

## FRONTIER SEMINAR

Department of Applied Economics and  
College of Earth, Ocean and Atmospheric Sciences

# Reducing the Gulf of Mexico Dead Zone: Integrated water quality modeling and cost effective policy

## Dr. Catherine L. Kling

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**THURSDAY, OCTOBER 8**

**4:00 – 5:30 pm**

**COVELL HALL**

**ROOM 221**

### Abstract:

A seasonally occurring “dead” zone in the northern Gulf of Mexico is the second-largest in the world. We develop an integrated assessment model linking nutrient pollution from cropland upstream with a hypoxic zone model to identify the most cost-effective locations to place conservation practices. Model results suggest that by targeting cropland conservation investments the water quality goal can be achieved at a cost of \$2.7 billion annually, less than ½ the non-targeted cost.



Cathy Kling is a professor of economics at Iowa State University. Cathy’s work has undertaken research to examine how agricultural practices affect water quality, wildlife, soil carbon content, and greenhouse gases. She was elected to the National Academy of Sciences in 2015. She is a Fellow of the Association of Environmental and Resources Economists (AERE) and the Agricultural & Applied Economics Association (AAEA).