

ON THE EDGE:

DECODING FARMERS' UNDERSTANDING OF EDGE-OF-FIELD CONSERVATION PRACTICES

Conservation practices are vital to long-term sustainable agricultural production in Iowa. Both in-field and edge-of-field practices are crucial to improving water quality.

EDGE-OF-FIELD PRACTICES: UNSUNG SUPERSTARS

High adoption of edge-of-field (EOF) practices—such as **saturated buffers**, **bioreactors**, and **water quality enhancement wetlands**—is vital to achieving the goal of 45% nutrient reduction outlined in the Iowa Nutrient Reduction Strategy.

Designed to slow, filter, and process subsurface drainage water from farm fields, EOF practices can—



Improve
water
quality



Enhance
wildlife
habitat



Reduce nitrogen
loads to streams,
rivers, and lakes

However, **few farmers in the state have embraced EOF practices on their land.**



WHY AREN'T MORE FARMERS IMPLEMENTING EOF PRACTICES?

Iowa farmers and landowners across five different HUC-8 watersheds in the Des Moines Lobe shared their perceptions and concerns about EOF practices in two rounds of surveys.

PROCEEDING WITH CAUTION

Lack of understanding of various aspects of EOF practices makes farmers and landowners uncertain and reluctant to adopt them:



EOF practices themselves

EOF practices are newer practices, rooted in recent scientific advancements. Farmers and landowners have little experience with how the practices work and how to maintain them.



Environmental benefits

Saturated buffers and water quality enhancement wetlands offer multiple benefits—improving water quality and wildlife habitat—whereas bioreactors only benefit water quality. None of these EOF practices are designed to enhance soil health.



Governmental regulations

More than a third of farmers surveyed are apprehensive about bureaucratic “red tape” involved with adopting conservation practices.



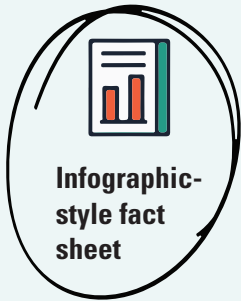
Additional outreach—and more effective outreach—are critical to increased EOF adoption.

INFOGRAPHIC, PLEASE

Survey respondents received information about EOF practices in one of the following educational formats:



Traditional text-oriented extension fact sheet



Infographic-style fact sheet



Video featuring an extension professional



Video featuring a farmer adopter



Most Likely to Encourage EOF Adoption

WHAT'S AN INFOGRAPHIC?



A fact sheet that relies on clear instructional visuals supplemented by minimal, focused text, with plenty of white space (like this one!).

KEYS TO SUCCESS



Farmers respond well to **clear, visual, and succinct resources**.



Well-designed, easily digestible content is more effective than traditional narrative formats.



Infographics are particularly effective among farmers who have not previously participated in government conservation programs.



Including wildlife benefits on the infographics increased the likelihood farmers would adopt the practice, but was less effective in video format.



Outside of infographics, **farmers prefer to hear about new practices from other farmers**. Videos featuring farmers were more effective than those featuring extension professionals.

IF YOU KNOW, YOU KNOW

Farmers are not actively seeking out information about implementing EOF practices.

Increased education efforts are essential to achieving widespread adoption of EOF practices crucial to improving water quality. Expanded, effective outreach could—



Help farmers to understand what EOF practices are, and how to implement and maintain them.



Correct misconceptions about individual EOF practices and their benefits.



Reduce uncertainty about adopting EOF practices.



Motivate farmers to support water quality through EOF practices.