

# Heartland Nutrient and Pesticide Management

## Who We Are...

The **Nutrient and Pesticide Management (NPM) Team** is comprised of research and extension faculty from Kansas State University, the University of Nebraska, Iowa State University, and the University of Missouri. A U.S. EPA Region 7 representative participates as a member of the NPM team as well, and together they work as part of a multi-institution steering committee, which includes multiple state and federal natural resource agency personnel, and representatives from non-governmental organizations. The number one priority of the team is to facilitate efficient development, evaluation, and dissemination of research-based information on phosphorus, nitrogen and pesticide pollutants. The NPM team promotes best management practices (BMPs) to aid in the control of nonpoint source pollution of those nutrients and pesticides.

## Our Objectives...

- Improve the availability of technical and educational resources on nutrient and pesticide management to meet the needs of watershed planners, technical service providers, and producers.
- Address quantitative nutrient and pesticide reduction goals, including goals related to TMDL implementation, nutrient criteria and nutrient trading proposals.
- Improve tools available for developing Comprehensive Nutrient Management Plans (CNMPs).
- Identify, report, and publicize the effectiveness of BMPs for phosphorus, nitrogen and pesticides.



## Our Accomplishments...

- Communication has been enhanced between regional stakeholders through a multi-institutional steering committee.
- Phosphorus (P), Nitrogen (N) and Pesticide Roundtables have been held in 2004, 2005 and 2006 respectively. Regional and technical specialists discussed P, N and pesticide BMPs, the P-Index, on-going research, research needs, and opportunities for collaboration within the Heartland Region.
- Following both Roundtables, larger P, N and Pesticide Workshops were hosted. Roughly sixty participants represented the Heartland Region universities, federal and state agencies, such as EPA Region 7, USDA-ARS, NRCS, Department of Natural Resources, and Soil Conservation Districts at both workshops. The group discussed the research and implementation of P BMPs, including the P-Index, and a variety of other water quality issues.
- These workshops have produced two regional publications, "Agricultural Phosphorus Management and Water Quality Protection in the Midwest" and "Agricultural Nitrogen Management for Water Quality Protection in the Midwest", and a third publication on pesticides is in development. A regional project, "Targeting Watershed Vulnerability and Behaviors Leading to Adoption of Conservation Management Practices" has been funded \$570,000 for three years by CSREES.
- A NPM searchable web site has been developed, it can be viewed at [www.oznet.ksu.edu/waterquality](http://www.oznet.ksu.edu/waterquality)

"...when we share programs and experience we all gain in knowledge and new perspectives."

## The Regional Project

The Heartland Water Quality Initiative is a collaborative effort made up of four land-grant universities; Iowa State University, Kansas State University, the University of Missouri, and the University of Nebraska, and EPA Region 7. The goal of the Initiative is to promote multi-institutional and inter-state research, education, and extension on priority water quality issues. This coordination effort is designed to make these resources more accessible to federal, state, and local water quality improvement efforts in the region.

The Heartland Water Quality Initiative targets three nonpoint source pollution areas that are currently identified as state and regional priorities:

1. Animal Manure/Waste Management
2. Community Involvement in Watershed Management and
3. Nutrient and Pesticide Management

## Our Website... [www.oznet.ksu.edu/waterquality](http://www.oznet.ksu.edu/waterquality)

The NPM website has proven to be an efficient source of research-based information. The website serves as a hub for information sharing throughout the Heartland Region. Summaries of integrated resources and a search publications feature aid the website in educating and encouraging the use of BMPs to improve water quality. A list of workshops and/or educational events is presented on the web site, along with presentations and information fact sheets that were developed from those events.

### Future Plans...

- Collaborate with the Heartland Animal Manure Management Team in CNMP development and implementation programs, with the intent of sponsoring workshops and/or training events throughout the Heartland Region.
- Sponsor a proposal writing workshop to facilitate the development of a regional research project.
- Integrate regional workshop information into state and county levels.
- Continue to facilitate communication between regional stakeholders.
- Produce an *Agricultural Pesticides Management for Water Quality Protection in the Midwest* regional publication.
- Address "Targeting Critical Source Areas for Implementation of BMPs" in 2007 and Watershed Management in 2008.

#### Nutrient and Pesticide Management Leadership Team

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For More Information on the Heartland Nutrient and Pesticide Management Team or the Heartland Regional Water Quality Coordination Initiative, please visit our website at [www.oznet.ksu.edu/waterquality](http://www.oznet.ksu.edu/waterquality)

**Search Features:**  
▶ Publications by author, state, subject, etc.  
▶ Comprehensive list of resources by state.



**“Heartland is the reason that state and federal agencies like NRCS and USDA-ARS are meeting with university personnel to discuss research.”**

- NPM Workshop Attendee -

