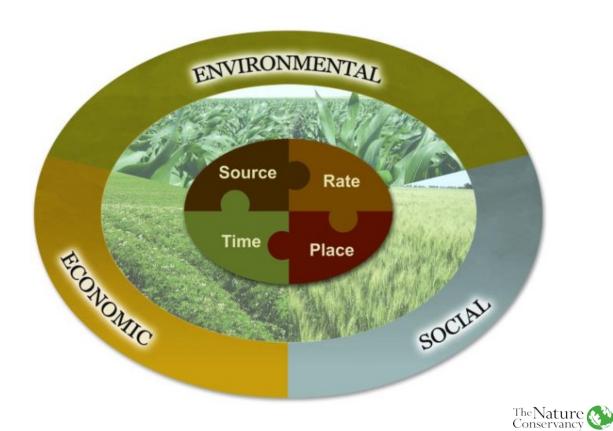


Carrie Vollmer-Sanders
Nutrient Stewardship Council Chairwoman
Nutrient Strategy Manager

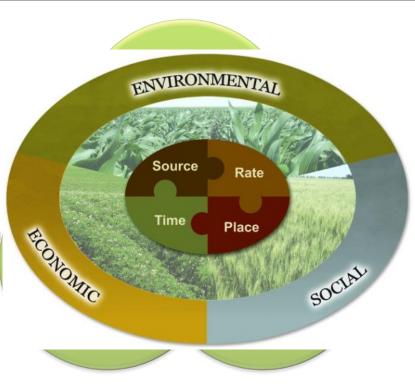


Sustainable Nutrient Management



What do the 4Rs mean?

- Cleanest air & water
- Highest yields
- Maximum profit
- During growing season
- Injection
- Stabilizer





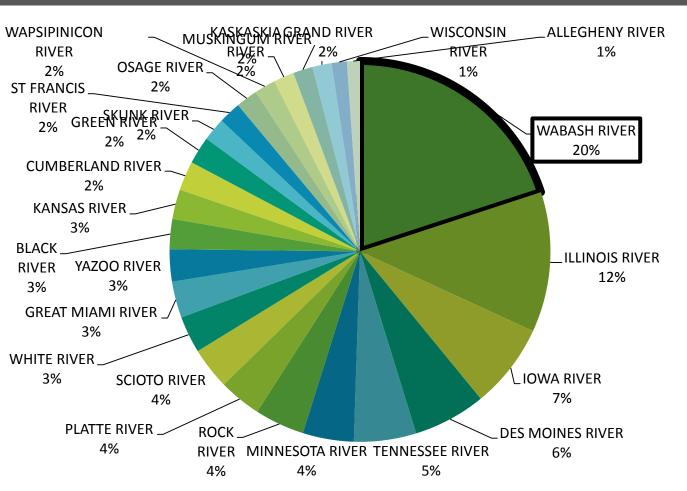
Wabash River

- Flows freely over 411 miles
- 73 IN counties
 - 2 states, 25.6 M acres
- Primary land use Ag
- Rare fish & mussel species
- Largest nutrient contributor to the Gulf of Mexico





25 Largest Total Nutrient Contributions (N & P)



Lake Erie – Some Similarities

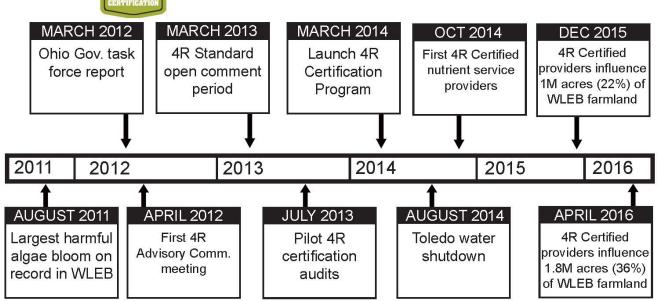
- Largest watershed in Great Lakes
- Rare fish & mussel species
- 6 IN counties
 - 3 states, 7.2 M acres
- Primary Land use Ag
- 70-80% subsurface drainage
- Maumee largest nutrient load to Lake Erie



Timeline of Events



4R Nutrient Certification Program





4R Nutrient Stewardship Certification Program Advisory Committee











Conservation Districts



Com Marketing Program of Michigan















EXTENSION



























Ohio Sovbean Council























4R Nutrient Stewardship Certification Program



Private Third Party Auditor

Nutrient Service
Nutrient Service
Providers

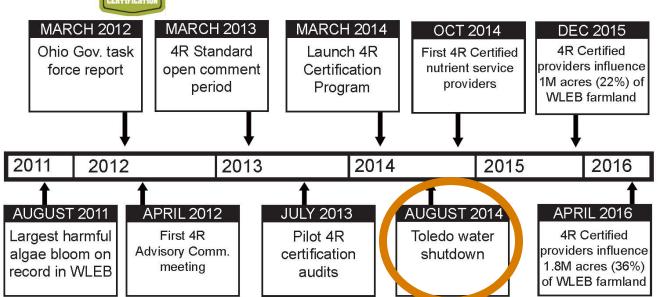
Voluntary



Timeline of Events



4R Nutrient Certification Program





Fragmented action with low adoption does not work







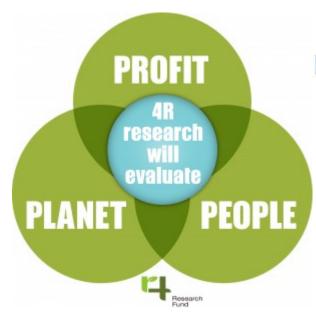


Continual Research & Evaluation











Protecting nature. Preserving life."



Environment

Scientists Engineers



COLLEGE OF FOOD, AGRICULTURAL, AND ENVIRONMENTAL SCIENCES



Responsible Agriculture – What sets this program apart?

Credibility

- Governance
- Evaluation
- Recordkeeping

Rigor

- Science based
- Change thinking
- Third party auditor

Participation

- Market penetration
 - Voluntary
- Realistic



















4R NUTRIENT STEWARDSHIP CERTIFICATION PROGRAM















This facility operates under the 4R Nutrient Stewardship Certification Program. 4rcertified.org













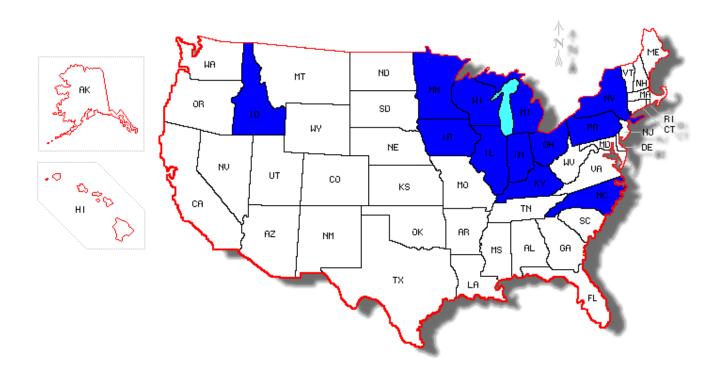






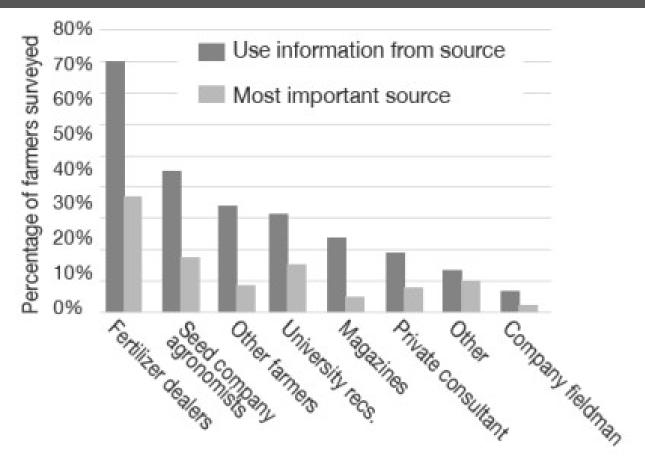


There is broad interest in 4R Certification

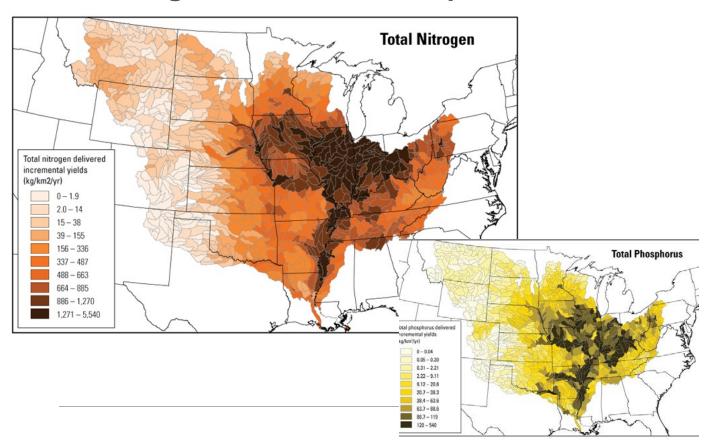




Farmers Trust YOU for Nitrogen Management



Agribusiness must be proactive



Nutrient Management & Soil Health Strategy

- Ag Industry Led
- Complements ISDA
 - State Nutrient Reduction Strategy
- 4Rs identified



4R Nutrient Stewardship Certification Program - create your own future







Carrie Vollmer-Sanders, Nutrient Strategy Manager



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www.4Rcertified.org

www.nature.org/soil



@carrie4stars



Grains & Greens, Inc. @grainfamily



