Public Policy Issues around Water Quality

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Addressing Gulf Hypoxia

- Gulf Hypoxia Task Force required plans to reduce N and P load to Gulf by 45%
- States are responsible for creating strategies
- Both point and non-point sources of nutrients are addressed

Iowa Nutrient Reduction Strategy

- Voluntary, science-based
- State goal of 45% reduction of Nitrogen (N) and Phosphorous (P)
- Point sources achieve maximum biological removal rate: 4% N and 16% P
- Non-point source goal 41% N and 29% P

Agricultural Nutrient Reduction Practices

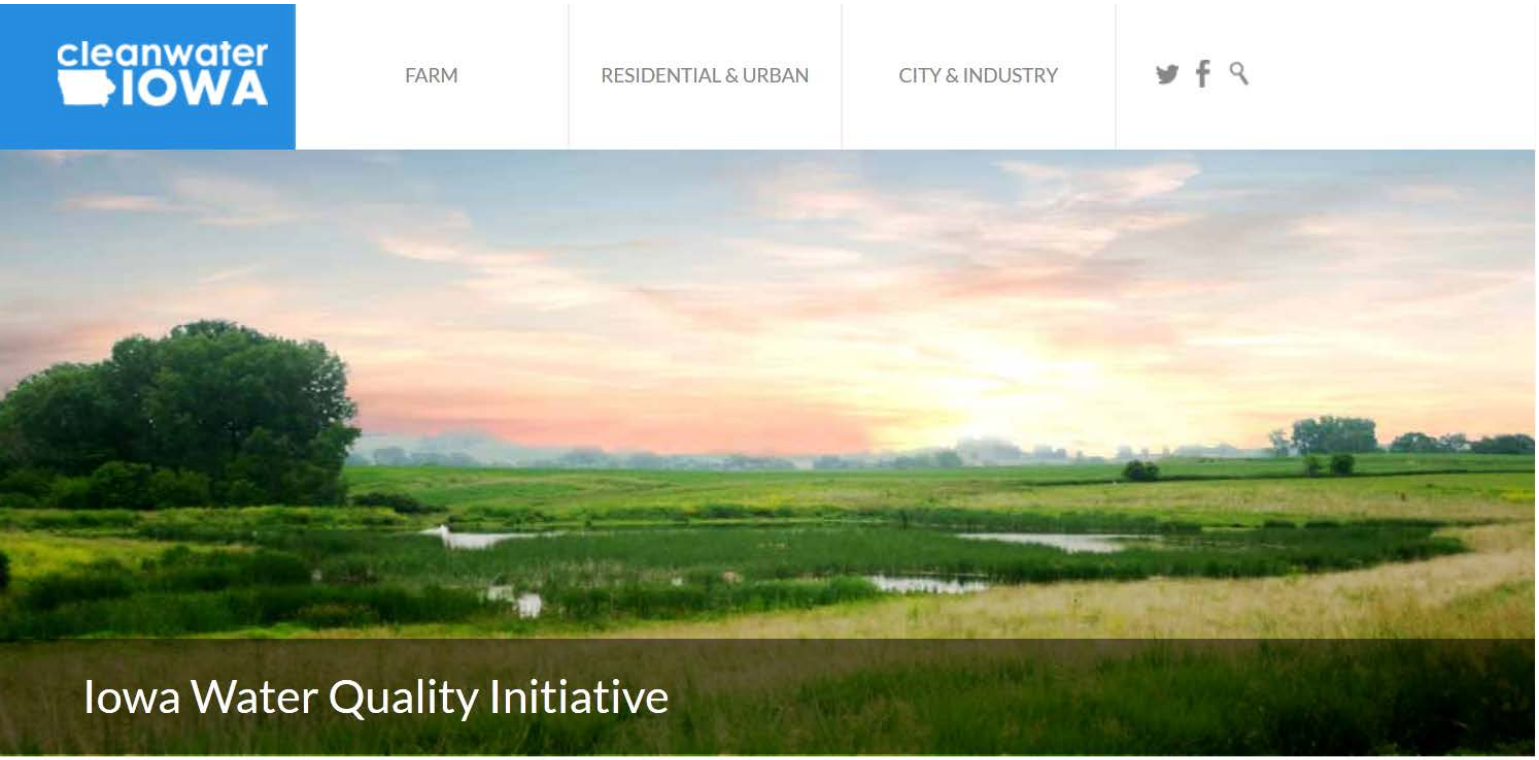
- **In-field**
- **Edge of field**
- **Land use change**
- **Both N and P**

Point Source Process

- Established a plan for reduction of N and P discharged by the largest industrial and municipal wastewater treatment plants
- Practices determined most feasible and affordable will be required to be implemented

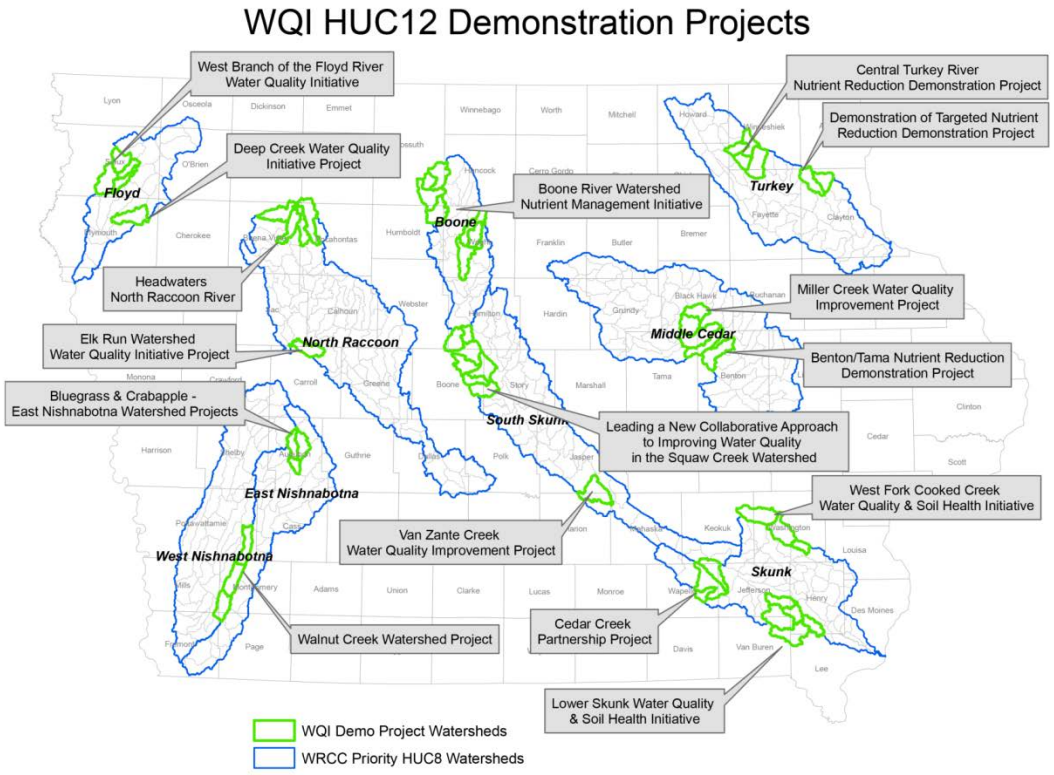
Iowa DNR

Strategy Implementation



www.cleanwateriowa.org/

Strategy Implementation

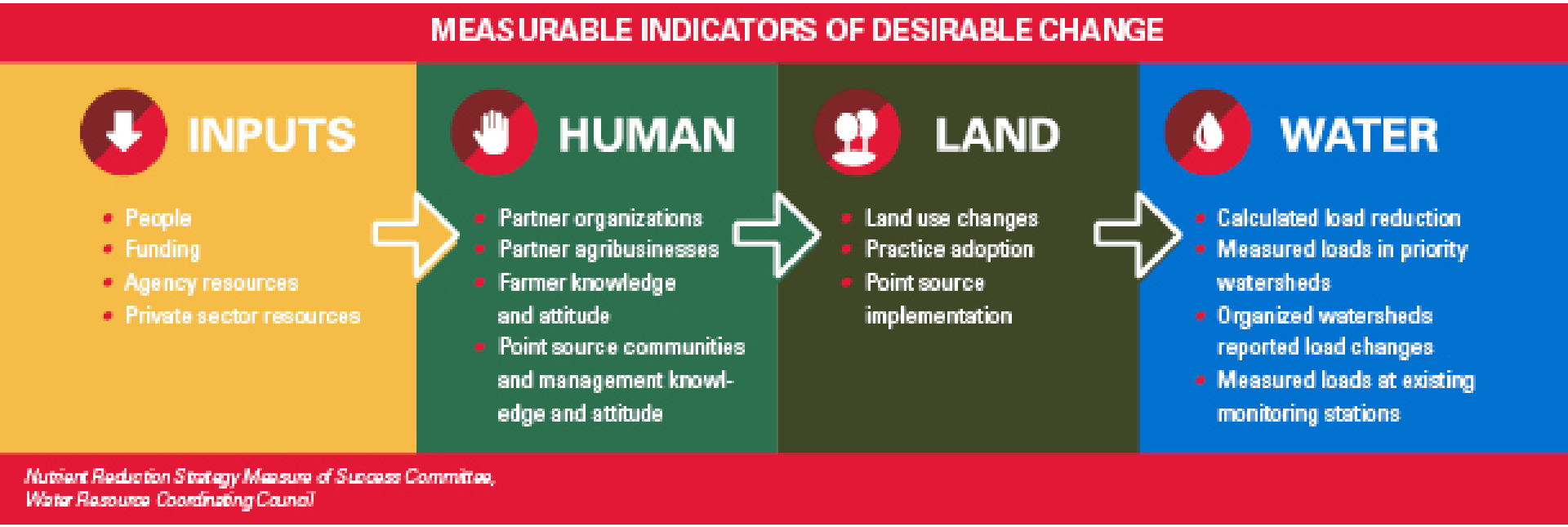


- Demonstration projects
- Practice scale-up projects
- Statewide cost-share
- Agency and organization partnerships

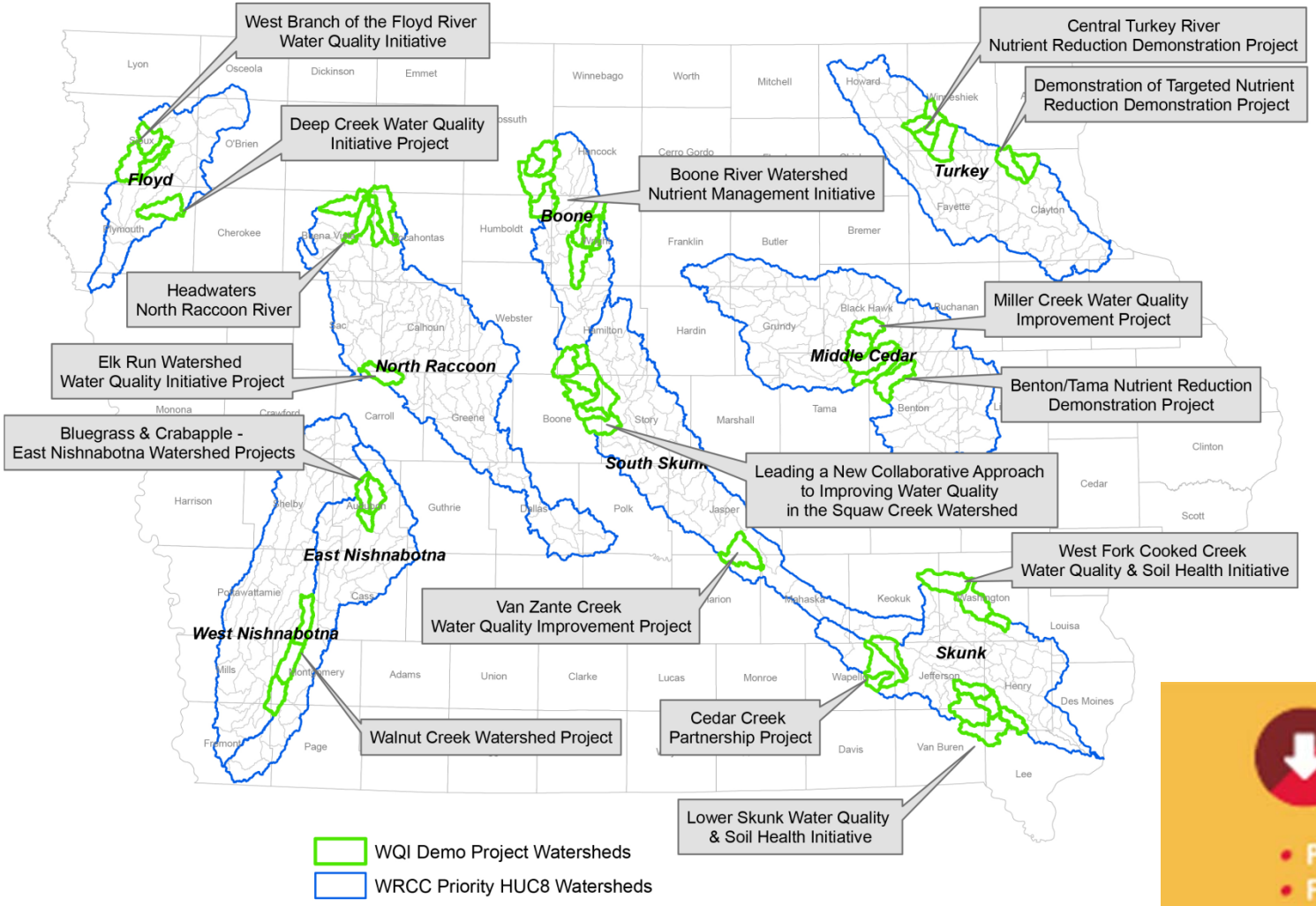
Point Source Progress

- 102 major municipal and 46 industrial wastewater facilities where biological nutrient removal is economically and technically feasible
- 35 NPDES permits have already been issued with plans to implement the strategy
- Intent to issue 20 permits per year

Measuring Progress: NRS Logic Model

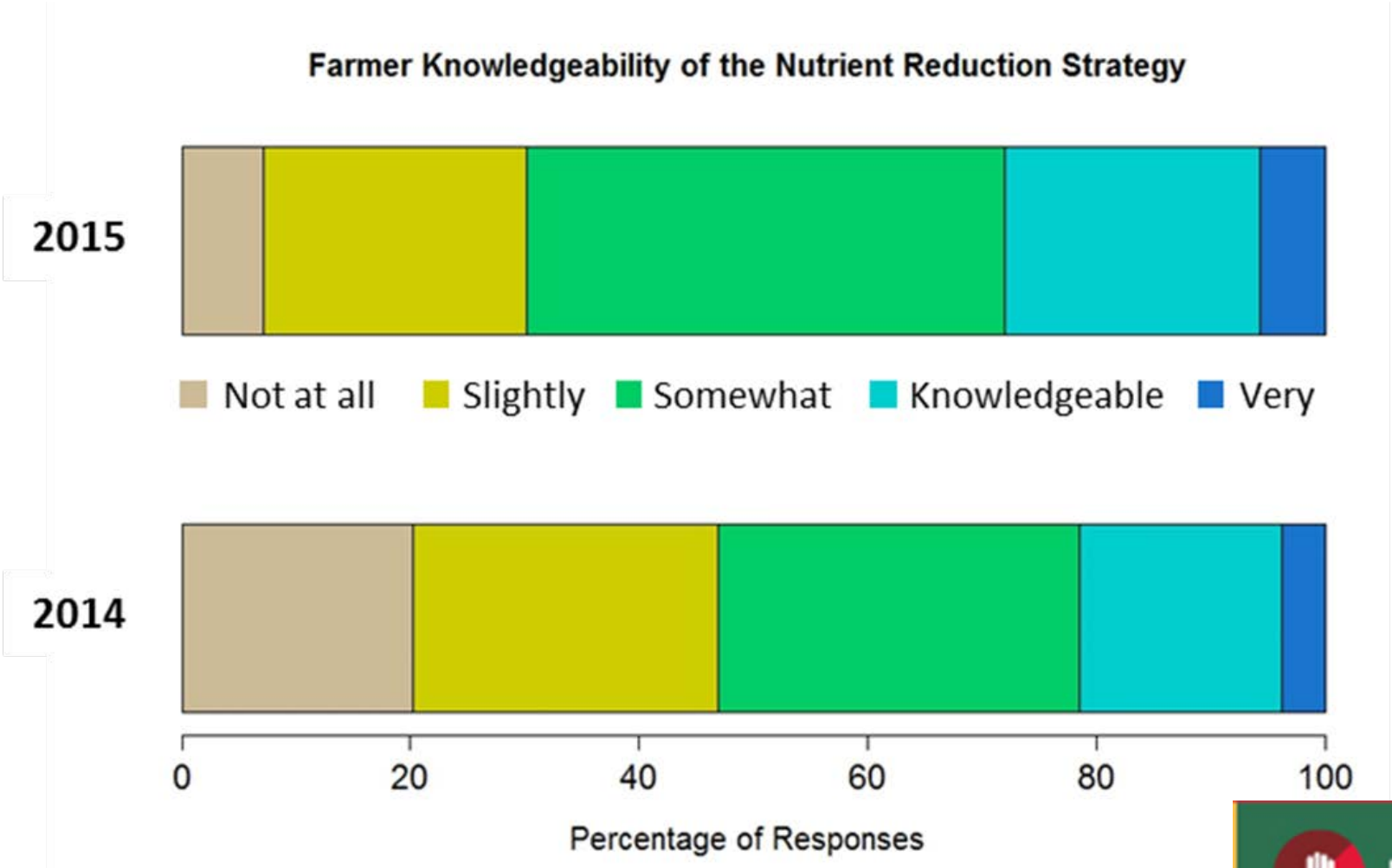


WQI HUC12 Demonstration Projects



INPUTS

- People
- Funding
- Agency resources
- Private sector resources



Indicators of Change

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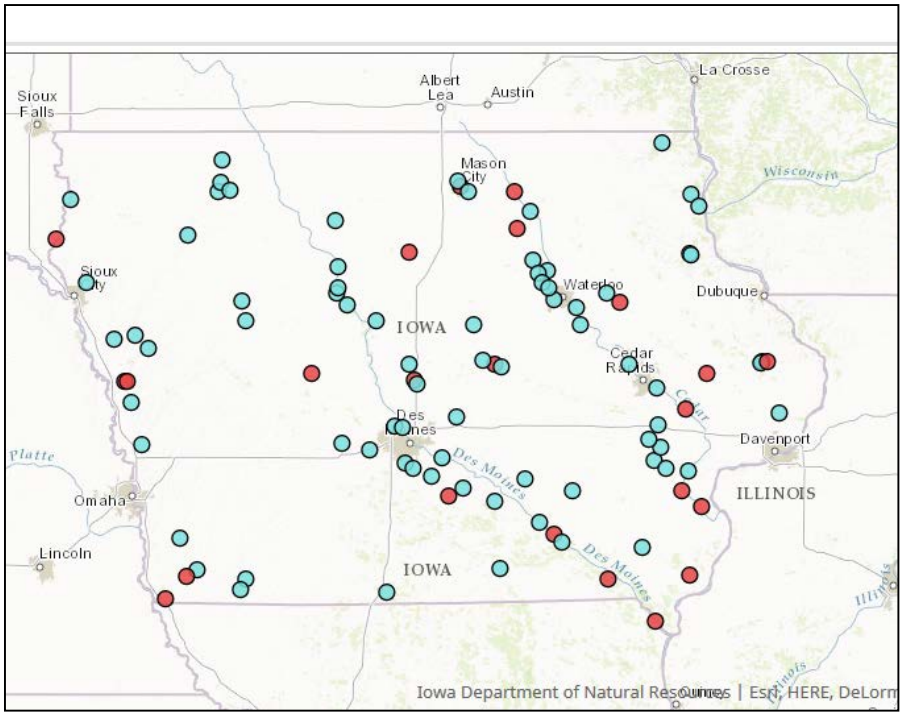
- State and federal agency practice implementation data
- Private field-level data (aggregate)
- Point Source implementation data



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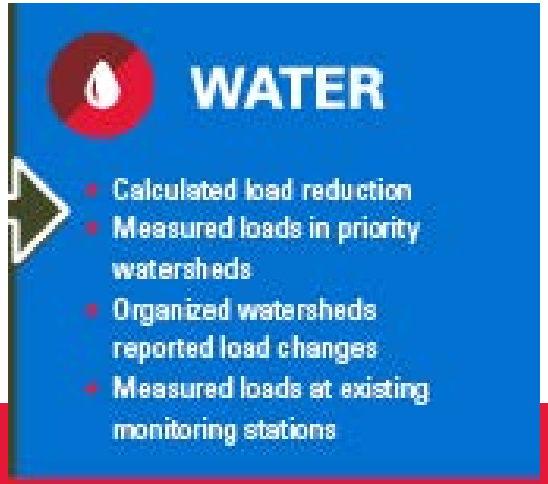
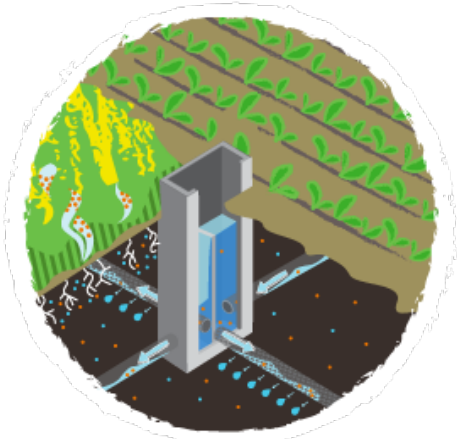


Increasing Implementation

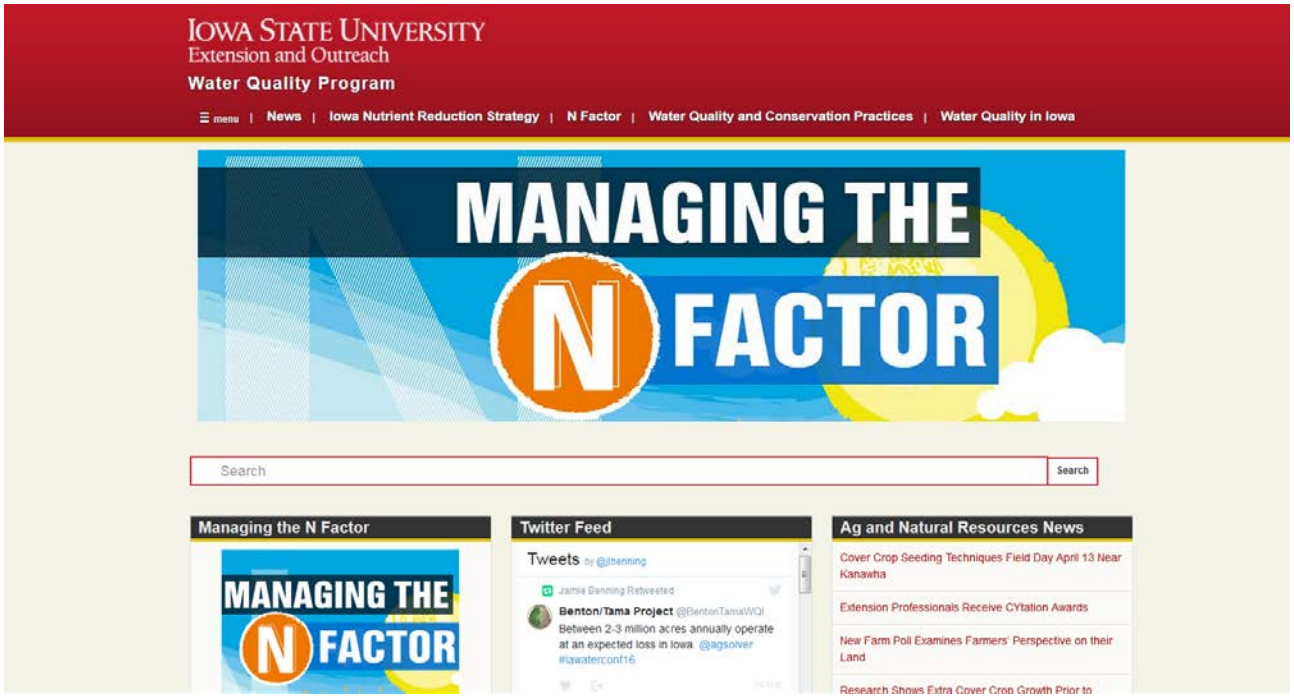
- **Increasing practice effectiveness**
- **Developing and testing new technologies**
- **Innovative education and outreach**



Saturated Buffer

retaiN N test kits

http://www.extension.iastate.edu/waterquality/



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