



# EPA Update

## Agriculture and Water Quality Partnerships

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# Overview

- ▶ Section 319 and Nonpoint Source Control Branch
- ▶ Nutrient Priorities
- ▶ Water Quality Resources
- ▶ National Water Quality Initiative
- ▶ Hypoxia Task Force
- ▶ Animal Ag Partnerships, Nutrient Recycling Challenge
- ▶ EPA training opportunities
- ▶ Ag partnership opportunities



# Section 319 of the Clean Water Act

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- ▶ Nonpoint Sources are not specifically defined under the CWA – any source that EPA does not have authority to regulate as a point source
  - ▶ Includes agriculture stormwater discharge and irrigation return flows
- ▶ 319(b) - State NPS Management Programs
- ▶ 319(h) - Grant Program



- In addition to CWA, states follow EPA grant guidelines in spending 319 funds <https://www.epa.gov/nps/319>



# NSCB: What We Do

- ▶ Manage the Section 319 NPS grants and program
- ▶ Manage, with NOAA, the Coastal Nonpoint Program (CZARA)
- ▶ Provide a focal point for NPS issues among CWA programs
- ▶ Provide expertise in areas critical to NPS control
  - ▶ Agriculture
  - ▶ Green infrastructure/LID practices and programs
  - ▶ Forestry
  - ▶ Onsite systems (septics)
  - ▶ Watershed planning
  - ▶ Data analysis/mining
- ▶ Technical leadership for Hypoxia Task Force



# EPA Nutrient Priorities

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- ▶ Strong strategic focus is on nutrients
  - ▶ Addressing nutrient pollution by supporting states is a top priority for EPA
- ▶ Many efforts are underway to reduce nutrient impacts on WQ at state and national levels but, collectively, we are not solving this problem
- ▶ EPA focus is on assisting states as they implement and continue to develop state-level nutrient reduction strategies and develop and implement TMDLs
  - ▶ Continue to encourage focused efforts at the state level
- ▶ Working with all source sectors, point source and nonpoint source community, is key to many of these strategies





# Water Quality Resources: CEAP and NARS

- ▶ Conservation Effects Assessment Project (CEAP)
  - ▶ NIFA/CEAP Watershed studies
    - ▶ Valuable lessons learned on conservation placement, critical source areas and monitoring designs
  - ▶ National and Regional Assessments (Cropland reports)
- ▶ National Aquatic Resources Survey (NARS)
  - ▶ Collaboration between EPA, states and tribes to assess the quality of nation's rivers and streams, coastal waters, lakes and wetlands
  - ▶ Statistical survey and randomized design to provide a snapshot of the overall condition of the nation's waters



# National Water Quality Initiative (NWQI)

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- ▶ Objective: Water quality progress through accelerated implementation of conservation practices
- ▶ NRCS coordinates with EPA and state WQ agencies to address Ag sources; states monitor water quality results in selected watersheds
- ▶ NRCS directs portion of EQIP funds to water quality-focused practices in small watersheds (currently 188) impaired by nutrients, sediment and pathogens
- ▶ State agencies are monitoring water quality in at least one NWQI watershed per state - approximately 60 watersheds
- ▶ Funding began at 5% of EQIP funds (\$33M) – was \$25M in FY15



# NWQI- Building Working Partnerships

- ▶ Many state water quality agencies work with USDA and Ag partners to reach common goals of reducing nutrients and other water quality impacts
  - ▶ 2014: half of state agencies reported active collaboration with USDA
  - ▶ EPA, states, and USDA are working to grow these partnerships; NWQI has been helpful
- ▶ We've used the NWQI to advance collaboration more generally
  - ▶ While some challenges persist, NWQI has been an excellent opportunity to build partnerships between EPA, NRCS and State water quality agencies
  - ▶ Successful ways to collaborate at state level
- ▶ New partnership opportunities to arise- NWQI pilot projects with enhanced watershed planning and outreach opportunities



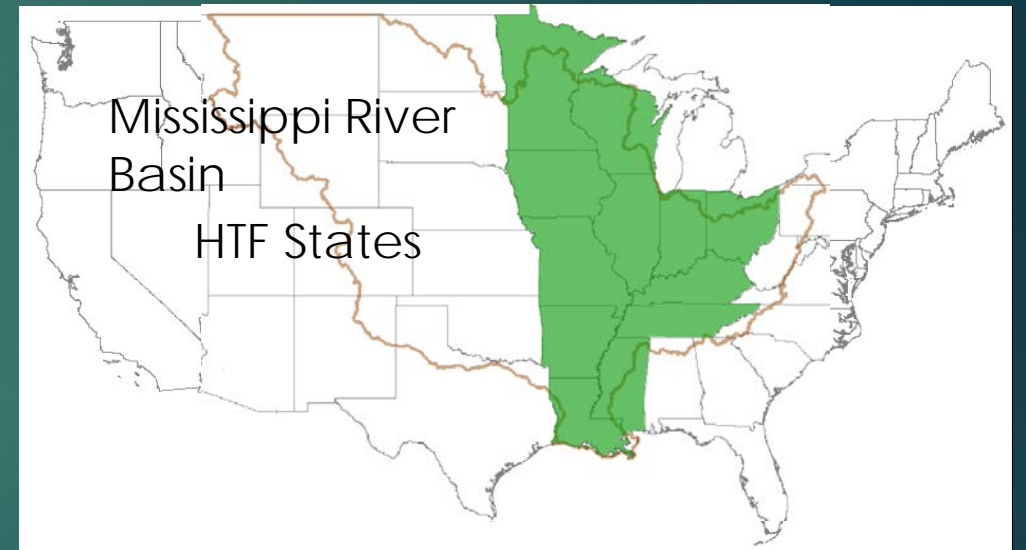
# Hypoxia Task Force

## 5 Federal Agencies and Tribes:

- US Army Corps of Engineers
- US Environmental Protection Agency
- US Department of Agriculture
- US Geological Survey
- National Oceanic and Atmospheric Administration
- National Tribal Water Council

## 12 State Agencies:

- Arkansas
- Missouri
- Iowa
- Tennessee
- Minnesota
- Indiana
- Ohio
- Louisiana
- Illinois
- Mississippi
- Kentucky
- Wisconsin



Each state is represented by one of:

Agriculture agency, Environmental Quality agency, or Natural Resources agency



# HTF State Nutrient Reduction Strategies

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[www.epa.gov/ms-htf/hypoxia-task-force-nutrient-reduction-strategies](http://www.epa.gov/ms-htf/hypoxia-task-force-nutrient-reduction-strategies)

- ▶ Each state has a nutrient reduction strategy aimed to move towards the Goal
  - ▶ Coastal Goal: By 2035, reduce 5-year running average size of the Gulf hypoxic zone to 5,000 km<sup>2</sup>
  - ▶ Interim Goal: 20% reduction of nitrogen and phosphorus loading by 2025
- ▶ 2013 Federal Strategy complements/supports the 12 state strategies; to be updated fall, 2016
- ▶ HTF and state members working to grow partnerships to help implement their strategies, e.g.:
  - ▶ Land Grant University
  - ▶ NGOs
  - ▶ Foundations
  - ▶ State Agribusiness Councils and Industry



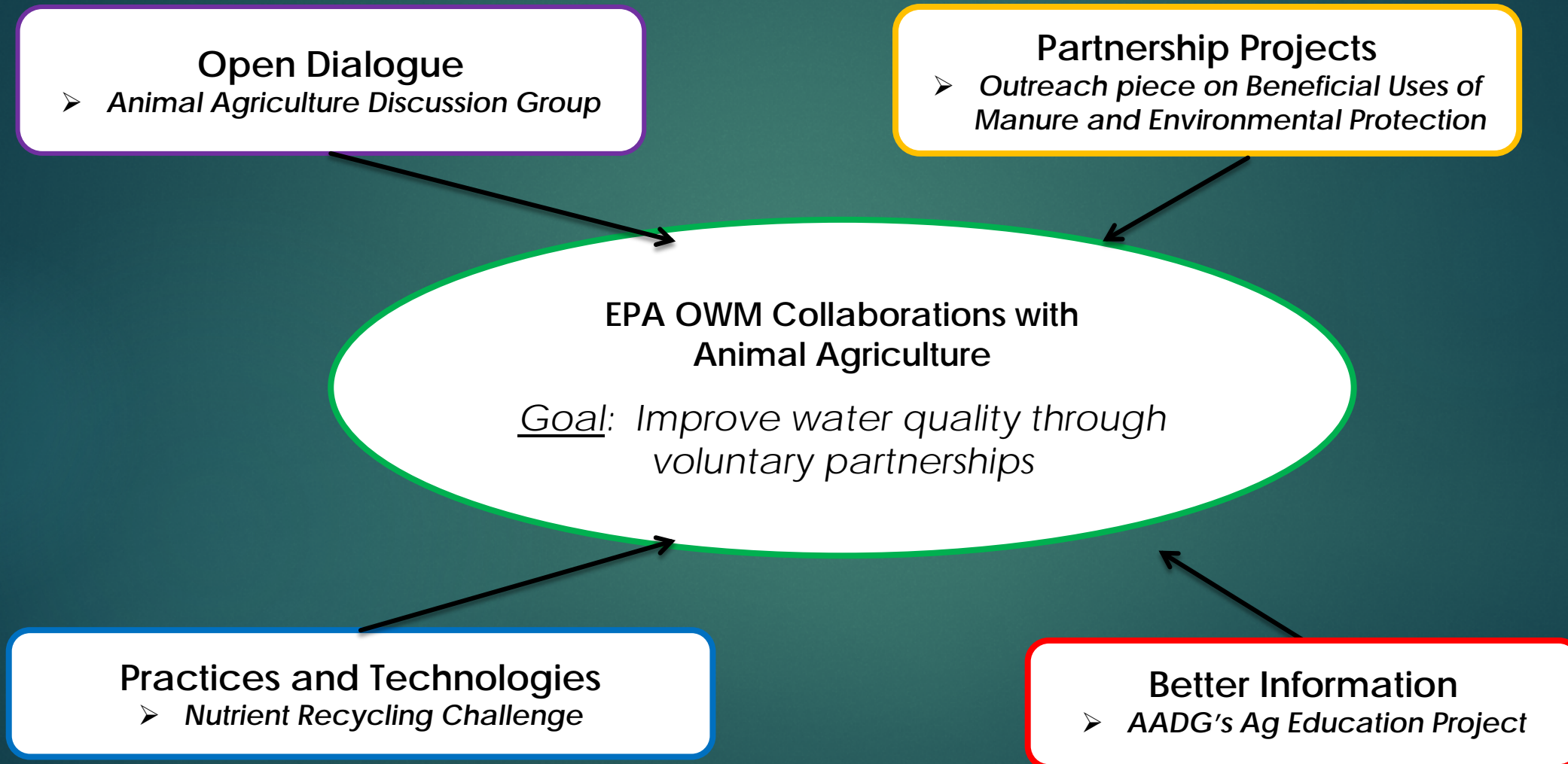
# Tracking progress towards our goal

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- ▶ [www.epa.gov/ms-htf/northern-gulf-mexico-hypoxic-zone](http://www.epa.gov/ms-htf/northern-gulf-mexico-hypoxic-zone)
- ▶ [www.epa.gov/ms-htf/hypoxia-task-force-new-goal-framework](http://www.epa.gov/ms-htf/hypoxia-task-force-new-goal-framework)
- ▶ Develop basin-scale nonpoint source measures
  - ▶ This year, develop and report on common NPS metrics by state
- ▶ Modeling considerations
  - ▶ How can state information and data be used by federal and regional modelers in MARB scale nutrient reduction tracking models?



# EPA Office of Wastewater Management's Collaborations with Animal Agriculture





# ➤ Goals of the Nutrient Recycling Challenge

- Accelerate the development of nutrient recovery technologies that are adoptable for pork and dairy farms, and can produce environmental and economic benefits.
- Increase awareness of issues and opportunities related to nutrients and manure management.
- Connect innovators and agricultural stakeholders.
- Stimulate markets for products generated by nutrient recovery technologies.





# EPA training opportunities

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- ▶ Watershed Academy Webcasts
- ▶ Water Quality Standards Academy
- ▶ Animal Ag Discussion Group- Ag Education Project
  - ▶ Livestock and Environmental Learning Center producing videos and webcontent on trends in ag and manure management, nutrient management, and managing manure for water quality
- ▶ Series of technical webinars on water quality monitoring, a nonpoint source technical exchange on NPS issues and solutions, and upcoming webinars on watershed planning



# Partnership Opportunities

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- ▶ Agricultural partnerships are key to success of 319 NPS program:
  - ▶ USDA
  - ▶ Conservation Districts
  - ▶ Industry Service Providers: Ag Retailers, CCAs
  - ▶ Land-grant Universities
- ▶ Implement grant-supported Ag partnerships for training and adoption of high impact practice systems and watershed planning
- ▶ Continue to advance partnerships through the NWQI and HTF, and through Animal Ag collaborations