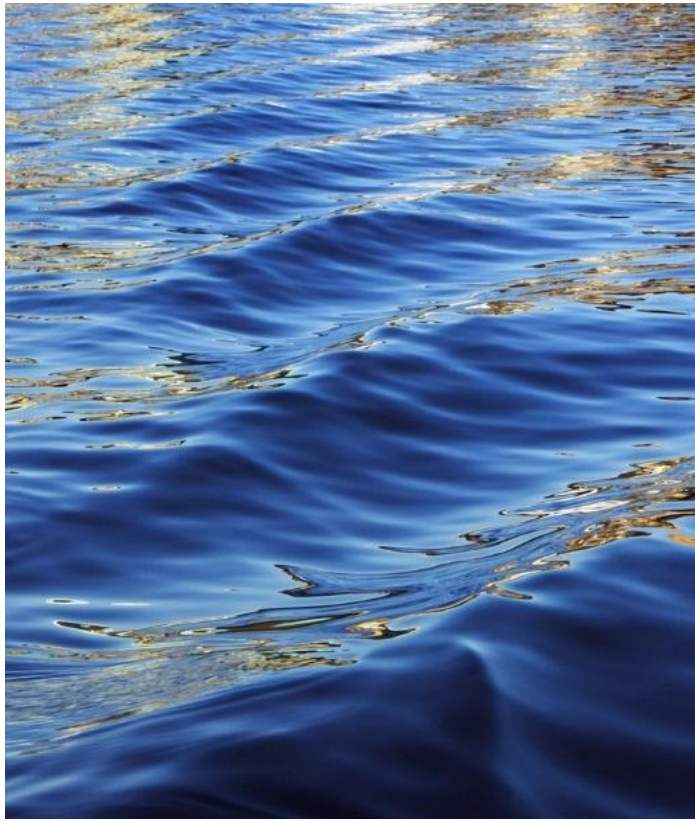
USDA Climate Change Strategy

William Hohenstein

Director, Office of Energy and Environmental Policy

US Department of Agriculture



U.S. Economy-Wide Climate Change Goals

- The Biden-Harris Administration has called for a whole-of-government approach to achieve **net-zero greenhouse gas emissions economy-wide by 2050**, which scientists say is required to avoid the worst impacts of climate change.

- In its Nationally Determined Contribution (NDC) to the UNFCCC in April 2021, the U.S. committed to an **economy-wide target of reducing its net greenhouse gas emissions by 50-52 percent below 2005 levels in 2030.**

- Achieving these climate goals, particularly the 2030 benchmark, will take ambitious action in the next 8 years. This will require broad engagement and action across the Department.

USDA's Approach to addressing climate change

USDA Climate Priorities

- Climate-Smart Agriculture
  - Leverage Existing Programs
  - New Partnerships Program
- Climate-Smart Forestry
- Quantification and Metrics
- Adaptation and Resilience
- Build a Climate-Informed Workforce
- Research and Development
- Clean Energy and Energy Efficiency for Rural America
- Equity and Environmental Justice
- International Cooperation

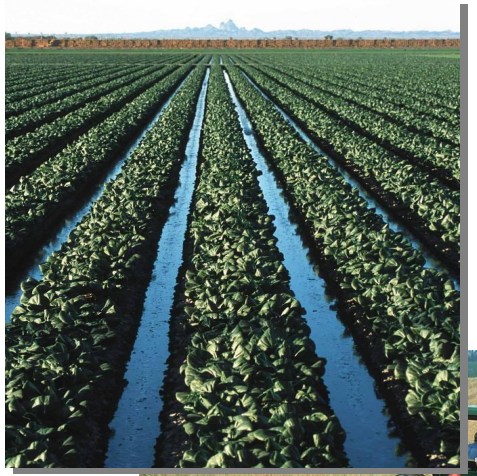
USDA Climate Principles:

- Comprehensive
- Voluntary and Incentive-Based
- Equitable
- Accessible
- Cost-Effective
- Leverage Public-Private Partnership
- Support Rural Jobs and Economies

Achieving this potential implies a transformation within the Agriculture Sector

Croplands

- Millions new acres of conservation tillage and reduced field pass intensity
- Doubling the adoption of cover cropping, double cropping, and reducing dry land fallow
- Enhanced efficiency fertilizers, nitrogen inhibitors, and variable rate application on millions acres
- Millions of acres of new buffers, wind breaks, and grassland conservation
- Reducing the frequency and duration of flooding of rice paddies on a million + acres



Animal Agriculture

- Several hundred new anaerobic digesters
- Thousands covers on anaerobic lagoons
- Millions of acres of improved and rotational grazing
- Commercially available and widely adopted improved feed management and effective feed additives

Expanding Investment in Climate Smart Agriculture and Forestry

Existing Farm Bill Title II Conservation and Title IX Energy programs

- Integrating GHG benefits into programs
- Tracking progress through reporting

Expansion of Farm Bill Title II through 2022 IRA

- 19+ Billion in funding for conservation
- Additional funding for on-farm energy projects
- Targeting GHG benefits
- Focus on MMRV

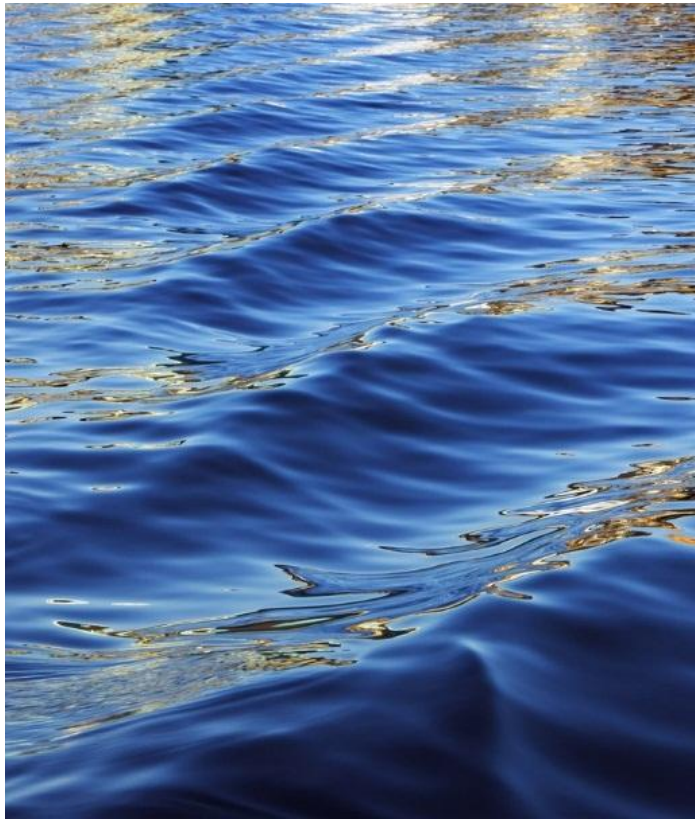
Partnerships for Climate Smart Commodities

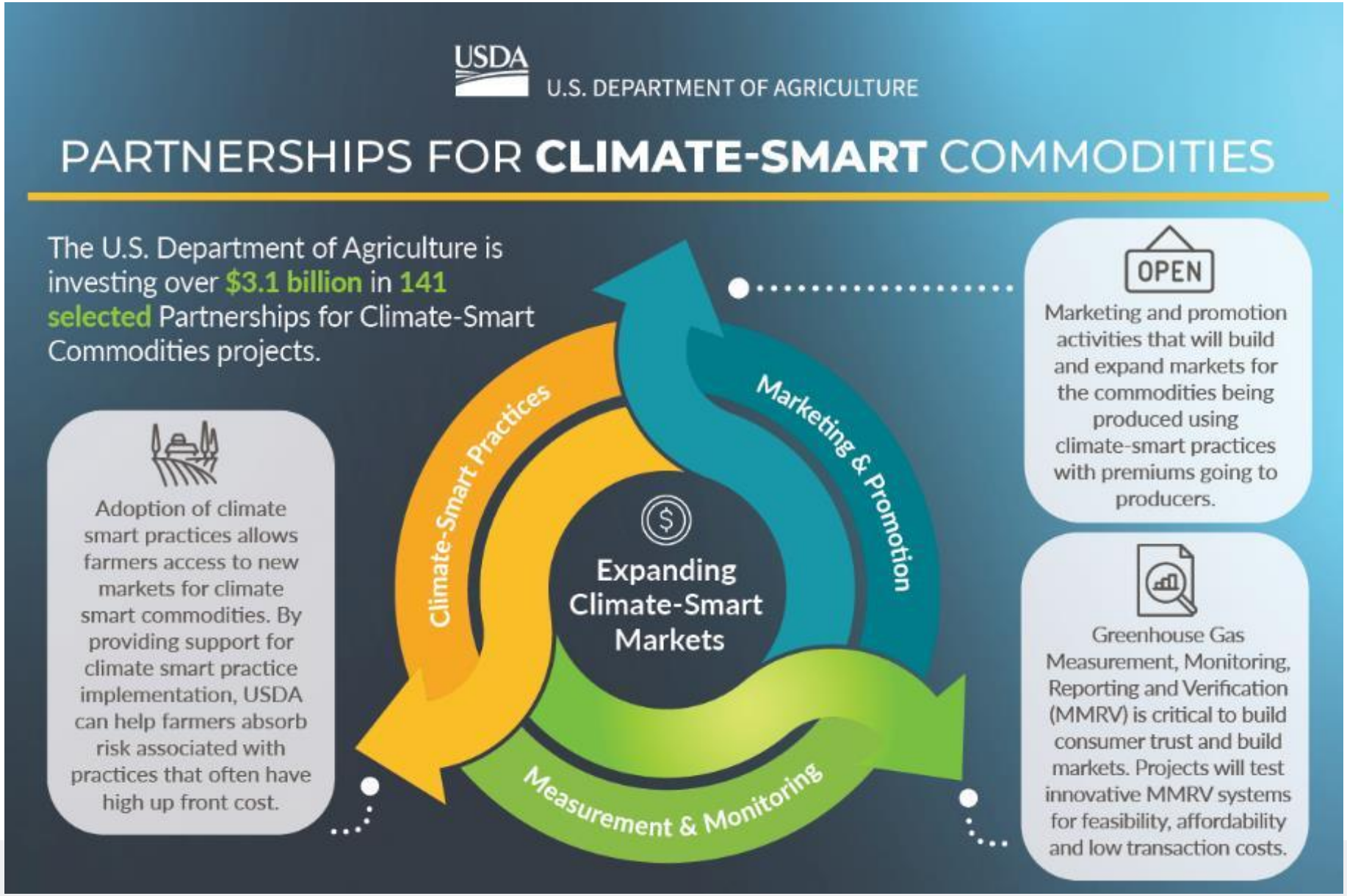
- Leverage consumer demand
- Private Sector supply chains
- Returning value to producers

Facilitate Private Carbon Offset Markets

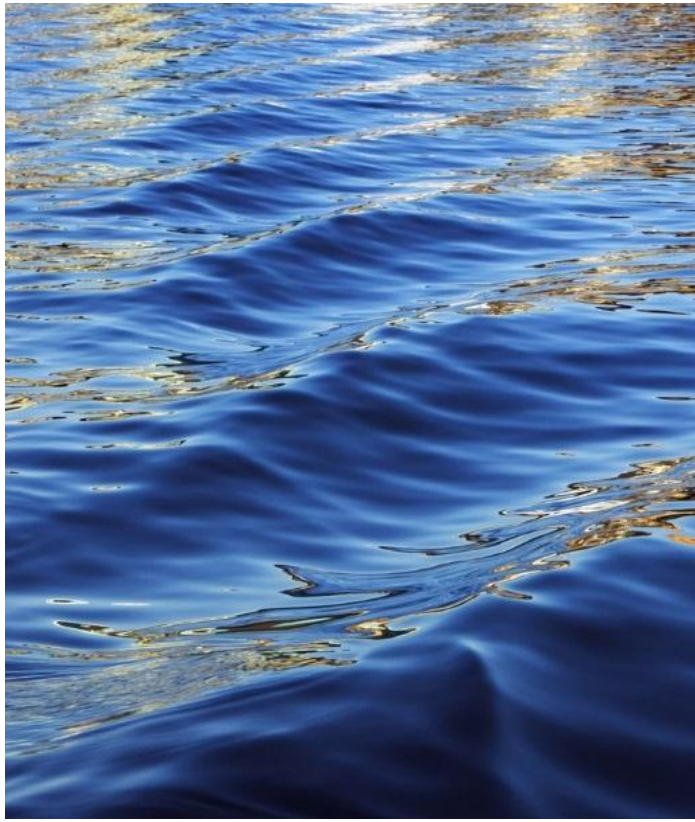
- Quantification systems/MMRV
- Pilots and demonstrations
- Reducing confusion
- Lowering transaction costs

Partnerships for Climate-Smart Commodities




USDA
U.S. DEPARTMENT OF AGRICULTURE
PARTNERSHIPS FOR CLIMATE-SMART COMMODITIES
The U.S. Department of Agriculture is investing over $3.1 billion in 141 selected Partnerships for Climate-Smart Commodities projects.
Adoption of climate smart practices allows farmers access to new markets for climate smart commodities. By providing support for climate smart practice implementation, USDA can help farmers absorb risk associated with practices that often have high up front cost.
Climate-Smart Practices
Marketing & Promotion
Measurement & Monitoring
Expanding Climate-Smart Markets
OPEN
Marketing and promotion activities that will build and expand markets for the commodities being produced using climate-smart practices with premiums going to producers.
Greenhouse Gas Measurement, Monitoring, Reporting and Verification (MMRV) is critical to build consumer trust and build markets. Projects will test innovative MMRV systems for feasibility, affordability and low transaction costs.

Climate Elements of the Inflation Reduction Act



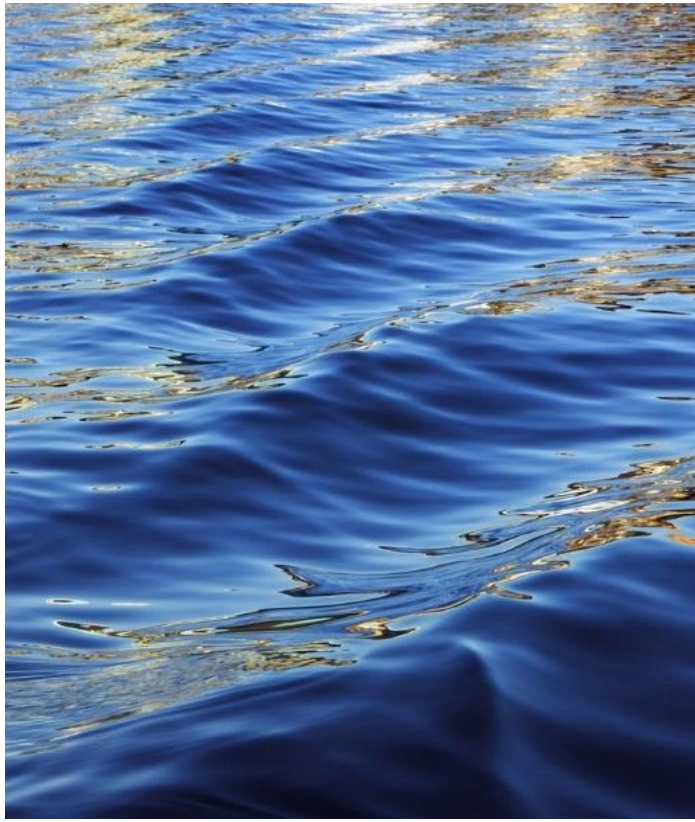
USDA U.S. DEPARTMENT OF AGRICULTURE

The Inflation Reduction Act (IRA) and USDA:

Creating Opportunity and Addressing Climate Change through Investments in Agriculture and Rural Communities

- *Nearly **$40 billion** for USDA over the next 10 years to improve life and livelihoods in rural communities.*
- Specific investments include:
  - **$19.3 billion** for climate-smart agriculture on farms, ranches, and forests
  - **$13.4 billion** to lower costs for families and support good-paying clean energy jobs in rural communities
  - **$5 billion** to protect communities from wildfires and conserve forests
- Investments will provide new sources of on-farm income and employment in rural communities, reduce energy costs, and help secure and strengthen American agriculture in the face of climate change, all while achieving significant reductions in greenhouse gas emissions.

FY 2023 Omnibus Budget



authorities to promote private sector investment in GHG Mitigation

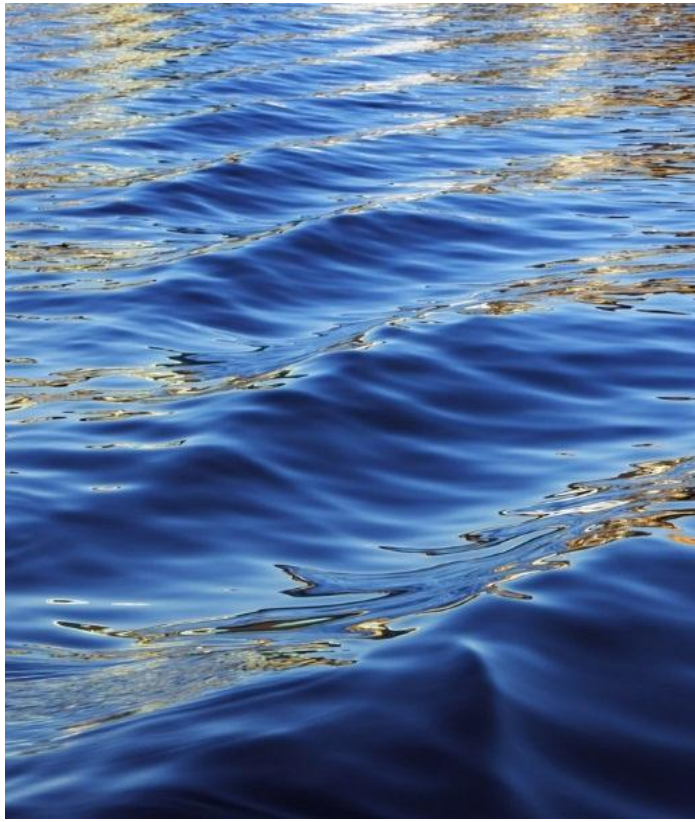
The Greenhouse Gas Technical Assistance Provider and Third-Party Verifier Program (Growing Climate Solutions Act)

- USDA will evaluate and publish a list of recognized protocols for voluntary agriculture or forestry carbon credit markets;
- USDA will register:
  - Technical assistance providers
  - Independent verifiers
- Provide information to farmers participating in voluntary environmental credit markets

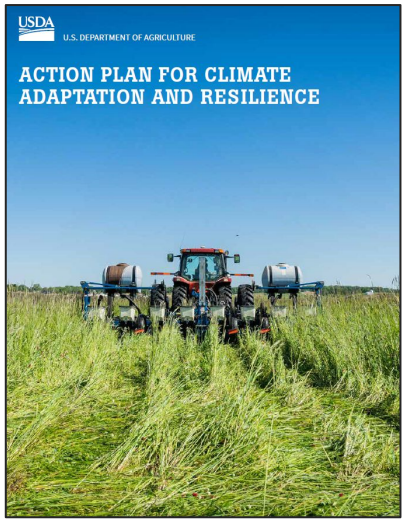
Sustainability Targets in Agriculture to Incentivize Natural Solutions Act (SUSTAINS)

- Grants the Secretary broad authorities to accept contributions of funds to address climate change, improve wildlife habitat, protect drinking water, and address other natural resource priorities.
- "Contributing entities," or private fund contributors, may decide:
  - The USDA program to contribute to;
  - The geographic area to contribute to;
  - Which natural resource concern to address; and

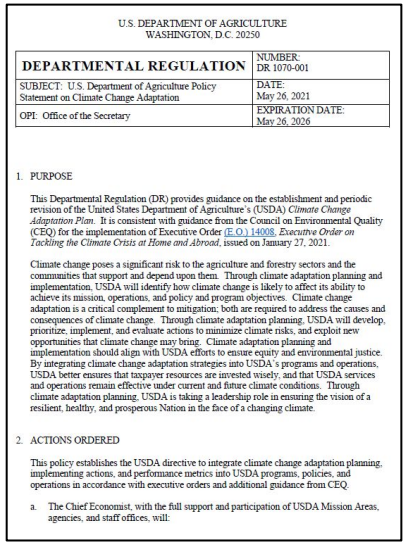
Climate Adaptation and USDA



Climate Adaptation at USDA



October 2021



U.S. DEPARTMENT OF AGRICULTURE
WASHINGTON, D.C. 20250

DEPARTMENTAL REGULATION	NUMBER: DR 1070-001
SUBJECT: U.S. Department of Agriculture Policy Statement on Climate Change Adaptation	DATE: May 26, 2021
OPI: Office of the Secretary	EXPIRATION DATE: May 26, 2026

1. PURPOSE

This Departmental Regulation (DR) provides guidance on the establishment and periodic revision of the United States Department of Agriculture's (USDA) *Climate Change Adaptation Plan*. It is consistent with guidance from the Council on Environmental Quality (CEQ) for the implementation of Executive Order [E.O.] 14008, *Executive Order on Tackling the Climate Crisis at Home and Abroad*, issued on January 27, 2021.

Climate change poses a significant risk to the agriculture and forestry sectors and the communities that support and depend upon them. Through climate adaptation planning and implementation, USDA will identify how climate change is likely to affect its ability to achieve its mission, operations, and policy and program objectives. Climate change adaptation is a critical complement to mitigation; both are required to address the causes and consequences of climate change. Through climate adaptation planning, USDA will develop, prioritize, implement, and evaluate actions to minimize climate risks, and exploit new opportunities that climate change may bring. Climate adaptation planning and implementation should align with USDA efforts to ensure equity and environmental justice. By integrating climate change adaptation strategies into USDA's programs and operations, USDA better ensures that taxpayer resources are invested wisely, and that USDA services and operations remain effective under current and future climate conditions. Through climate adaptation planning, USDA is taking a leadership role in ensuring the vision of a resilient, healthy, and prosperous Nation in the face of a changing climate.

2. ACTIONS ORDERED

This policy establishes the USDA directive to integrate climate change adaptation planning, implementing actions, and performance metrics into USDA programs, policies, and operations in accordance with executive orders and additional guidance from CEQ.

a. The Chief Economist, with the full support and participation of USDA Mission Areas, agencies, and staff offices, will:

"Climate change poses a significant risk to the agriculture and forestry sectors and the communities that support and depend upon them. Through climate adaptation planning and implementation, USDA will identify how climate change is likely to affect its ability to achieve its mission, operations, and policy and program objectives." USDA DR 1070-001

Climate Vulnerabilities

Decreased agricultural productivity

Threat to water quantity and quality

Disproportionate impacts on vulnerable communities

Shocks due to extreme climate events

Stress on infrastructure and public lands

USDA's Adaptation Actions

Build resilience to climate change with investments in soil and forest health

Broaden access and availability of climate data

Increase support for research and development of climate-smart practices and technologies

Increase outreach and education to promote adoption of climate-smart strategies

Leverage the USDA Climate Hubs to support USDA Mission Areas