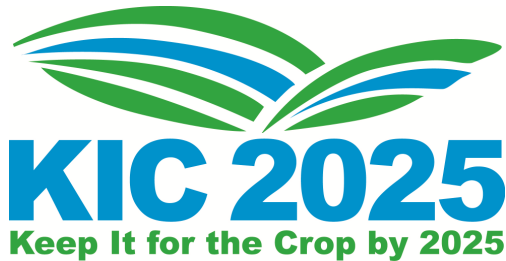




KIC Quarterly Report July 2012



It's been ten months since CBMP officially launched the "Keep it for the Crop by 2025" program back in September 2011 at the Farm Progress Show. As with many new programs the first few months were spent lining up the resources to fund the program and hiring personnel to make it all happen.

As you review the detailed progress we have made on pages 2-3 of this report, we thought a timeline of how this all came about would be helpful, including how the program is being funded.

- May 2011: CBMP presents concept for KIC Program to Illinois Nutrient Stakeholders @ IEPA Mtg.
- July 2011: CBMP sources and secures sponsors to fund launch of KIC Program (see page 3)
- Sept 2011: KIC is officially announced at Farm Progress Show in Decatur; staffing KIC is now priority
- Jan 2012: Dan Schaefer hired as CBMP Director of Nutrient Stewardship
- Jan 2012: Ag Industry introduces HB 5539 to secure long-term funding for KIC and Nutrient Research Education Council Projects from designated assessment on fertilizer sold in Illinois
- Feb 2012: Dan Schaefer visits with ag retailers in KIC watersheds to gain support for dealers working with growers in the watersheds on implementing the 4Rs.
- March 2012: Work begins with Rockford Map Publishers to develop detailed maps of the watersheds to assist CBMP and its partners in defining the watershed boundaries.
- April 2012: CBMP finds software partner to begin developing program for ag retailers to track acres in the watersheds that are utilizing the 4Rs of nutrient stewardship (right source, right rate, right time, right place).
- May 2012: IL General Assembly passes HB 5539 creating the Nutrient Research & Education Council
- May-July: See rest of KIC Quarterly Report!

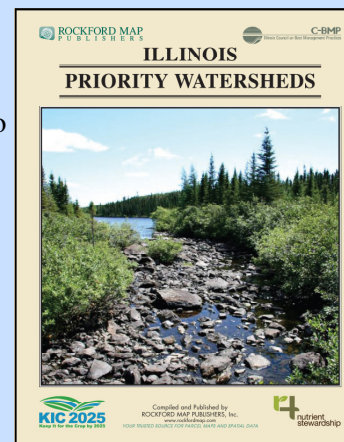
CBMP is a 501 (c) 5 organization. Its members include: Illinois Corn Growers Association, Illinois Farm Bureau, Illinois Fertilizer & Chemical Association, Illinois Pork Producers, Illinois Soybean Association and Syngenta.

KIC Makes Significant Progress on Outreach, Tools, Research and Relationships to Reduce Nutrient Losses

By Dan Schaefer, CBMP Director of Nutrient Stewardship

To have a truly successful KIC program we have to create a structure that is science-based, utilizes sound technical resources and is user-friendly. I think we are getting there fast with these recent accomplishments:

- * **KIC Plat Books:** Ag retailers need to be able to delineate which customers are within the watershed boundaries. The initial maps we had of the watersheds just weren't detailed enough. With help from IEPA and NRCS, we were able to better define the watershed boundaries, and we engaged Rockford Map Publishing to develop plat maps for each priority watersheds. CBMP's license agreement with Rockford allows us to provide a bound plat map book to each retailer as well as give them on-line access to the maps.
- * **MRTN Smartphone App:** Dennis Bowman at UI-Extension has developed a smart phone application for the MRTN (Maximum Return to Nitrogen) calculator. This app gives us the ability to access nitrogen recommendations from the seat of the tractor or combine. The calculator is available on the Iowa State website, and Dennis took it a step further adding in the nitrogen source, rate, time and place along with additives and application costs. A crop advisor can complete the app from a Droid or Apple device and walk the grower through the concept of maximizing corn production with a systems approach to nitrogen, also emailing a copy of the plan to the farmer for his records. The app will be ready shortly and will be free by contacting Dennis Bowman. Watch for a press release from CBMP with details on this new tool.
- * **Software for Tracking 4R Implementation:** By working with ag retailers, we can begin to track the acres in the watershed that are under a 4R nutrient stewardship program (i.e. split applications, use of stabilizer products, utilization of rate calculator, soil testing, etc.) Software Solutions Integrated (SSI) in Shelbyville is working with KIC to develop a component within their product billing/inventory system that retailers can utilize to track progress on the 4Rs in the watershed. We will utilize these KIC dealer reports to develop web-based dashboards and other illustrative tools to demonstrate 4R progress on the acres in each watershed.
- * **Nitrogen Rate Trials and Nitrate Testing:** KIC is asking ag retailers in the watersheds to find 2-3 growers in each watershed who enjoy doing field trials. Dr. Fernandez and Dr. Nafziger at UI helped with the trial protocols with the goal being to better define what the nitrogen rate should be in the watershed. We'll incorporate soil associations and GIS tools to help makes these trials easy for the retailers to implement. We are also asking retailers to check soil nitrate amounts this fall after ammonia application to track the conversion of ammonium to nitrate. It's easy to make assumptions about nitrate conversion, but testing will show what's really happening. We will have testing kits to help the retailers provide this vital information to the KIC program.
- * **Fall Strip Trials Planned:** John Deere donated equipment for us to conduct deep placement and strip-till in both corn and soybeans. Again with the help of UI, we've written the protocols and are looking for growers who want to do a comparison between strip-till and their normal application practices. The trials will help UI researchers compare their small plots to the larger field trials we'll set out. This will help validate what they are seeing for phosphorus and potassium removal rates, nutrient stratification and help refine how we soil test in strip-till fields.



As you can see, ag retailers and the UI land grant university are critical partners in the KIC program!

Recognizing our KIC Sponsors and Supporters

KIC is a program fully funded by the agricultural industry, with moral and technical support from our state agencies. Getting KIC off the ground is possible only because of the strong conviction of the following groups to support this effort by making a generous donation to CBMP to fund KIC.

Grower Organizations:



**Illinois
Corn
Growers
Association**



Fertilizer Industry :



Crop Protection & Equipment Industry:



We also thank Dr. Howard Brown of GROWMARK and Dr. Fabian Fernandez, Dr. Emerson Nafziger and Dennis Bowman of the University of Illinois for their agronomic expertise and assistance with the KIC nitrogen and phosphorus field trials. Without the support of all these organizations and people, KIC could not have accomplished so much in our first year. Thank you all!

Nutrient Research & Education Council (HB 5539)

A Nutrient Stakeholder Coalition Effort!

It took two years, but on May 22, 2012 the Illinois General Assembly sent HB 5539 to Governor Quinn's desk. This legislation makes significant changes to the Illinois Fertilizer Act and creates the Nutrient Research & Education Council (NREC). The NREC will consist of representatives from grower, agribusiness, agronomy, academia, environmental organizations, IEPA and IDA. A special assessment on each ton of fertilizer sold in Illinois will be allocated for the purposes of nutrient research, on-farm water quality programs, education on proper utilization of nutrients and overall nutrient stewardship. The NREC is structured outside of state government to ensure the funds are utilized only for NREC purposes, and the IL Dept of Agriculture is a critical partner with the fertilizer industry to assure accurate collection of the assessments to NREC.

HB 5539 was introduced by the IL Fertilizer & Chemical Association, and the bill was supported all through the legislative process by the major ag organizations, the IEPA and IDA, and environmental groups. The Metropolitan Water Reclamation District of Greater Chicago (MWRDC) also supported HB 5539 and has engaged in subsequent meetings with CBMP to explore ways we can work together on watershed and research projects that take into account nutrient implications from point and non-point sources.

We anxiously await Governor Quinn's signature on HB 5539, which becomes effective immediately. The funding provided to the NREC from the fertilizer assessment will assure a sustainable future for the KIC program and enable agriculture to also invest in other programs and research to continue to increase nutrient utilization and reduce nutrient losses. Bottom line is this: With state resources strained, the ag industry has stepped up to assure our ability to manage nutrients responsibly with scientific research, education and communication to make it happen.

What Effect is the Drought Having on Nutrient Management?

Going into the 2012 growing season, the ag industry had high expectations for a very successful crop. Agronomists made recommendations for fertilizer based upon a history of yields on the farm, fertilizer prices, grain prices, soil types and the individual planting patterns in the fields. Planting went extremely well with great soil conditions, and an excellent stand of corn and soybeans emerged. Many growers and retailers embraced the KIC concept and split-applied nutrients before planting, during planting and after planting. Then it quit raining. And got hot. Really hot. Now what?

The drought of 2012 has crushed yield expectations. The corn in particular is dying early in the field, having not had the opportunity to take up the nutrients from the soil or from applied fertilizer. The irony is that the nutrients applied in the latest stages of plant development (usually considered the optimum time) is likely the fertilizer now most vulnerable to loss because the plant was not fully able to utilize the later-applied nutrients due to lack of moisture, heat, stress, and now, death. There is considerable worry throughout agriculture that the drought will be like nothing we have experienced in our lifetime. Frankly, all citizens should be worried about the drought's impact on our local, state, national and world food supply and the economic impact it will have on all food prices, not just foods derived directly from corn and soybeans. Livestock and therefore the animal protein that the majority of people rely upon as part of their diet relies on grain, ethanol plant distillers grain and grass to thrive. None of those will be in abundance in late 2012.



Not the corn we are used to seeing in Illinois; at least this plant has an ear.

So what does this mean for KIC and for nutrient management? When we announced the KIC program, we also shared with nutrient stakeholders that it is difficult to know how weather will impact our nutrient management activities. We can do everything right according to agronomic and environmental considerations, and still have losses due to too much rain or not enough. This year many farmers did do the right thing and their crops have died. We will not know for some time what the impact will be on nutrient loss activity, but we do know that when a crop is not there to utilize the nutrients, well, that's a game changer that no one has any control over at this point in time. We will know more as we get into the fall and see what happens. Hopefully, moisture returns to our environment. In the meantime, on behalf of agriculture, we ask everyone to keep the farmers, the grain elevators, the ag retailers, the seed industry, livestock producers and all the enterprises that rely on agriculture in their prayers.

Drought Piques Interest in Cover Crops

CBMP supports the utilization of cover crops to retain soil, sequester nutrients and generally improve soil conditions. Culturally in Illinois we have had challenges getting the level of interest in cover crops to where it needs to be. But that seems to be changing and the drought has resulted in growers expressing more interest in cover crops' ability to utilize excess nutrients that the dying plants are not utilizing, and hold them until spring. Mike Plumer, our CBMP Coordinator, is an expert on cover crops and has been extremely busy managing a multitude of requests to share his expertise at the state and national level on how cover crops can be incorporated more into the ag landscape. On August 17, CBMP and the American Farmland Trust are hosting a meeting in the Salt Fork Vermilion River Watershed to discuss cover crops and demonstrate their benefits. CBMP will continue its efforts to spread the good word about cover crops. The more we talk about it, demonstrate the benefits and encourage people to integrate cover crops into their production systems, the better odds we have of increasing the use another valuable tool to reduce nutrient losses and increase agricultural productivity.



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