the EPA on the 2014 – 2016 Renewable Fuel Standards for Renewable Fuel Standard Program (RFS2): Drafts of the Proposed and Final Rulemaking of the Renewable Fuels Standards of the Energy Independence and Security Act of 2007; and
- Coordinated Departmental interaction with the EPA on new feedstock pathway analyses, including comments on proposed rulemaking.

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### ORACBA

- Performed substantive reviews of economic analyses and interim final regulations to improve nutrition, wellness, and cost control in USDA food assistance and school feeding programs, revised agricultural quarantine inspection user fees and food safety.
- Provided risk assessments and economic analyses supporting poultry performance standards, nutritional labeling and cooking instructions for meat and poultry, including economic and scientific reviews, control animal diseases, and protect endangered or threatened species; and
- Provided analysis to the Department and other Federal agencies to assess food safety risk of emerging hazards and evaluate environmental issues affecting agriculture and matters pertaining to agriculture and environmental quality (air and water quality), pesticide use, and endangered species, including scientific reviews of EPA chemical and pesticide risk assessments and environmental effects associated with the Food and Drug Administration Food Safety Modernization Act Produce Rule.

### Selected Accomplishments Expected at the 2017 Proposed Resource Level/Challenges for the Future:

The Chief Economist and IO, WAOB, OEPNU, and ORACBA expect to provide substantially the same level of support in 2017 to Departmental programs across all mission areas. Key expected accomplishments are:

#### Chief Economist and IO

- Provide analysis and advice to the Secretary in the areas of commodity and conservation programs, agricultural market conditions, climate change, alternative/renewable energy, biobased chemicals and products, agricultural labor, sustainable development, international trade agreements, risk-sharing institutions, and crop insurance;
- Testify before Congress and prepare analyses when requested for Members of Congress and their staffs on the effects of legislative proposals or other topics of interest;
- Chair the Board of Directors of the FCIC and the Capper-Volstead Act Committee;
- Represent the Department on U.S. delegations to international discussions of sustainable development, international trade, or other issues and provide objective assessments of the effects of proposals made in international forums that would affect agreements, treaties or other obligations of the Department;
- Lead and coordinate cross-mission area work on sustainable development, including chairing the USDA Council on Sustainable Development; and
- Support Departmental efforts on issues related to agricultural labor and immigration reform.

#### WAOB

- Issue 12 monthly *WASDE* reports;
- Deliver 52 weekly Weather and Economics Briefing reports to the Chief Economist and senior staff;
- Issue daily national agricultural weather summaries;
- On a rotating basis, prepare issues of the weekly *U.S. Drought Monitor*, produced jointly with the National Weather Service and the National Drought Mitigation Center in Nebraska;
- Organize the annual USDA Agricultural Outlook Forum; and
- Prepare economic assessments of current issues or weather events at the request of the Chief Economist or other senior Department staff, and coordinate the annual 10-year baseline commodity projection exercise.

#### OEPNU

- Coordinate Departmental energy and biobased chemicals and products policy, programs, and strategies by providing assessments, reports, briefings, speeches, and analyses for senior USDA staff and other policymakers;
- Continue cooperative research activities on renewable energy and biobased products with academic and other institutions, expanding understanding of bioenergy and biobased feedstock markets;
- Continue to work with the EPA on annual RFS volume setting and on new feedstock pathways for renewable fuels production; and
- Sponsor or coordinate 1-2 workshops a year that focus on issues impacting the bioeconomy.

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ORACBA

- Review approximately 50 cost-benefit analyses and risk assessments; and
- Produce 10 issues of *ORACBA News* and hold periodic risk forum training seminars.

Key Outcome: Make substantial progress in the development of technical water quality metrics and guidelines that can meet the needs of emerging environmental markets.

Key Performance Measures and Targets:

- (1) Prepare technical reports on issues related to farmer and landowner participation in emerging environmental markets. The target performance for 2017 is 3 reports.
- (2) Develop national water quality metrics for agriculture. The target performance for 2017 is 60 percent completion of the water quality metrics.

Annual Performance Goals, Indicators, and Trends	Actual				Target	Actual	Result	Estimate/Target	Target
	2011	2012	2013	2014	2015		2016	2017	
Technical reports completed on issues related to farmer and landowner participation in emerging environmental markets.	New Program	Est. Baseline	3	3	3	3	Met	3	3
Dollars (in thousands)	\$339	\$254	\$367	\$587	\$550	\$550	Met	\$535	\$538
Allowable Data Range for Met: Target is considered met if actual is within 5% of target.									
Data Source – Manual count of the number of reports published.									
Completeness of Data – Reports are counted, so the data is complete.									
Reliability of Data – The data collected is reliable. The data was counted not sampled.									
Quality of Data – The quality of data is satisfactory.									

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Annual Performance Goals, Indicators, and Trends	Actual				Target	Actual	Result	Estimate/Target	Target
	2011	2012	2013	2014	2015		2016	2017	
Percentage completion of national water quality technical metrics for agriculture	N/A	N/A	N/A	10%	20%	20%	Met	50%	60%
Dollars (in thousands)	\$0	\$0	\$0	\$475	\$475	\$475	Met	\$475	\$478
Allowable Data Range for Met: Target is considered met if actual is within 5% of target.									
Data Source – Estimate of percentage completion by the OCE Office Director managing the program.									
Completeness of Data – The data that is collected is complete, in that the deliverables or milestones completed are counted.									
Reliability of Data – The data collected is reliable, as the number of project deliverables or milestones completed can be counted.									
Quality of Data – The quality of data is satisfactory, though some judgment is required to determine “percent completion” as not all deliverables or milestones require the same level of effort.									

Selected Past Accomplishments toward Achievement of the Key Outcome in FY 2015:

OEM staff engaged stakeholders to sustain support for the development of uniform standards and market infrastructure that will facilitate market-based approaches to agriculture, forest, and rangeland conservation. Selected past accomplishments include:

- Convened monthly meetings of the USDA Environmental Markets Workgroup and facilitated an update of the USDA Environmental Markets Strategy with an increased emphasis on coordinating USDA tool and metric development and a new focus on generating market demand;
- Supported development of issue papers on increasing opportunities for forest landowners to participate in environmental markets, establishing clear and consistent verification standards for environmental markets, and building Total Maximum Daily Loads (TMDL) to better support opportunities for trading;
- Led inter-agency efforts and funded cooperative agreements to improve existing water quality and greenhouse gas (GHG) quantification and decision support tools, establish a joint USDA-Environmental Protection Agency (EPA) information toolkit for water quality trading and offset programs, and develop a guide for biodiversity and habitat trading with the U.S. Geologic Survey;
- Initiated a new cooperative agreement to develop an environmental markets mapping and decision support tool that integrates data from water, carbon, and biodiversity projects and policy related to environmental markets for EnviroAtlas, a Federally-managed ecosystem services data platform;
- Led environmental market development efforts under the Chesapeake Bay Executive Order Strategy by convening monthly meetings of the Interagency Environmental Markets Team to facilitate collaboration among 12 Federal agencies, as well as sponsoring the development of an analysis of public administration costs of nutrient trading programs in the Chesapeake Bay and issuing papers on reducing the complexity and administrative burden of operating trading programs and how differences in water quality credit trading tools and rules may impact water quality trading efforts in the Chesapeake Bay; and



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Selected Accomplishments Expected at the 2017 Proposed Resource Level/Challenges for the Future:

OEM expects to provide substantially the same level of support to the Department in 2017 to accelerate USDA efforts to develop uniform standards and market infrastructure necessary to facilitate market-based approaches to agriculture, forest, and rangeland conservation. Key expected accomplishments are:

- Provide administrative and technical assistance to the Secretary in implementing Section 2709 of the 2008 Farm Bill by supporting the development of guidelines for market infrastructure that will facilitate market-based approaches to agriculture, forest, and rangeland conservation;
- Catalyze development of the infrastructure for environmental markets; and
- Accelerate integration of shared national water quality and GHG tools and metrics needed to facilitate environmental markets.

**USDA Strategic Goal 2: Ensure our national forests and private working lands are conserved, restored, and made more resilient to climate change, while enhancing our water resources**

**USDA Strategic Objective 2.2: Lead efforts to mitigate and adapt to climate change, drought, and extreme weather in agriculture and forestry**

Agency Strategic Goal	Agency Objectives	Programs that Contribute	Key Outcome
Coordinate Departmental climate change policy, programs, products, and strategies.	Coordinate USDA climate change policy, programs, and products. Develop regional climate change decision support tools.	Climate Change Program Office (CCPO)	Increased resilience of U.S. farms to climate change; increased participation of farmers, ranchers, and forest landowners in GHG markets; and increased use of non-market incentives for GHG reductions.

Key Outcome: Increased resilience to climate change and increased participation of farmers, ranchers, and forest landowners in GHG mitigations actions.

Key Performance Measures and Targets:

- (1) The Secretary of Agriculture and other senior USDA leadership are satisfied with CCPO climate change policy analysis and coordination activities. Measurement of the performance of CCPO is qualitative and is provided by direct feedback from the Chief Economist and other senior USDA leadership. The baseline performance is providing excellent climate change policy analysis and coordination. The target performance is to continue to provide excellent climate change policy analysis and coordination.
- (2) Percent completion of development of regional climate change decision support tools. The target performance for 2017 is 100 percent completion of the regional decision support tools.

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Annual Performance Goals, Indicators, and Trends	Actual				Target	Actual	Result	Estimate/Target	Target
	2011	2012	2013	2014	2015		2016	2017	
Percent completion of development of regional climate change decision support tools.	N/A	N/A	N/A	10%	60%	60%	Met	85%	100%
Dollars (in thousands)	\$495	\$1,092	\$629	\$1,190	\$1,735	\$1,735	Met	\$1,621	\$1,665
Allowable Data Range for Met: Not Applicable.									
Data Source – Estimate of percent completion by the OCE Office Director managing the program.									
Completeness of Data – The data that is collected is complete, in that the deliverables or milestones completed are counted.									
Reliability of Data – The data collected is reliable, as the number of project deliverables or milestones completed can be counted.									
Quality of Data – The quality of data is satisfactory, though some judgment is required to determine “percent completion” as not all deliverables or milestones require the same level of effort.									

Selected Past Accomplishments toward Achievement of the Key Outcome in FY 2015:

CCPO staff coordinated USDA climate change policy, programs and strategies and made good progress on the program to establish technical guidelines to measure the GHG benefits from conservation and land management activities. Selected past accomplishments include:

- Updated the Departmental Regulation that governed the preparation of the USDA Climate Change Adaptation Plan. Worked with agencies to implement specific actions and processes outlined in the Plan to improve resilience and reduce risks from climate variability and change;
- Coordinated the continued development of seven Regional Climate Hubs and three Sub-Hubs, which will serve as a resource for USDA programs and field offices on climate preparedness and planning and provide guidance and technical information on practical steps needed to build climate resilience into USDA programs and operations;
- Oversaw the production of a report that contributed to the National Climate Assessment focused on Climate Change, Global Food Security, and the U.S. Food System.
- Served as a Department-wide coordinator for agriculture, rural, and forestry-related climate change issues and activities, including releasing new GHG estimation methods for use at the farm and forest land scales which are being used by individuals, resource professionals, state governments and program managers to assess options for reducing GHG emissions and conserving and enhancing carbon stocks;
- Chaired the USDA Global Change Task Force, utilizing the task force to ensure that all USDA agencies with a responsibility for climate change are kept informed of Departmental and Administration priorities and are included in reviews, assessments, analyses, and communication efforts;
- Represented the Department in international climate change negotiations, including leading USDA’s efforts to implement a new international partnership called the Global Alliance on Climate Smart Agriculture;
- Represented the Department at the 20th Session of the United Nations Framework Convention on Climate Change and made progress addressing issues related to climate change and agriculture, continued to advance the

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work of the Global Research Alliance, and coordinated USDA contributions to the 6th U.S. Climate Action Report;

- Continued the multi-year effort to develop science-based methods and technical guidelines for quantifying GHG sources and sinks in the forest and agriculture sectors; and
- Completed work on a contract report that developed farm-level costs of adopting specific GHG mitigating production technologies and land management practices.

### Selected Accomplishments Expected at the 2017 Proposed Resource Level/Challenges for the Future:

With new initiative funding of \$500,000, CCPO expects to provide a greater level of support to the Department in 2017. It will provide oversight of USDA-wide efforts to integrate climate change adaptation planning and actions into USDA programs, policies, and operations—providing USDA managers and staff with better access to regional climate change information and projections, as well as developing the analytical capacity to project GHG emissions from agricultural and forestry lands. Key expected accomplishments are:

- Develop user-friendly tools to facilitate easy access to the revised technical greenhouse gas reporting guidelines to meet the needs of voluntary greenhouse gas registries, State Registries, and USDA programs;
- Support U.S. government efforts under the United Nations Framework Convention on Climate Change, the Global Research Alliance, and other international venues as requested by the U.S. Department of State;
- Coordinate Departmental climate change policy, programs, strategies, and products;
- Ensure that USDA is providing GHG inventory information and projections, and program information for US reporting under the UN Framework Convention on Climate Change;
- Conduct analysis, long range planning, research, and response strategies related to climate change mitigation and adaptation and liaison with other Federal agencies;
- Coordinate with Natural Resources Conservation Service, Forest Service, Rural Development, and Farm Service Agency in implementing the USDA Building Blocks for Climate Smart Agriculture and Forestry which will integrate greenhouse gas considerations into USDA conservation programs;
- Support the Secretary in the coordination of the 7 regional climate change hubs; and
- Provide projections of GHG emissions and carbon sequestration from agricultural and forest lands—enabling USDA to assess the benefits of expenditures on conservation and energy programs that reduce GHG emissions and track progress in meeting domestic goals for GHG mitigation.

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Strategic Goal and Objectives Funding Matrix  
(Dollars in thousands)

Program/ Program Items	2014 Actual	2015 Actual	2016 Estimate	Change	2017 Estimate
<b>Department Strategic Goal 1:</b> Assist Rural Communities to Create Prosperity so They are Self-Sustaining, Repopulating, and Economically Thriving.					
<b>Department Objective 1.2:</b> Increase agricultural opportunities by ensuring a robust safety net, creating new markets, and supporting a competitive agricultural system.					
<b>Department Objective 1.3:</b> Contribute to the expansion of the bioeconomy by supporting development, production, and consumption of renewable energy and biobased products.					
Immediate Office.....	\$6,774	\$7,257	\$7,605	-\$789	\$6,816
Staff Years.....	7	7	9	+1	10
World Agricultural Outlook Board.....	4,566	4,373	4,672	+108	4,780
Staff Years.....	25	23	26	-	26
Office of Environmental Markets.....	1,083	1,038	1,010	+6	1,016
Staff Years.....	2	3	3	-	3
Office of Energy Policy and New Uses.....	1,995	1,923	1,952	+81	2,033
Staff Years.....	4	4	5	-	5
Office of Risk Assessment and Cost-Benefit Analysis..	814	1,015	919	+13	932
Staff Years.....	5	5	5	-	5
Total Costs, Strategic Goal.....	15,232	15,606	16,158	-594	15,577
Total Staff Years, Strategic Goal.....	43	42	48	+1	49
<b>Department Strategic Goal 2:</b> Ensure Our National Forests and Private Working Lands are Conserved, Restored, and Made More Resilient to Climate Change, While Enhancing Our Water Resources.					
<b>Department Objective 2.2:</b> Lead efforts to mitigate and adapt to climate change, drought, and extreme weather in agriculture and forestry.					
Climate Change Program Office.....	2,545	2,698	2,551	+464	3,015
Staff Years.....	5	6	6	-	6
Total Costs, Strategic Goal.....	2,545	2,698	2,551	+464	3,015
Total Staff Years, Strategic Goal.....	5	6	6	-	6
Total Costs, All Strategic Goals.....	17,777	18,304	18,709	-117	18,592
Total FTEs, All Strategic Goals.....	48	48	54	+1	55

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Full Cost by Department Strategic Goal

(Dollars in thousands)

**Department Strategic Goal 1: Assist Rural Communities to Create Prosperity so They are Self-Sustaining, Repopulating, and Economically Thriving.**

Program/ Program Items	2014 Actual	2015 Actual	2016 Estimate	2017 Estimate
<u>Immediate Office</u>				
Economic Analysis.....	\$2,279	\$2,206	\$2,241	\$2,275
Sustainable Development, Agricultural Labor, Food Waste.....	359	363	364	541
Agricultural Policy Research Centers.....	4,000	4,000	4,000	4,000
Undersecretary of Agricultural Trade Study.....	-	600	-	-
Undersecretary of Agricultural Trade Implementation Plan.....	-	-	1,000	-
Total Costs.....	6,638	7,169	7,605	6,816
FTEs.....	7	7	9	10
<u>Office of Energy Policy and New Uses</u>				
Bio-/Renewable Energy/Biobased Product Analysis.....	867	876	908	971
Biodiesel Fuel Education Program.....	1,059	986	993	1,062
Increase Biobased Product Purchases/Labeling.....	49	49	51	-
Total Costs.....	1,975	1,911	1,952	2,033
FTEs.....	4	4	5	5
<u>Office of Risk Assessment and Cost-Benefit Analysis</u>				
Review Regulatory Impact Analyses.....	251	326	295	300
Review Risk Assessments/Economic Analyses.....	359	410	423	429
Risk Seminars, Training, and Research Collaboration.....	187	266	201	203
Total Costs.....	797	1,002	919	932
FTEs.....	5	5	5	5
<u>World Agricultural Outlook Board</u>				
WASDE Reports Issued.....	3,401	3,283	3,551	3,633
Weekly Weather and Crop Bulletins Issued.....	376	363	392	401
Weather/Crop Impact Assessments.....	698	674	729	746
Total Costs.....	4,475	4,320	4,672	4,780
FTEs.....	25	23	26	26
Performance Measure:				
WASDE reports issued.....	11	12	12	12
Cost per measure (unit cost).....	309	274	296	303

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Office of Environmental Markets

Support Development of Environmental Markets.....	587	550	535	538
Develop national Water Quality Metrics for Agriculture.....	475	475	475	478
Total Costs.....	1,062	1,025	1,010	1,016
FTEs.....	2	3	3	3
Performance Measure:				
Prepare technical reports on farmer and landowner participation in emerging environmental markets.....	3	3	3	3
Cost per measure (unit cost).....	587	550	535	538
Percent completion of national water quality technical metrics for agriculture.....	10%	20%	50%	60%
Cost per measure (unit cost).....	48	48	16	48
Total Costs, Strategic Goal.....	14,947	15,427	16,158	15,577
Total FTEs, Strategic Goal.....	43	42	48	49

**Department Strategic Goal 2: Ensure Our National Forests and Private Working Lands are Conserved, Restored, and Made More Resilient to Climate Change, While Enhancing Our Water Resources.**

Program/ Program Items	2014	2015	2016	2017
	Actual	Actual	Estimate	Estimate
<u>Climate Change Program Office</u>				
Coordinate USDA Climate Change Policy, Prgms, Prdcts.....	\$585	\$803	\$689	\$765
Climate Change Mitigation Analysis, Advice, Projections.....	649	930	930	850
Establish Greenhouse Gas Guidelines, Tools.....	655	-	-	-
Develop Regional Climate Change Decision Support Tools.....	605	932	932	900
Project GHG Emissions from Agriculture and Forest Lands.....	-	-	-	500
Total Costs.....	2,494	2,665	2,551	3,015
FTEs.....	5	6	6	6
Performance Measure:				
Percent completion of development of regional climate change decision support tools.....	10%	60%	85%	100%
Cost per measure (unit cost).....	61	19	37	60
Total Costs, Strategic Goal.....	2,494	2,665	2,551	3,015
Total FTEs, Strategic Goal.....	5	6	6	6
Total Costs, All Strategic Goals.....	17,441	18,092	18,709	18,592
Total FTEs, All Strategic Goals.....	48	48	54	55