

# **The Costs and Carbon Sequestration Benefits of Increasing Conservation Tillage in Iowa. (S03- Kling170231-Oral)**

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## **Abstract:**

In this paper we empirically estimate the costs of sequestering carbon via a policy under which farmers are offered green payments in return for the adoption of conservation tillage in Iowa. We use an economic model to predict the adoption of conservation tillage in conjunction with a soil carbon process model, CENTURY, to compare practice-versus performance-based policies, and to assess the efficiency gains from improved benefit-targeting technology. We evaluate the benefits of improved targeting technology by comparison of the costs of achieving the same carbon sequestration benefits under the assumptions of farm, county, or crop reporting district-level benefit targeting. Preliminary estimates indicate that high cost savings are possible due to improved carbon benefit targeting technology.

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