Brief Overview & Purpose of Conservation Effects Assessment Project - CEAP

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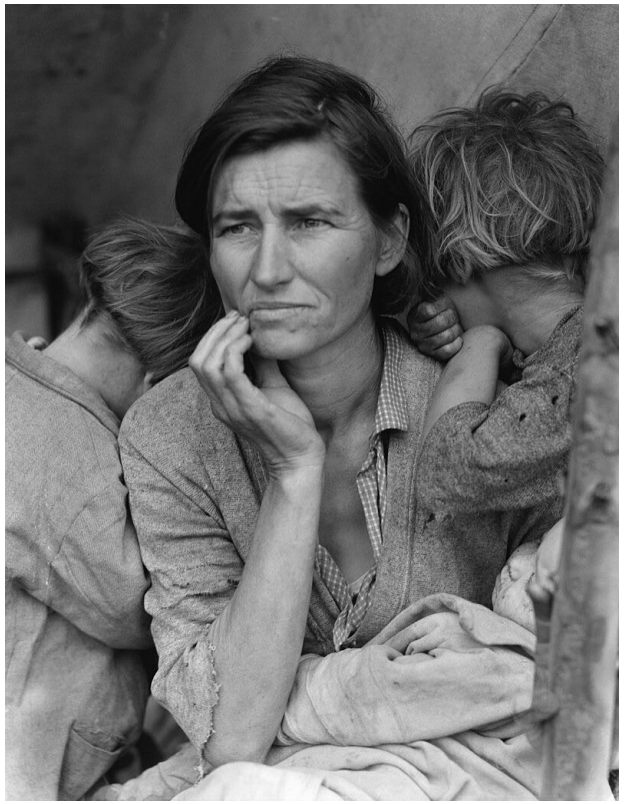
Vision of CEAP

Enhanced natural resources through improved conservation effectiveness and better management of ag-lands

Dust Bowl – 1930s



Images from Dust Bowl - Wikipedia

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CEAP- Conservation Effects Assessment Project

- **Led by:** Natural Resources Conservation Service (NRCS) - a U.S. Department of Agriculture (USDA) agency as well as Iowa State University
- **Goal:** Quantify trends in agriculture and effects of conservation
- **Scope:** National, regional, and watershed scales
- **Outcomes:** Provides data and science-backed findings to guide effective conservation actions.
- The Great Lakes Regional Field Office will screen over 1,400 selected National Resources Inventory (NRI) Points during Phase 1

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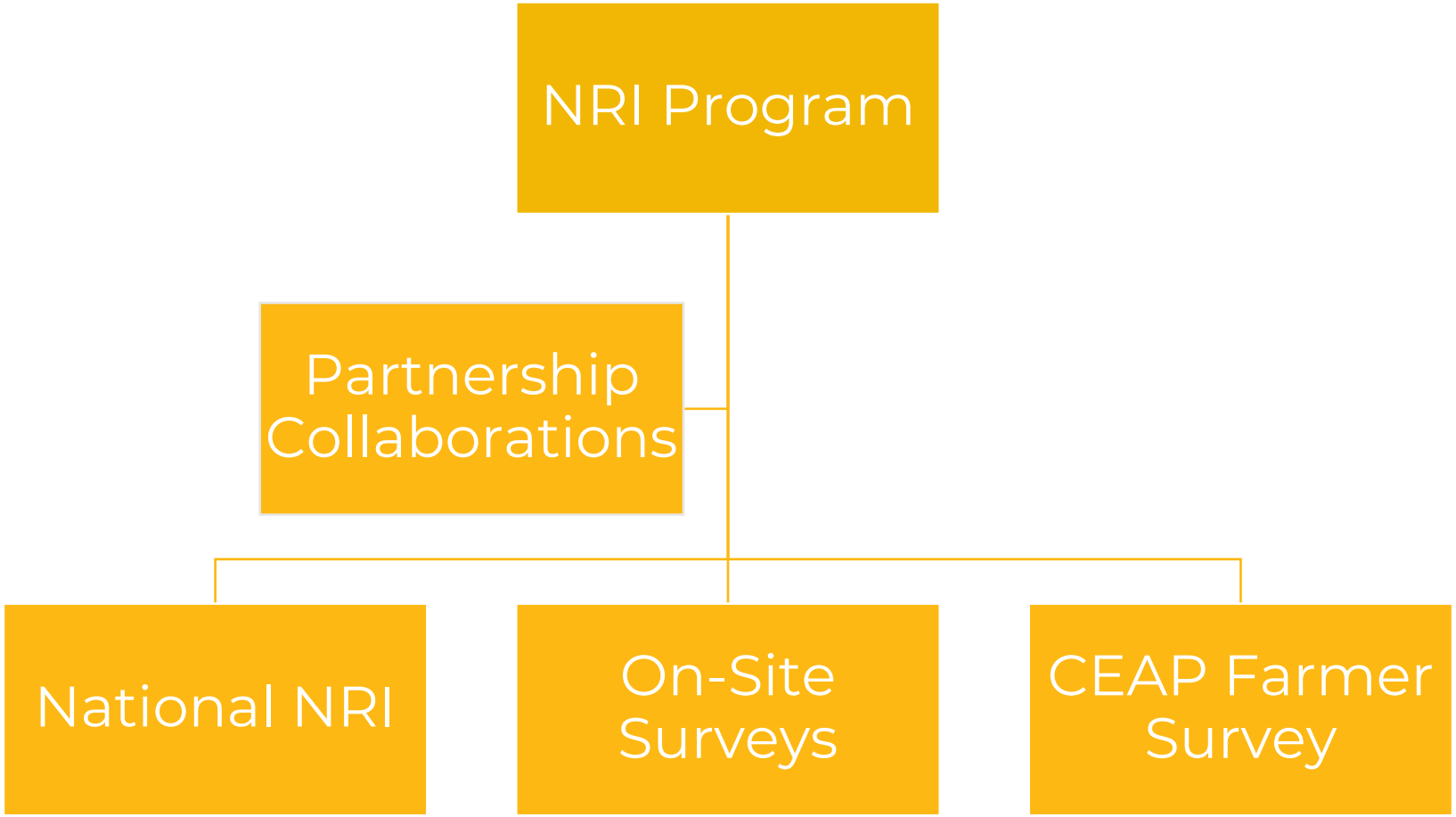
The National Resources Inventory (NRI) Program



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National Resources Inventory - NRI

- Annual survey conducted collaboratively by USDA NRCS and Iowa State University Center for Survey Statistics & Methodology (ISU)
- Provides status and trend estimates for natural resources on nonfederal lands in US
  - Loss of farmland to development
  - Soil erosion in relation to land characteristics, programs
  - Wetland changes in relation to agriculture
- NRI is like NASS's Area frame
  - Instead of addresses, it contains information about soils and climate.
  - It also focuses on the field the point lies in instead of the segment

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Goal of CEAP

Determine and Improve conservation practices and programs by:

- Survey management and conservation on ag-lands
- Quantify conservation effects
- Improve science and education to enhance agriculture land management, conservation, and policy decisions
- Collect information not available from NRI alone

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Why is CEAP Important?

- **Community:** Gives producers an opportunity to provide a complete and accurate picture of the conservation practices they use on their working lands.
- **Science:** Establishes the scientific understanding of effects of conservation practices and agricultural land management at the regional and watershed scale
- **Policy:** Provides policymakers with valuable information needed to prioritize programs and practices that producers can use to address resource concerns

History of CEAP

Initiated in 2002 Farm Bill to support strengthened reporting on the effects of funding for conservation programs

20+ years of CEAP data collection

- 2003-2006
- 2015-2016
- **2024-2026**

Last time we conducted was in 2016

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How is Farmer Survey Data Used

- **Status & Trends:** Provides a 3-year snapshot of the conservation and management practices carried out at the surveyed point
- **Predictive Models:** CEAP uses a modeling approach to estimate edge of field sediment and nutrient losses.
- **Mitigate Ongoing Environment Projects:** Lake Erie toxic algae blooms mitigation efforts use CEAP reports when planning how to control toxic alga blooms U.S. Action Plan for Lake Erie (epa.gov)
- More Information: https://www.nrcs.usda.gov/ceap

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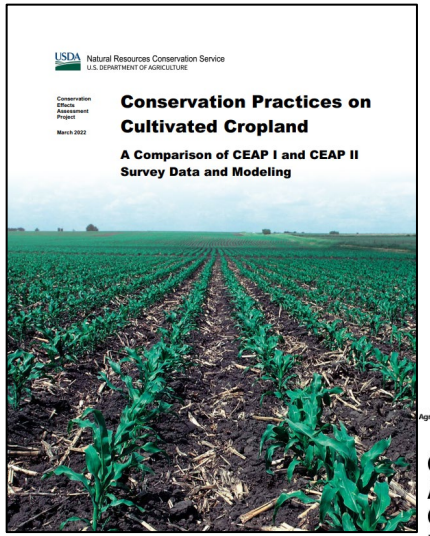
What are the Reported Outcomes?

Changes in adoption of conservation practices between CEAP surveys

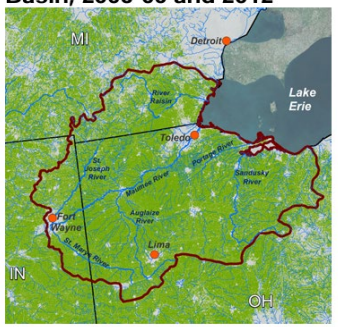
- Structural practices and conservation tillage
- Conservation crop rotations – high residue crops
- Use of cover crops in rotations
- Irrigation (water sources, application method, efficiency, amount)
- Nutrient management (rate, timing, and method)
- Manure application trends (rate, timing, and method)

How Are Findings Distributed?

- NRCS - National Report (2027)
- NASS – Highlights Report at end of each survey year (2025, 2026, 2027)
- Regional Reports by CEAP Crop Production Regions
- State-specific Informational pages provided to State NRCS conservationists and other state agricultural agencies
- Incorporated into tools to assess conservation effects and inform with planning



Conservation Practice Adoption on Cultivated Cropland Acres: Effects on Instream Nutrient and Sediment Dynamics and Delivery in Western Lake Erie Basin, 2003-06 and 2012



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General Uses

- Cropland farmers can use CEAP findings to inform on-the-ground decisions related to conservation tillage, cover crops, irrigation, nutrient management, etc.
- NRCS and conservation partners use CEAP data to evaluate regional and national conservation outcomes to guide future efforts and initiatives

NRCS Programs that use CEAP data

- Environmental Quality Incentives Program (EQIP),
- Wetlands Reserve Program (WRP),
- Wildlife Habitat Incentives Program (WHIP),
- Conservation Reserve Program (CRP),
- Conservation Reserve Enhancement Program (CREP),
- Conservation Security Program (CSP),
- Agricultural Water Enhancement Program (AWEP),
- Agricultural Management Assistance (AMA) Program.
    - There are many additional programs offered by State and local governments, private industries, and non-profit organizations.

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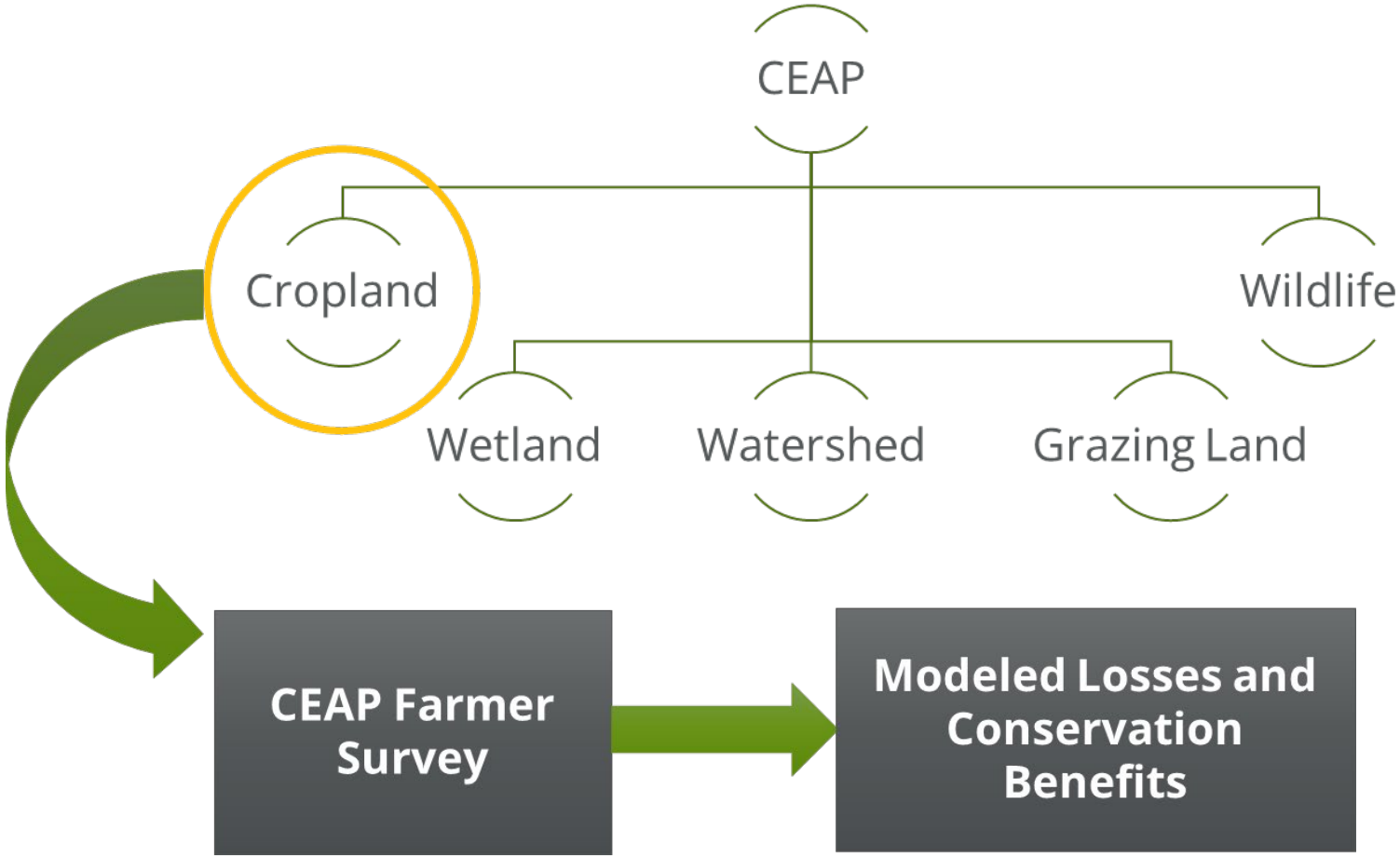
CEAP Cropland Assessment



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CEAP Survey Flow

- **Phase 1: Screening for eligibility** (NASDA) – Starts August 1
  - Confirm operator (or knowledgeable person)
  - Confirm field of interest
  - Draw field/conservation area boundary
  - Confirm field eligibility
  - Account for duplicate operators across NRI sample points
- **Post Phase 1: Sample adjustment** – October (NASS)
  - Update targets for Phase 2 data collection
  - Non-response, refusals, no items of interest will be removed for Phase 2

CEAP Survey Flow Continued

- **Phase 2: Collecting specific field data and production practices** (NASDA)November-March
  - Similar to ARMS surveys with fertilizer, pesticide, operations tables
  - Much more focus on conservation practices or lack of practices depending
  - Questions will cover operation management practices during 2022, 2023, 2024 seasons

Phase I – NASDA Training Objectives

- At the end of the training, participants will be able to:
  - Locate NRI Points
  - Locate the Farm Operator (or knowledgeable person)
  - Confirming name and address
  - Identify the Area of Interest
    - **Area of interest**=(selected field + conservation area)

Questions?

Thank You!

Photo Source: https://www.ars.usda.gov/ARSUserFiles/oc/graphics/photos/dec97/k7152-9.jpg