



Department of
Agriculture and Markets

AGRICULTURAL ENVIRONMENTAL MANAGEMENT (AEM)

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DIV. OF LAND & WATER RESOURCES AND
NYS SOIL & WATER CONSERVATION COMMITTEE

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WELL-MANAGED AGRICULTURE AS SUSTAINABLE DEVELOPMENT

Local food and beverage, horticulture, fiber, forest products, therapeutics, and energy +

- Economic growth
 - Locally-based transactions
- Jobs
- Taxes paid by farms >> services used
- Conservation and resiliency:
 - Habitat and wildlife corridors
 - Unpaved open space
 - Resiliency for extreme storms, drought, and heat
 - Ag is green infrastructure on a broad scale
 - Water and air quality
 - Soil health / function
 - Greenhouse gas mitigation
 - Recycling
- Tourism
 - Scenic vistas / Agricultural vistas
- Quality of life / sense of place



AGRICULTURAL ENVIRONMENTAL MANAGEMENT (AEM)

Core Concepts

- Open to all farmers
- Voluntary, incentive-based
- Locally-led & delivered
 - Farmers
 - Soil & Water Conservation Districts
 - Agri-Business / Service Providers / CCAs
 - Cornell Cooperative Extension
 - Natural Resources Conservation Service
 - Farm Service Agency
 - Farmer Organizations
 - Other Government Partners
 - NGOs

- Prioritized based on natural resource needs, local AEM Strategic Plans, and farmer goals
- Customized with farm-specific plans
 - Science-based (NRCS Stds) and feasible
 - **Wide range of practice systems**
- Trust and relationship building
 - **Farmers make decisions for their farms and the environment**
- Leads to practice adoption
- Promotes teamwork and coordination
- Adaptive to future priorities



AEM FIVE-TIER APPROACH



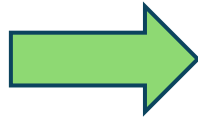
AEM Tier	Purpose	People
Tier 1 – Inventory (Questionnaire)	Basic info and interests from the farmer	Farmers and District Planners
Tier 2 – Environmental Assessment (“Tier 2 Worksheets”)	Walk the farm and discuss stewardship, management concerns, and opportunities for improvements	Farmers and District Planners
Tier 3 – Conservation Planning	Develop conservation plans	Farmers, District Planners, Specialists
Tier 4 – Practice Implementation	Implement conservation practices based on the plans	Farmers, District Planners, Specialists, Engineers, Contractors, Permitters
Tier 5 – Evaluation and Updates	Evaluate/update plans, practices, and programs	Farmers and District Planners



AEM TIER 3 PLANS AND TIER 4 PROJECT EXAMPLES

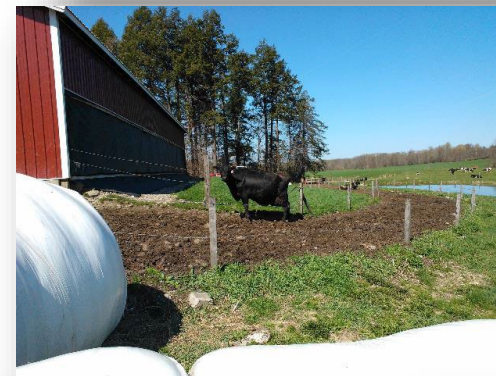
AEM Tier 3 Plan Types

- Farmstead
- Soil Health
- Nutrient Management
- Pasture / Grazing
- Forest
- Stream Corridor
- Pest
- + combinations from above



AEM Tier 4 Practices (examples)

- Cover Crops
- Soil Carbon Amendment
- Grazing
- Nutrient Management
- Conservation Crop Rotation
- Tree Planting
- Stream Corridors/Buffers
- Wetlands
- Forestry/Tree Planting
- Pollinator Habitat
- Barnyards
- Composting
- Irrigation / Ponds
- Pesticide Facilities
- Petroleum Storage
- Water Diversions
- + many more



AG BMP SYSTEMS CATALOGUE

BMP SYSTEM NAME	BMP SYSTEM NAME
Access Control System	Pathogen Management System
Agrichemical Handling and Storage System	Petroleum and Oil Products Storage System
Composting System – Animal	Prescribed Rotational Grazing System
Erosion Control System – Structural	Process Wash Water Management System
Feed Management System	Riparian Buffer System
Forestry / Agroforestry System	Short Term Waste Collection and Transfer System
Integrated Pest Management System	Silage Leachate Control and Treatment System
Irrigation Water Management System	Soil Health System
Livestock Heavy Use Area Runoff Management System	Stream Corridor and Shoreline Management System
Manure and Agricultural Waste Treatment System	Waste Storage and Transfer System
Nutrient Management System – Cultural	<i>More to come...</i>



Ag BMP
Systems
Catalogue

FUNDING PROGRAMS TO HELP ADVANCE AEM ON FARMS

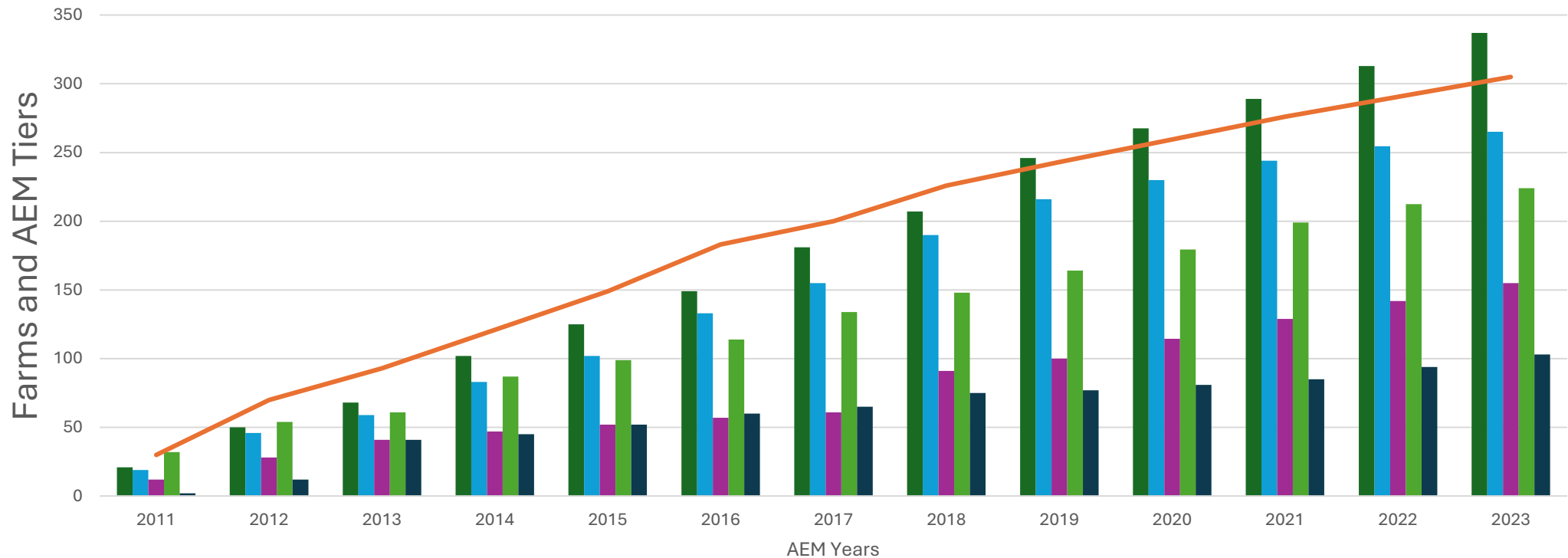


SWCD Directory

- Locally-led and sponsored by your **Soil & Water Conservation District** to support planning, implementation, and adoption of BMP Systems
 - Funded through via the NYS AGM / NYS Soil and Water Conservation Committee
 - New rounds offered annually
 - AEM participation is a pre-requisite for cost-share funding
 - **AEM Base Program**
 - **Agricultural Non-Point Source Pollution Abatement and Control Program (AgNPS)**
 - **Climate Resilient Farming (CRF)**
 - **CAFO Enhanced Nutrient and Methane Management Program (CAFO ENMP)**
 - **Source Water Buffer Program**
 - **Ecosystem Based Management (EBM) Programs**
- **Eastern Finger Lakes Coalition of Soil and Water Conservation Districts**
- Other Programs from NYSAGM (Farmland Protection Grants), NYSDEC, USDA-NRCS (EQIP, CSP), USDA-FSA, Cornell PRO-DAIRY (Dairy Advancement Program), USEPA, and others....
- + Significant, on-going investment by farmers.

AEM PROGRESS THROUGH THE TIERS – CAYUGA LAKE WATERSHED

Cumulative Number of Farms and AEM Tiers in the Cayuga Lake Watershed (2011-2023)



- Tier 1 Inventory
- Tier 2 Assessment
- Tier 3 Conservation Plan
- Tier 4 Implementation
- Tier 5 Follow Up/Plan Updates
- Farms in AEM

AEM PROGRESS THROUGH THE TIERS

May 2005 – December 2023

AEM Tiers	Statewide AEM Tier Work	Cayuga Lake Watershed AEM Tier Work
Tier 1 Inventory	12,597	337
Tier 2 Assessments	7,794	265
Tier 3 Plans	5,154	155
Tier 4 BMP Systems	Over 5,000 BMP Systems on 3,500 farms	298 BMP Systems on 264 farms
Tier 5A Assessment Updates	2,453	27
Tier 5B Plan/BMP Evaluations	5,923	76

- Need to better capture BMPs by farmers without programs.

- Approx. doubled if USDA funded projects included.

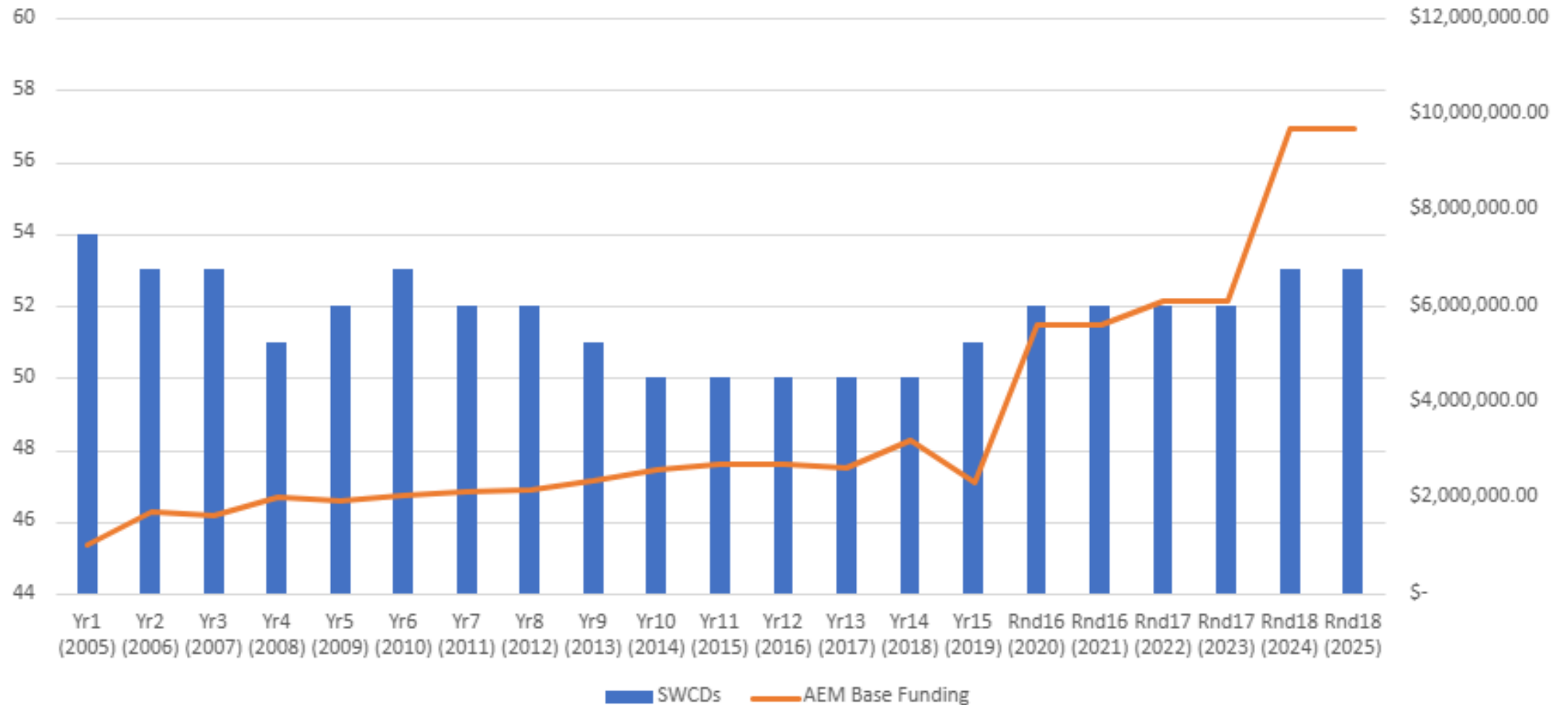
- Approx. half of all commercial farms are in AEM.



Prescribed Grazing System & Buffers

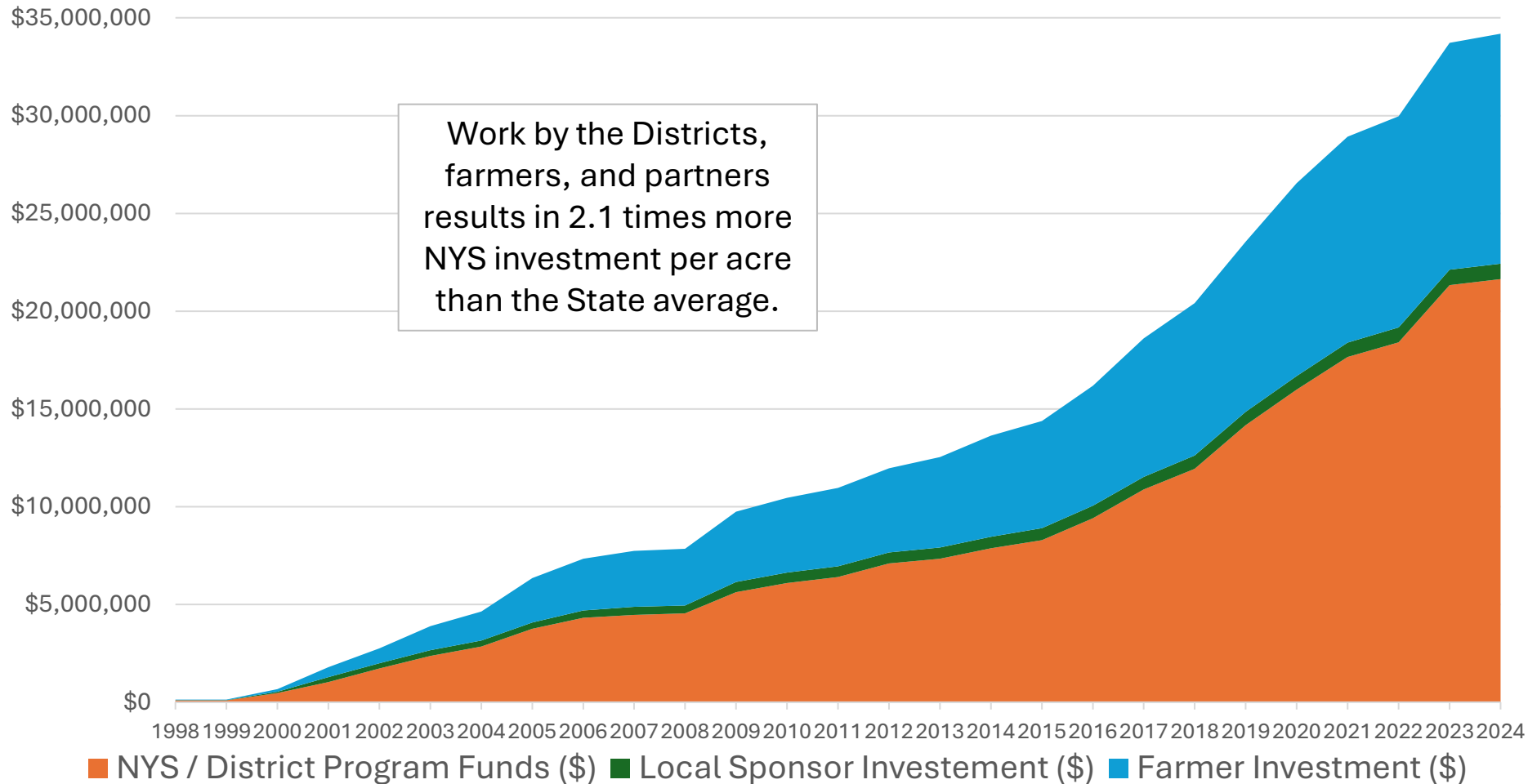
AEM BASE PROGRAM – SUSTAINED SUPPORT THROUGH PERFORMANCE

AEM Base Program through the Years
(Participating SWCDs and Annual Funding across NYS)



CONSERVATION INVESTMENT THRU AEM – CAYUGA LAKE WATERSHED

Cumulative Investments in BMPs by NYS, SWCDs, and Farmers in the Cayuga Lake Watershed



WATERSHED COLLABORATION

Collaboration is the best tool in the toolbox....

- Support each other in the long-term pursuit
 - Work the plan, its priorities, its sectors, and its complementary actions
 - Allow each other space to operate their specialties
- Local funds help leverage state (and federal) funds
 - Help with District staff capacity; build long-term, skilled, trusted conservation staff
 - Relationships are key for practice adoption
- Invite District staff to present
- Recognize/lift successful, local examples
 - Continuing to make practices more normal, common in the community
 - Share what you learned at meetings with others



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Thank you!



**Department of
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