EPA Update

Agriculture and Water Quality Partnerships

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SEPTEMBER 19, 2016
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

- 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](https://www.epa.gov/nps/319)
NSC B: 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

- 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
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
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.
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
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 km²
- 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

- [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

Goal: Improve water quality through voluntary partnerships

Open Dialogue
- Animal Agriculture Discussion Group

Partnership Projects
- Outreach piece on Beneficial Uses of Manure and Environmental Protection

Practices and Technologies
- Nutrient Recycling Challenge

Better Information
- AADG’s Ag Education Project
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

- 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

- 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