

What are new technological solutions on the horizon?

- Soil, groundwater, and aquatic sensors to track leaching
- Green technologies
- Fluorescence sensors in drones to monitor crop stresses (chlorophyll disruption)
- IRsensing for nutrient sufficiency
- New biostimulants
- Farmer data cooperatives (big data) that can support more rapid and cost-effectively identification of cost -effective management options for reducing N losses

What are new behavioral approaches to engaging farmers with existing technological tools?

- Online license-free ArcGIS module for farmers to load up field-level information
- Bioreactor implementation
- Setting up and supporting groups of farmers to innovate together
- Have farmer's commercial crop advisors include conservation practices in recommendations

What are new markets, policies, or collaborative efforts to engage farmers with existing technological tools?

- Cost share for small farmers to implement bioreactors
- Increase funding and access to USDA's 590 program to offset perceived risk to adopting better practices like enhanced efficiency fertilizers
- Watershed approaches focused on diversity and setting limits
- Need markets for small grains to encourage their use in rotation with row crops