



National Water Quality Monitoring Council

Working together for clean water



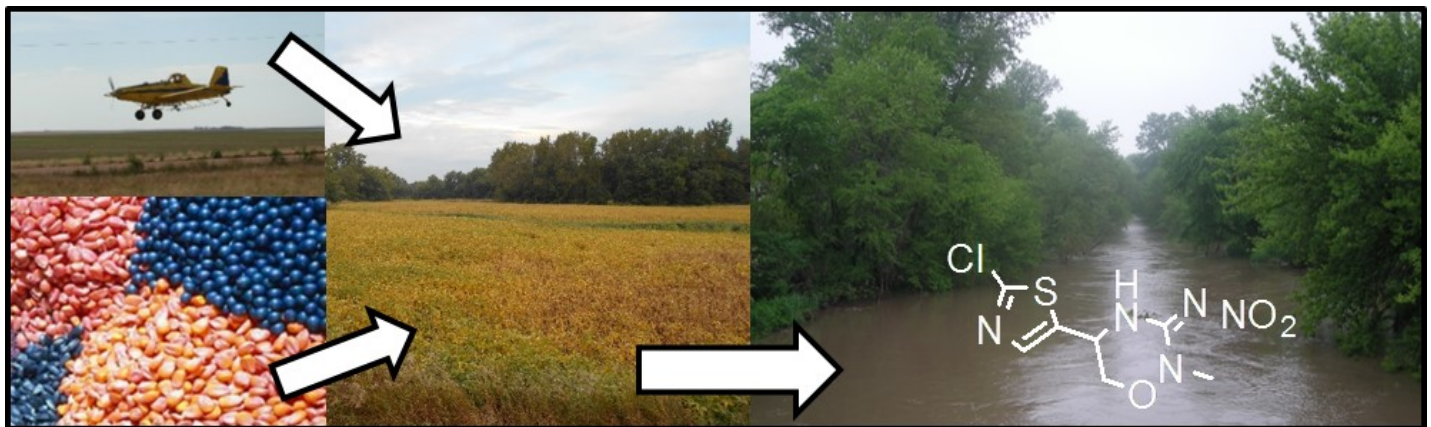
## NWQMC Webinar Series

# Changing Pesticide Use: Challenges for Water-Quality Monitoring and Ecological Implications

Presented by

**Dr. Michelle Hladik, U.S. Geological Survey Research Chemist**

**Wednesday, May 3rd, 2017, 1:00 – 2:00 p.m. EST**



Pesticide use is constantly changing due to pest resistance, regulations, crops planted, and the introduction of new chemicals. In the past few decades there have been changes in the types and amount of insecticides, fungicides, and herbicides used in agricultural and urban areas. In recent years, application techniques for agricultural use pesticides have also changed with an increase in seed coatings in addition to more traditional application methods such as foliar sprays. Most seeds coatings consist of one insecticide and up to five fungicides; many of these pesticides have not been used extensively prior to their inclusion on seed coatings. A change in the pesticide active ingredient or application technique can impact the environmental fate and transport of these pesticides and their potential effects on non-target organisms. For example, a shift in the mid-2000s from the pyrethroid to neonicotinoid insecticides required new analytical methods, sampling of different environmental matrices, and toxicological concerns focused on different species.

*The webinar is free; pre-registration is required. Please login 10 minutes early.*

### To register for this session:

Go to <https://doilearn2.webex.com/doilearn2/k2/j.php?MTID=tc1fc5ddbba796f82c233f810ba4a8279f> and register. You will receive a confirmation email with instructions for joining the session.