

IOWA DEPARTMENT OF NATURAL RESOURCES

Leading Iowans in Caring for our natural resources

DEEP DIVE INTO ASPECTS OF A FLEXIBLE PERMITTING PROGRAM: DRIVERS



October 27, 2020

IOWA NUTRIENT REDUCTION STRATEGY

Focused on Nitrogen and Phosphorus to the Mississippi River

- Finalized in May 2013
- Total TN & TP Reduction Goal: 45% for Non-Point Source (NPS) and Point Source (PS)

Integrated Strategy

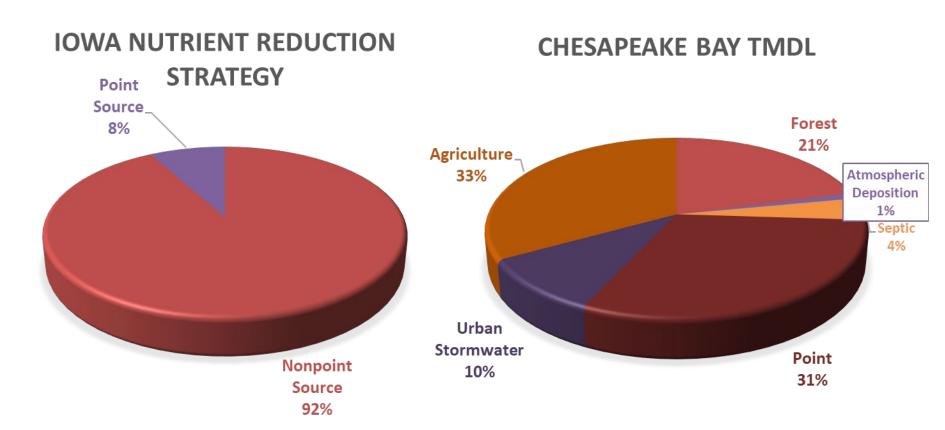
- Non-Point Source: Science Assessment for NPS agricultural producers with voluntary implementation of conservation practices
- Point Source: Technology/Performance Assessment for major wastewater treatment facilities

Estimated Cost

- NPS: Initial Investment Costs range from \$1.2 to \$4 billion
- PS: Capital and operation costs over 20 years of approximately \$1.5 billion
- Water Quality Trading Included in Final Strategy and Annual Updates



NITROGEN MAKEUP IN IOWA



Source: Iowa Nutrient Reduction Strategy and Libra, R.D., Wolter, C.F., and Langel, R.J. 2004. Nitrogen and Phosphorus Budgets for Iowa and Iowa Watersheds. Iowa Geological Survey Technical Information Series 47, 43p



Secondary 25 mg/l TN 4 mg/L TP BNR 10 mg/l TN 1 mg/L TP

LOT 3 mg/l TN 0.05 mg/L TP



WATER QUALITY TRADING

- 2003 EPA Water Quality Trading Policy
 - Allows a Point Source to Purchase "Credits" to Reduce Pollutants More Cost Effective
 Than with Technology at the Plant
- Previously Solely Compliance Driven with Numeric Nutrient Criteria or TMDL
- Too Restrictive and Limited Success
- Updated Language in 2016 INRS with Iowa League of Cities' 2015 USDA NRCS Conservation Innovation Grant

2015 CONSERVATION INNOVATION GRANT

- Technical Advisory Committee
- Storm Lake and Dubuque Pilot Trades
 - Additional Cities: Des Moines, Iowa City, Sioux City, Cedar Rapids...
- Early Adoption Letter
- IDNR Transition
 - Potential Incentives List: Flexibility, recognition, watershed-based permitting, additional time to comply, preferred trading ratios, etc.
 - RIBITS

IOWA NUTRIENT REDUCTION EXCHANGE

Utilize Motivations (aka DRIVERS)

 Environmental benefits, flood mitigation, source water protection, economic development, habitat development, nutrient reduction, increased production

Track Multi-Benefit Investments

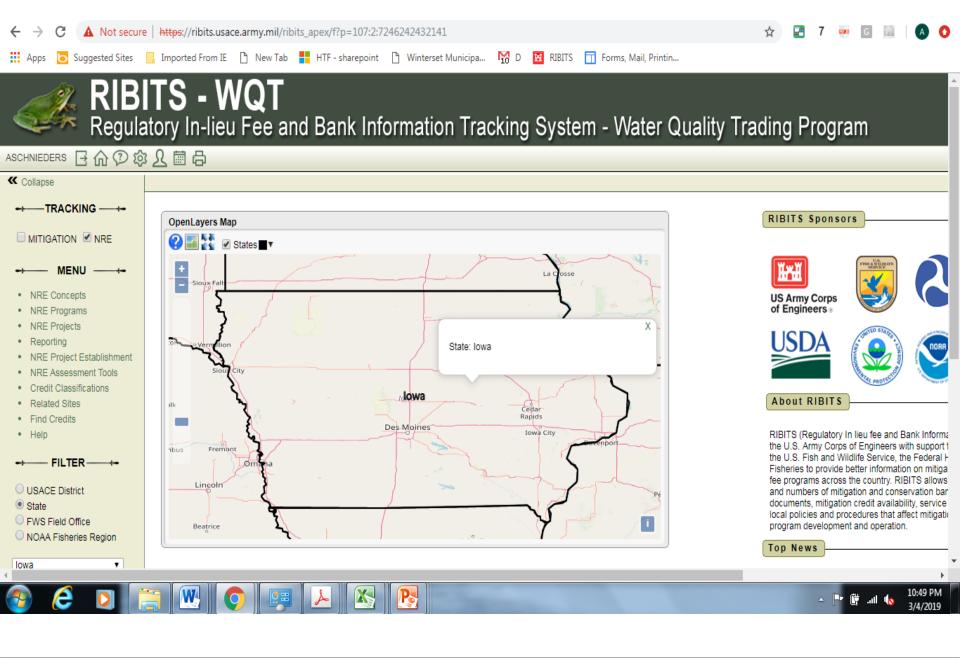
RIBITS, federal support

Provide Incentives for Investment

Exploring improved ratios, environmental excellence, longer term schedules, etc.

Data Points

Watershed, permit number, project name, funding source, practice type, install data, term
of practice (years), type of credits generated (N, P, sediment, etc.), credit calculation
method, verifying entity, monitoring, pollutant reductions, ancillary benefits



MOU – Memorandum of Understanding

Outline of MoU – what does it do?

- Lays out foundation for agreement
- Sets the goal regulatory certainty
- Enables the mechanism to engage in watershed work as part of NPDES permit compliance
- Allows credit for past voluntary work

PROGRESS AND BARRIERS

PROGRESS

- More Ag/Urban Partnerships Cedar Rapids, Dubuque, and more
- Regulatory certainty coupled with a voluntary approach resulting proactive actions by utilities

BARRIERS (or next areas to tackle)

- Staffing and expertise both City and State
- Accommodating innovations in
 - Process
 - Incentives
 - Database
 - Regulatory placement
 - Models
 - Financing

What questions do you have?



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