NUTRIENT MANAGEMENT PRACTICES FOR WATER QUALITY

Adam Herges

The Mosaic Company, Plymouth, MN Adam.herges@mosaicco.com www.mosaicco.com

Field to Market®: The Alliance for Sustainable Agriculture

Field to Market® is a diverse alliance working to create opportunities across the agricultural supply chain for continuous improvements in productivity, environmental quality, and human well-being. The group provides collaborative leadership that is engaged in industry-wide dialogue, grounded in science, and open to the full range of technology choices.

Driving Sustainable Outcomes for Agriculture

Field to Market®: The Alliance for Sustainable Agriculture brings together a diverse group of grower organizations; agribusinesses; food, beverage, restaurant and retail companies; conservation groups; universities; and public sector partners to focus on defining, measuring and advancing sustainability of food, fiber, and fuel production.

Across the entire agriculture supply chain – from the farm gate to the restaurant counter – the challenge of meeting demand for a rapidly growing population, while conserving natural resources, has become increasingly complex. With the world population estimated to reach 9 billion by 2050, the entire food chain must work together to efficiently and responsibly lay the groundwork for the future. Source: www.fieldtomarket.org.

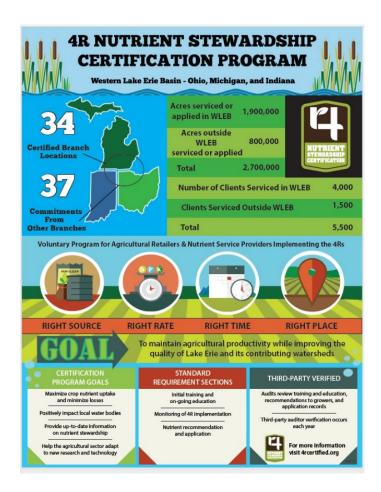
4R Nutrient Stewardship Certification Program and Expansion Opportunities

The agriculture community launched a proactive, responsible commitment aimed at the long-term improvement of Lake Erie's water quality in March, 2014.

This 4R Nutrient Stewardship Certification Program encourages agricultural retailers, service providers and other certified professionals to adopt proven best practices through the 4Rs, which refers to using the Right Source of Nutrients at the Right Rate and Right Time in the Right Place. This approach provides a science-based framework for plant nutrition management and sustained crop production, while considering specific individual farms' needs.

Source: <u>www.4rcertified.org.</u>

Retailers are requesting to be certified through the Western Lake Erie Basin 4R Nutrient Stewardship Certification program in other regions of the United States. As a result, The Nature Conservancy, Ohio Agribusiness Association, and The Fertilizer Institute are in discussions with several states and provinces.



Mosaic's Nutrient Stewardship Efforts

The Mosaic Company is one of the world's leading producers and marketers of concentrated phosphate and potash crop nutrients, two essential crop nutrients. Driven by its mission to help the world grow the food it needs, Mosaic is committed to working toward improved global food security and protecting critical water resources. The Mosaic Company and The Mosaic Company Foundation make investments in and partner with best-of-class leaders in the focus areas of food, water and local community investments. The Mosaic Company supports the 4Rs of Nutrient Stewardship, using the Right Source, with the Right Rate, at the Right Time, and in the Right Place.

Rice Stewardship Partnership program: a collaborative partnership between Ducks Unlimited and USA Rice. This Regional Conservation Partnership Program (RCPP) project focuses on improving rice production through three major goals of providing wildlife habitat for waterfowl, increasing water use efficiency, and improving nutrient management through 4Rs in the Mississippi Alluvial Valley.

Other financial partners: Walmart, National Fish and Wildlife Foundation, U.S. Department of Agriculture, Chevron, BASF, Freeport-McMoRan Foundation, Irene W. and C.B Pennington Foundation, RiceTec, Riviana Foods, HorizonAg, MacDon, Farmers Rice Milling Company, Wells Fargo, and Turner's Creek and Bombay Hook Farms.

The Western Winter Wheat Initiative is a collaboration between Bayer Crop Science, The Mosaic Company Foundation, Richardson International, and Ducks Unlimited. The purpose for this initiative is to build awareness and credibility of winter wheat as a highly productive crop option for western Canadian farmers. Western Winter Wheat Initiative is designed to ensure that there is a significant support structure in agronomy, products, and grain marketing to ensure this crop is a sustainable and profitable option for farmers for decades to come.

North American Agriculture Nutrient Stewardship Initiative: a collaborative between The Mosaic Company Foundation and The Nature Conservancy. This initiative has many objectives but three main focus areas including:

- Improve water quality in the Western Lake Erie Basin in Indiana, Michigan and Ohio, through support of a multi-sector initiative, governed by the Nutrient Stewardship Council (NSC), to continue supporting efforts around 4R Nutrient Stewardship.
- Expand the 4R Nutrient Stewardship Certification program to other states or regions
- Launch a 4Rs pilot program for nutrient stewardship in the Mississippi River Basin

PROCEEDINGS OF THE

46th

NORTH CENTRAL EXTENSION-INDUSTRY SOIL FERTILITY CONFERENCE

Volume 32

November 2-3, 2016 Holiday Inn Airport Des Moines, IA

PROGRAM CHAIR:

Dorivar Ruiz Diaz

Kansas State University Manhattan, KS 66506 (785) 532-7213 ruizdiaz@ksu.edu

PUBLISHED BY:

International Plant Nutrition Institute

2301 Research Park Way, Suite 126 Brookings, SD 57006 (605) 692-6280

Web page: www.IPNI.net

ON-LINE PROCEEDINGS:

http://extension.agron.iastate.edu/NCE/