A Closer Look: What Drives Conservation Decisions in Iowa?

lowa's fertile soil has helped the state become a global agricultural leader. However, that same soil and the fertilizers used to boost crop production contribute to water quality challenges when nitrogen and phosphorus leave through drainage, runoff and erosion. The lowa Nutrient Reduction Strategy set statewide goals for reducing nutrient losses through a variety of practices.

Farmers aim to operate profitable businesses while maintaining compliance with local, state, and federal program regulations. The commitment of farmers and landowners to improving the value and productivity of their land through conservation practices is less tangible, but no less important.

No-till and cover crops play a key role in improving water quality while offering many additional benefits to farmers and landowners. When properly managed, no-till and cover crops have been shown to have no negative impact on corn and soybean yield. Primary decision-drivers of what conservation practices to implement and where:





Where Does Iowa Stand on No-Till and Cover Crops?

Significant increases in no-till and cover crops, along with edge-of-field practices, are needed to meet the Iowa Nutrient Reduction Strategy goals and improve Iowa's water quality.



Iowa Nutrient Reduction Strategy

Current Statewide Implementation = 27%

Areas with highly erodible land have higher adoption rates of no-till due to compliance provisions required by the USDA Natural Resources Conservation Service to participate in federal programs like crop insurance. Short-term economic benefits of no-till have also led to higher adoption by both farmers and landowners.



Current Statewide Implementation = 4%

Cover crops offer longer-term benefits, but factors such as delayed benefit realization and the practice of annual leases – which may deter tenant investment – have slowed statewide adoption.

Applying Best Practices (Regardless of Ownership)

Shared commitment among tenants and landowners to protecting the land is crucial to increasing conservation practices statewide, and lease agreements are one method of sharing both costs and benefits.

Discussing a new conservation practice with a tenant or landlord can be challenging. For talking points and relevant research findings to help begin the conversation, visit: www.iowalearningfarms.org/talking-your-tenant

For information about adding conservation practices to leases:



Iowa State Extension and Outreach Ag Decision Maker: www.extension.iastate.edu/agdm/wdleasing.html_



Incorporating Conservation Practices Into Your Farm Lease (March 17, 2021 Webinar): https://www.iowalearningfarms.org/page/webinars



Learn about practices that fit your land with the **Whole Farm Conservation Best Practices Manual**: <u>https://store.extension.iastate.edu/Product/15823</u>

This publication was produced by the Conservation Learning Group and is based upon Sawadgo, W., W. Zhang, and A. Plastina, 2021, What Drives Landowners' Conservation Decisions? Evidence from Iowa. Accepted at Journal of Soil and Water Conservation.