

IOWA NUTRIENT REDUCTION EXCHANGE

May 28, 2025

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**

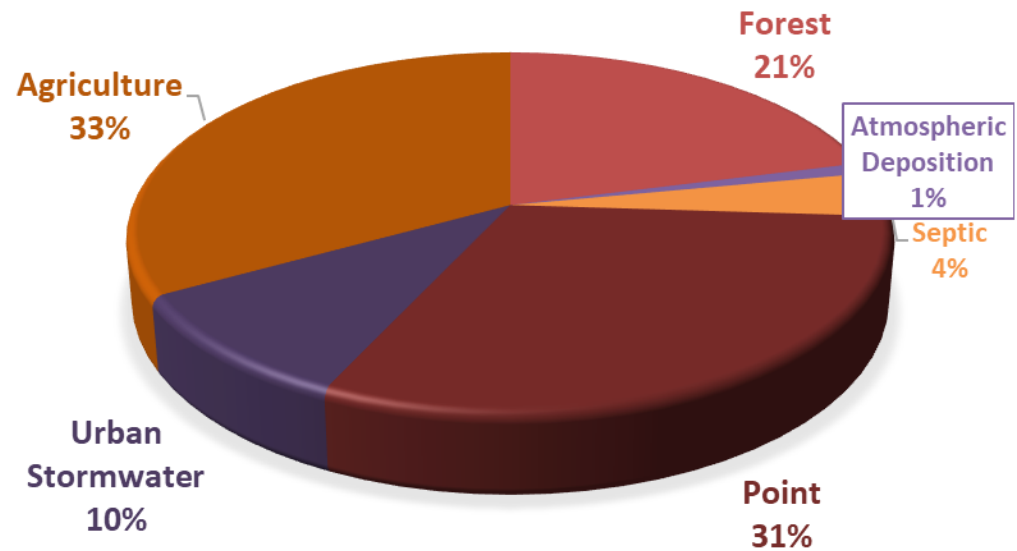


NITROGEN MAKEUP IN IOWA

IOWA NUTRIENT REDUCTION STRATEGY



CHESAPEAKE BAY TMDL



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



2015 CONSERVATION INNOVATION GRANT

- Technical Advisory Committee
- 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 loads reduced (N, P, sediment, etc.), credit calculation method, verifying entity, monitoring, pollutant reductions, ancillary benefits

Iowa Rules!

NRE established in Iowa Administrative Code

- 567—64.17(455B) **Nutrient reduction exchange.** The department shall maintain a registry of nonpoint source nutrient reduction practices installed by permittees. Practices listed in the registry may be eligible for future regulatory incentives. [ARC 6191C, IAB 2/9/22, effective 3/16/22]

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
- Cedar Rapids, Dubuque, Storm Lake, Ames, Muscatine, Burlington, Mason City, Forest City, and Osage

PROGRESS AND BARRIERS

PROGRESS

- Ag/Urban Partnerships – Cedar Rapids, Dubuque, Storm Lake, Ames, Muscatine, Burlington, Forest City, Osage, and Mason City
- Regulatory certainty coupled with a voluntary approach resulting in 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

Iowa Permittee Name: City of Ames			
NRE Project	Yr	Total Nitrogen Reduction	Total Phosphorus Reduction
<u>2021 SWOFF Cover Crops - Ames</u>	2021	34383.6	2386.9
<u>2022 SWOFF Cover Crops</u>	2022	20583.1	1144.8
<u>2023 Bioreactor Batch and Build</u>	2023	2652.98	
		57619.68	3531.7
Iowa Permittee Name: City of Cedar Rapids			
NRE Project	Yr	Total Nitrogen Reduction	Total Phosphorus Reduction
<u>City of Cedar Rapids - 2019-2023 - WPC Farmland Retirement</u>	2019	2498.5	256.5
<u>City of Cedar Rapids - 2020 Submission - Part 2</u>	2020	520	11.2
<u>City of Cedar Rapids - 2020 Nutrient Reduction Practices on City-Owned Farmland</u>	2020	10187	225.4
<u>City of Cedar Rapids - 2021 Nutrient Reduction Practices on City-Owned Farmland</u>	2021	17636	929.3
<u>Soil & Water Outcomes Fund - Cedar Rapids - 2021</u>	2021	140753.5	8365.8
<u>City of Cedar Rapids - 2022 Nutrient Reduction Practices on City-Owned Farmland</u>	2022	25700.83	1401.66
<u>Soil & Water Outcomes Fund - City of Cedar Rapids - 2022</u>	2022	130501.3	7507
		327797.13	18696.86
Iowa Permittee Name: City of Des Moines			
NRE Project	Yr	Total Nitrogen Reduction	Total Phosphorus Reduction
<u>City of Des Moines - Rothfus Bio-reactor</u>	2017	29.4	
		29.4	