



The Iowa Policy Project

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July 2014

EXECUTIVE SUMMARY

A Threat Unmet

Why Iowa's Nutrient Strategy Falls Short Against Water Pollution

By David Osterberg and Aaron Kline

Bodies of water across Iowa increasingly are in peril, and send their problems on to the Mississippi River and on to the Gulf of Mexico. Public policy has failed to address it, and shortcomings of the 2013 Nutrient Reduction Strategy (NRS) promise more of the same.

In 2010, the “Dead Zone” in the Gulf was 7,700 square miles, one of the five highest recordings ever and in 2012, over 50 percent of Iowa’s water bodies were classified as impaired. This situation produced the call for the NRS, designed to take on this water quality problem.

In this paper we first examine the effects of excess nutrients — nitrogen and phosphorus — in

waterways and their effects on the Gulf and Iowa waters. Next, we explain Iowa’s NRS, and its different approaches to pollution reduction from point sources (cities’ waste treatment and industry) as opposed to nonpoint sources (mainly farms). Finally, we examine the effectiveness of voluntary conservation approaches in agriculture and the missing components of Iowa’s NRS that hinder its effectiveness. The importance of changing the dominant reliance on voluntary conservation practices cannot be overstated. As the State-EPA Nutrient Innovations Task Group noted:

“We believe that absent a profound change in current approaches and support for the development of a multi-sector framework of accountability for both point and nonpoint sources, we collectively are unlikely to be successful in responding to an increasingly pervasive source of pollution that comes from multiple sources in every state and affects not only near-field waters and habitats, but also those of neighboring and downstream states.”

The NRS has established goals of a 45 percent reduction in nitrogen and phosphorus loads leaving the state. Different strategies are employed for point and nonpoint sources of pollution: For point sources, nutrient reductions for a number of municipal waste treatment plants and industries are mandated. For agriculture, which is responsible for the lion’s share of the pollution, voluntary measures are all that is required.

While many citizens might find this apportionment of strategies odd, this IPP research examined the literature to find how and if voluntary measures by agribusiness might be expected to remove

Iowa Impaired Waters (2012): Over Half Impaired, More Threatened

	Number Assessed	Potentially Impaired	Impaired
Streams and Rivers	901	200 (23%)	490 (55%)
Lakes and Reservoirs	201	16 (8%)	117 (58%)

its 90 percent share of the total 45 percent nitrogen goal. The report finds the NRS needs at least six major changes of policy and commitment to succeed in Iowa:

- **Direct attention to the problem.** While the issue is acknowledged by the Secretary of Agriculture and the ag industry, other parts of the NRS need significant assistance.
- **Sufficient funding from the state for water quality.** The recent veto by the Governor of much of the new money the Legislature appropriated to share conservation costs with farmers is a bad start. Iowa's water quality improvement requires sustained and consistent funding, rather than one-time funding subject to the governor's veto power. Lawmakers could fully fund the Natural Resources and Outdoor Recreation Fund. In 2010, 63 percent of the voters in Iowa voted to amend the State Constitution to require a part of any new sales tax be dedicated to "protecting and enhancing water quality and natural areas in the state." The new fund could provide more than \$100 million annually for water quality and conservation to meet the goals of the NRS.
- **Adopt nutrient criteria standards for Iowa waters.** Such standards are part of EPA's eight-point framework for reducing nutrient loads to waterways. However, Iowa has not developed nutrient criteria standards due to concerns with EPA's statistical framework used for developing its recommendations.
- **Assure monitoring of targeted water bodies to demonstrate progress — or stagnation — toward the goals.** Millions of dollars are spent on small watersheds to demonstrate that voluntary measures can succeed — but there is no accompanying requirement for monitoring.
- **Require all farms statewide to choose two conservation management practices.** This would force action but let farmers choose which practices to implement for improving water quality. Leaving land along streams as a buffer between row crops and the water is one such practice that would provide a noticeable reduction in the amount of nitrogen and phosphorus, in addition to controlling sedimentation, trapping bacteria, and providing wildlife habitat. Other practices listed in the "clean water is good water" section of the Iowa Soybean Association website are cover crops, bioreactors, grassed waterways, conservation uses for oxbows, contour farming and terraces. Establishing wetlands near fields is another technique.
- **Make sure all understand the role of public oversight and enforcement.** Iowa officials must set benchmarks, starting no more than three years in the future, to ensure the new strategy is working. Iowans should not allow the NRS to serve as window dressing to stave off action by the federal Environmental Protection Agency, while doing little to actually clean the water.

It is up to Iowa to sow the seeds that will harvest clean water for generations to come. Iowa's taxpayers and farmers together must identify situations to achieve the most benefit for the lowest expense. Success will require additional financial support, new practices on every farm, buffers along our streams or other practices. The NRS in its current state is not enough for agriculture to achieve its share of the nutrient reductions necessary for Iowa to decrease nitrogen and phosphorus loads by 45 percent.

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The Iowa Policy Project, www.iowapolicyproject.org, is a nonpartisan, nonprofit public policy research organization in Iowa City. Funding for this report was provided by the McKnight Foundation and the Fred and Charlotte Hubbell Foundation. Conclusions and recommendations are solely those of the authors.