# Midwest Row Crop Collaborative

Scaling Solutions for Agriculture and the Environment



## What is the Midwest Row Crop Collaborative?

- The Midwest Row Crop Collaborative is a diverse group of organizations working to support the efficient and sustainable production of food, fiber, and fuel while also conserving and improving natural resources.
- The Collaborative is working to support, enhance, and accelerate the environmentallyfriendly agricultural practices already underway in Illinois, Iowa, and Nebraska.
- This effort will ensure our agricultural system can meet the demands of a rapidly growing population expected to exceed 9 billion people by 2050 while also conserving and improving natural resources and ensuring the ability of future generations to meet their own needs.

## Who is participating in the Midwest Row Crop Collaborative?

- The Midwest Row Crop Collaborative's founding members include Cargill, Environmental Defense Fund, General Mills, Kellogg Company, Monsanto, PepsiCo, The Nature Conservancy, Walmart and World Wildlife Fund.
- These leading companies and conservation groups are all committed to building a broad partnership in three pilot states: Illinois, Iowa and Nebraska.
- The Collaborative will measure and deliver improved environmental outcomes through cross-sector collaboration and continuous improvement throughout the Upper Mississippi River Basin.

### What challenges is the Midwest Row Crop Collaborative working to solve?

- Farmers and agricultural producers need to find better, more efficient, and more environmentally conscious practices to ensure we not only meet the growing demands of a growing population, but also protect our water, lands, and other natural resources for future generations.
- The Midwest Row Crop Collaborative is working to find sustainable solutions to address a series of environmental impacts from farming, such as:
  - Water quality impairment, including eutrophication in the Upper Mississippi River Basin and Gulf hypoxia, with nitrogen runoff 25 percent higher than the U.S. EPA goals for the Gulf of Mexico.
  - **Greenhouse gas emissions**, with fertilizer use in the agriculture industry accounting for approximately 30 percent of total agricultural emissions nationally.
  - Groundwater depletion of the Ogallala Aquifer, which experts estimate is only being replenished to 70 percent of its capacity. Acreage fed by the Ogallala produces about 20 percent of U.S. cattle, corn, cotton, and wheat.<sup>1</sup>

# Why is the Collaborative focused on the Midwest, specifically Illinois, Iowa and Nebraska?

- The majority of row crop production occurs in the Midwest, with the states of Illinois, lowa and Nebraska collectively representing nearly 44 percent of corn, soy, and wheat production in the United States.
- The Illinois, Iowa and Nebraska region currently contributes 422 million kg/year of nitrogen downstream, which ultimately flows into the Gulf of Mexico, contributing to the annual Gulf hypoxia, or *dead zone*.
- Farmers lack technical resources and business cases that can help demonstrate success of fertilizer optimization, cover cropping, and other practices that enhance soil health, reduce greenhouse gases, and improve water and air quality
- Illinois, Iowa, and Nebraska are a starting point and can yield critical lessons for other states and regions.

## How will the Collaborative measure its success?

- The Midwest Row Crop Collaborative is committed to working with others farmer organizations, environmental groups, and state and local watershed partnerships to achieve the goals outlined in the Gulf Hypoxia Taskforce action plan and respective state nutrient and water loss reduction plans. Those common goals include:
  - By 2025, 75 percent of row crop acres in Illinois, Iowa and Nebraska are engaged in the sustainability measures that will result in optimizing Field to Market Fieldprint<sup>®</sup> analyses and soil health practices outcomes.
  - By 2025, reduce nitrogen loading from Illinois, Iowa, and Nebraska by 20 percent as a milestone to meet agreed upon Gulf of Mexico Hypoxia Task Force goal of 45 percent reduction in nitrogen and phosphorus loading.
  - By 2035, Illinois, Iowa and Nebraska have met the 45 percent nutrient loss reduction goal, and partnerships and goals are established to expand the Collaborative across the Upper Mississippi River Basin.
  - By 2025, 50 percent of all irrigation units used in Nebraska will maximize water conservation to reduce pressure on the Ogallala Aquifer.
- The Collaborative will work to ensure its efforts leverage technical and regional information already in place as well as complement other ongoing conservation efforts. These partnerships also will provide a measure of the Collaborative's success.

<sup>&</sup>lt;sup>1</sup> Data: Michigan State University, cited in Bloomberg article (<u>http://www.bloomberg.com/news/articles/2015-07-02/great-plains-water-crisis-aquifer-s-depletion-threatens-farmland</u>)

### What projects are the Midwest Row Crop Collaborative currently undertaking?

- The Midwest Row Crop Collaborative formally launched in August 2016 at Farm Progress, but its members have been working behind the scenes since 2015.
- The Collaborative has a series of ongoing efforts to support sustainable farming practices, including:
  - The Soil Health Partnership Led by the National Corn Growers Association, this initiative brings together diverse partner organizations including federal agencies, universities, and environmental groups to work toward the common goal of improving soil health. The Partnership is identifying, testing and measuring farm management practices that improve soil health and benefit farmers.
  - The Sustainable Agriculture Resource Center A collaborative resource for farmers and trusted advisers that lays out the business opportunities to help meet supply chain demand for sustainability, which is a selling point for ag retailers, independent crop consultants, and farmers. The Center, established in partnership with Field to Market: The Alliance for Sustainable Agriculture and the Agricultural Retailers Association, will empower farmers to not only meet market demands for sustainable products, but also to confront and address risk by relying on the ag retail sector as a provider of solutions.
  - Regional Conservation Partnership Program Projects The Collaborative is partnering with key projects to support the use of sustainability metrics and conservation practices via improved management of grower data. The Collaborative is currently partnering with two projects in its priority region, the Midwest Agricultural Water Quality Partnership and the Precision Conservation Management: A Farm Enterprise Approach to Promoting Conservation Practices.
- Farmers are the original stewards of the land. The Collaborative is working to provide them with proven methods to meet consumer demand, improve conservation, and ultimately operate more efficiently and effectively.

### What is the Midwest Row Crop Collaborative's strategy to achieve its goals?

The Collaborative is utilizing four strategies to improve positive environmental and social outcomes in the Upper Mississippi River Basin. These strategies are:

- **Building the Business Case**: build data and engage farmers via the Soil Health Partnership;
- Sustainable Agriculture Resource Center: provide training and technical support for ag retailers and crop advisors to help scale conservation practices such as fertilizer optimization and cover crop adoption;
- **Policy Engagement**: plan for and understand drivers and incentives for in-field, edge-of-field, and landscape conservation practices; and,
- **Communications**: catalyze change in the region and help consumers understand these efforts, seeing farmers as heroes.