

States' nutrient frameworks, trading approaches, and perspectives of the Gulf Hypoxia Task Force States

Karen Flournoy

Director, Water, Wetlands, and Pesticides Division

U.S. EPA Region 7

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# Nutrient Framework Elements

1. **Prioritize watersheds** on a statewide basis for nutrient loading reductions
2. Set watershed **load reduction goals** based upon best available information
3. Ensure effectiveness of **point source permits**
4. Control **agricultural runoff**
5. Control **stormwater runoff** and nutrients from **septic systems**
6. Implement **accountability and verification** measures
7. **Report annually on implementation** activities
8. **Biannual report** on load reductions and environmental impacts in targeted watersheds
9. Develop work plan and schedule for **numeric criteria development**

# Framework: Guiding Principles

- **Results, results, results:** build from existing state work but accelerate progress and demonstrate clear results
- States need flexibility to achieve near-term reductions in N and P pollution while they make progress on their long term strategies

**Encourage a collaborative approach between federal partners, states, and stakeholders**

# Key to success: Working in priority watersheds:

## HTF Progress to Date

- All twelve HTF states have developed and/or released draft or final strategies
- HTF focus over the past 4 years is strategy development
- Focus is now on implementation -- on the ground in state priority watersheds
- Partnerships and collaboration are key to strong progress



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# States referencing trading activity

## Arkansas

Includes the phrase: “Explore the feasibility and viability of nutrient trading programs.”

## Illinois

- Illinois EPA plans to promote trading, urban/rural partnerships, or other offsets as part of watershed planning and implementation efforts
- May use such trading when considering NPDES permits after an appropriate, enforceable, and transparent program has been developed.
- DuPage River Salt Creek Workgroup action: evaluate the potential for a watershed-scale total phosphorus trading program.

## **Indiana**

- Indiana envisions that the codification of numeric nutrient criteria will be a driving force for water quality trading between point sources and agricultural producers
- Indiana is one of three states (OH, KY, IL) participating in the Electrical Power Research Institute's pilot program for the Ohio River

## **Iowa**

- Look for opportunities to include existing state and federal targeted stewardship incentive programs with nutrient trading and innovative new approaches.
- Recognizes credit trading as helpful where it is more economical for nonpoint source efforts versus point source controls.
- Iowa point sources plan to work to develop an environmental credit trading program based on need and available resources, including nonpoint sources.

## **Kentucky**

- One of three states (OH, KY, IL) participating in the Electrical Power Research Institute's pilot program for the Ohio River
- The purpose of the pilot is to evaluate the feasibility of intrastate and interstate water quality trading, to refine the credit generation and transaction process prior to a future regulatory compliance scenario

## **Louisiana**

- Have conducted preliminary evaluation of water quality credit trading.
- Interested in exploring other incentive avenues such as through water quality credit trading and through business forces. Trading is a market-based tool that connects different sources of pollutants to achieve a cost-effective solution to water quality improvement.

## **Minnesota**

- Currently, as an approach for Phosphorus point source to nonpoint source is listed as low priority, but elsewhere trading said to be worth exploring
- Within wastewater strategy trading seen as an example of a market-based strategy
- Viability of an interstate nitrogen trading network said to be worth considering.

## **Mississippi**

- Under “Incentives” mentions alternative approaches for creating incentives such as Ecosystem services, Carbon credits, Nutrient trading

## **Missouri**

- The Missouri Innovative Nutrient Trading (MINT) Project continued a literature review of nutrient trading and conservation marketing programs and initiatives throughout the United States.
- In June 2011, a draft framework for a Missouri Water Quality Trading Program was submitted to the department for review.
- Nutrient Trading: Missouri proposes to develop all the tools, protocols and documentation required to support nutrient trading to establish at least a pilot trading system in the next five years.

## Ohio

- Ohio EPA intends to phase in water quality based effluent limits for phosphorus derived from the TMDL/WLA calculations. This will be done over a time frame to allow point sources to explore water quality trading or other options.
- Lake Erie and Ohio River Basin permits in impaired waters: set limits with trading option.
- To provide a regulatory framework for water quality trading, Ohio EPA adopted rules in 2007, OAC 3745-5. Those rules were reviewed, amended and renewed in 2012.
- The key point of the rules is that water quality trading must take place under a plan approved by the Ohio EPA Director. In addition to outlining the requirements for an approvable trading plan, the rules address technical aspects of trading such as:
  - Prohibitions and restrictions on trading; Calculating water quality credits; Setting baselines and trading ratios;
  - Incorporating trades into NPDES permits; and limiting trading to avoid adverse impacts.

## Tennessee

- Agricultural communities and other relevant stakeholders will be engaged to determine potential nutrient trading opportunities.
- All sources will be encouraged to consider nutrient load trading with other sources within the HUC-10 watershed.

## Wisconsin

- Wisconsin has placed a priority on integrated point source and nonpoint source management through... Allowance of water quality trading, another point source compliance alternative.
- Water quality based effluent limit compliance may be achieved through water quality trading or through implementation of a “watershed adaptive management” option plan, or trading.
  - Adaptive management is not trading, it is a more holistic watershed management where the point source works to achieve net WQ goals rather than end of pipe limits.
- Has developed a trading framework  
<http://dnr.wi.gov/topic/surfacewater/adaptivemanagement.html>.