

Iowa Nutrient Reduction Strategy Annual Report Now Available

Report documents \$420 million in public and private funding supporting water quality efforts in Iowa

DES MOINES – Iowa State University, the Iowa Department of Agriculture and Land Stewardship and the Iowa Department of Natural Resources today highlighted the Iowa Nutrient Reduction Strategy Annual Progress Report that is now available at <http://www.nutrientstrategy.iastate.edu/documents>.

The annual report provides progress updates on point source and nonpoint source efforts to reduce nitrogen and phosphorus loads leaving the state. The Report follows the “logic model” framework that identifies measurable indicators of desirable change that can be quantified, and represents a progression toward the goals of achieving a 45-percent reduction in nitrogen and phosphorus loads leaving the state.

“There are a wide variety of factors that impact water quality and this report seeks to identify and quantify all of the work being done. We continue to see progress among all aspects of measures that have been identified, we just need to continue to accelerate and scale-up our efforts,” said Iowa Deputy Secretary of Agriculture Mike Naig.

“We continue to focus highly on the main goal of water quality improvement and it is gratifying to see we are moving in that direction. A great deal of collaboration and cooperation has taken place which has enhanced and continues to enhance the partnerships and teamwork being done to successfully meet our end goals,” said Iowa DNR Director Chuck Gipp.

The “logic model” framework recognizes that in order to affect change in water quality, there is a need for increased inputs, measured as funding, staff, and resources. Inputs affect change in outreach efforts and human behavior. This shift toward more conservation-conscious attitudes in the agricultural and point source communities is a desired change in the human dimension of water quality efforts.

With changes in human attitudes and behavior, changes on the land may occur, measured as conservation practice adoption and wastewater treatment facility upgrades. Finally, these physical changes on the land may affect change in water quality, which ultimately can be measured through both empirical water quality monitoring and through modeled estimates of nutrient loads in Iowa surface water.

“While it will take time to reach the 45 percent reduction goal, the indicators we track are moving in the right direction,” said John Lawrence, interim vice president of extension and research at Iowa State University.

Highlights from the report include:

Inputs

- The report identifies \$420 million in private and public sector funding for NRS efforts, an increase of \$32 million compared to the previous year.
- Since 2013 the Iowa Nutrient Research Center has funded 54 projects with a primary focus on evaluating the performance of current and emerging in-field and edge-of-field practices to reduce nutrient loss.
- Of the 151 municipal wastewater plants and industrial facilities required to assess their nutrient removal capacity, 105 have been issued new permits and 51 of those have submitted feasibility studies on potential technology improvements to reduce nutrient loss.

Human

- Outreach events effectively doubled in the last year. In the latest reporting period, partner organizations reported 474 events focused on water quality with 54,500 total attendees.
- In 2017, 77% of farmers surveyed reported that they are knowledgeable about the NRS. This is a 9% increase from 2015.

Land

- Government cost-share programs enrolled 300,000 cover crop acres in 2016. Iowa has experienced a steady increase in cover crop acres since 2011, and statewide estimates (beyond just cost-share) indicate 600,000 acres were planted in 2016.
- Edge-of-field practices that address only nitrogen, such as bioreactors and nitrate-treating wetlands, are just starting to receive increased focus from cost-share programs.

Water

- Iowa has an extensive water quality monitoring system in place and at least 88% of Iowa's land naturally drains to a location with water quality sensors installed and maintained mainly by the Iowa Department of Natural Resources, University of Iowa—IIHR, and the US Geological Survey
- Water monitoring occurs at various scales, from edge-of-field to large watersheds. Long-term data will contribute to our understanding of local and statewide nutrient loss over time.

The report was compiled by the Iowa Nutrient Research Center at Iowa State University with support from the Iowa Department of Agriculture and Land Stewardship and the Iowa Department of Natural Resources. A draft of the report was shared with the Iowa Water Resources Coordinating Council in late September and their feedback was incorporated into the recently finalized report.

###

About the Iowa Department of Agriculture and Land Stewardship

Led by Secretary Mike Naig, the Department of Agriculture and Land Stewardship serves the rural and urban residents that call Iowa home. Through its 14 diverse bureaus, the Department ensures animal health, food safety and consumer protection. It also promotes conservation efforts to preserve our land and enhance water quality for the next generation. Learn more at iowaagriculture.gov.