

Hypoxia Task Force Agreement and Southern Extension/Research Multistate Activity

AES and CES directors of the 12 Mississippi River basin states signed a Non-funded Cooperative Agreement with the federal Hypoxia Task Force (HTF) in March 2014. SERA 46, Framework for Nutrient Reduction Strategy Collaboration: the Role for Land Grant Universities, began Oct 1, 2014. Since that time, SERA 46 has worked closely with the HTF and its Coordinating Committee to develop mutually agreed on priorities for research and extension activities.

In May 2015, SERA 46 identified the following high priority research and extension activities to focus on during the next three years. These were presented at the HTF business meeting and agreed upon by HTF members.

1. Strengthening Networks

- a. Refer the pertinent work of other multistate committees and land-grant university researchers and extension educators to the HTF and its member agencies.
- b. Work with NIFA and other HTF agencies to identify and share information on latest research being done across university systems.
- c. Work within LGU's to develop more consistent messaging across disciplines/specialists.
- d. Strengthen communication between SERA-46, HTF, and agriculture and food industry groups.
- e. Review the HTF states' nutrient reduction strategies to identify the state goals, approaches and common attributes. Highlight opportunities for cross state information sharing to enhance other HTF state strategies.

2. Nutrient Conservation Systems

- a. Translate science regarding the issues and solutions in tile drained areas into accessible information for states to adopt into policies to address nutrient use and movement, particularly where corn is the main crop and where N movement is the main issue in the broad landscape. (This item has been referred to NCERA 217, Drainage design and management practices to improve water quality.)
- b. Consider current social, economic, and public policy research and opportunities/needs for expansion.
 - i. Develop and implement a social indicators system that will guide, evaluate and advance implementation of strategies to reduce nutrient loss from agricultural lands across the 12 HTF states.
- c. Create a network of watershed practitioners and farmer leaders to strengthen the implementation effectiveness of nutrient management strategies that reduce nutrient movement.
- d. Develop training and educational materials that will provide basic information about agriculture and nutrient management to agency staff, conservation NGOs and others less familiar with agriculture.
- e. Work in partnership with ASA's CCA Program to:
 - i. Identify and summarize pertinent CCA training available in each state.
 - ii. Assess the feasibility of more CCAs producing customized whole farm conservation plans
 - iii. Where appropriate, develop training that addresses state nutrient related regulations and policies to strengthen nutrient management and reduce nutrient loss from agricultural lands.
 - iv. Facilitate learning among CCAs, agencies, university researchers and extension professionals, and farmers to improve adoption of nutrient management practices that reduce nutrient loss from agricultural lands.

3. Monitoring, Calibration, and Validation

- a. Determine the potential for use of comparable edge of field monitoring measures from state to state.
- b. Building from the work by the Monitoring Collaborative, identify further gaps in data available.

- c. Expand the knowledge base for discovery of new tools and practices as well as for the continual validation of recommended practices.
- d. Improve the coordination and delivering of educational programming and increase the implementation effectiveness of nutrient management strategies that reduce nutrient movement for agricultural and non-agricultural audiences.

Workgroups were formed around each priority area are engaging collaborators and developing short white papers that can be used as pre-proposals; including goals, deliverables, costs, anticipated impacts, etc.