No-Till, Grassed Waterways Protect Linn County Farm

Coggon, IA – A combination of no-till and small grassed waterways delivered a one-two punch to potential storm damages and erosion for Linn County farmer Jack Kintzle after continuous heavy rains hit his farm April through June. His conservation work helped minimize potential crop replanting as well as severe soil erosion on his 1,400 acres of cropland.

The former president of the National Corn Growers Association has farmed for 43 years. He says this year was especially difficult for local farmers because the ground saturated by May, and then several three- to four-inch rain events hit the area. “These rains caused more (crop and erosion) damage than a five-inch rain earlier in the spring because of the ground saturation,” he said.

Linn County District Conservationist John Bruene with the U.S. Department of Agriculture’s Natural Resources Conservation Service (NRCS) surveyed the county for damage to conservation practices in June. He spotted at least 20 sites averaging $15,000-$20,000 in practice repair costs.

In addition to damaged practices, thousands of crop acres in Linn County needed replanting this year. Kintzle replanted 17 acres of corn and three acres of beans on low-lying areas, where ponding occurred on the flat landscape. But his other cropland, which includes three- to five-degree slopes, stayed relatively dry. Kintzle credits no-till and well-designed, well-maintained small grassed waterways for the success.

He says tillage methods make a tremendous difference in maintaining a healthy soil profile and preventing soil erosion. Kintzle took over operations of his father’s 320-acre farm five years ago. He says no-till helped reduce the need for replanting because of increased water infiltration.

Kintzle calls his father’s cropland a “wet farm.” “No-till has really decreased sheet and rill erosion on that farm,” he said. “It is...
important for farmers to not till anymore than absolutely necessary.”

Kintzle also reconstructed small grassed waterways on his father’s farm, where sediment buildup through the center of the waterways caused water to run down the sides, causing gully erosion. Since the waterways were past their 10-year lifespan, Kintzle received cost-share from the Iowa Department of Agriculture and Land Stewardship-Division of Soil Conservation (IDALS-DSC) and technical assistance from NRCS in 2004 to reconstruct more than 5,000 feet of small grassed waterways.

NRCS designed 30-foot wide small grassed waterways with fabric checks that line the outlet areas to help stabilize the soil during grass establishment. Bruene says the goal of waterway design is to minimize both siltation and gullying. “We want water to run down the center of the waterway,” he said, “preventing it from spilling out and cutting a path along the outside edges.”

To maintain his waterways, Kintzle says he lifts his implements out of the ground before crossing. He also tries to plant rows into the waterway, instead of along the sides. And Kintzle allows a local cattleman to mow and bale the grass for livestock, typically in the fall to benefit wildlife nesting.

Bruene commended Kintzle for his conservation efforts. “What impresses me about Jack is he doesn’t wait for someone to tell him he needs to fix something on his farm,” he said. “If there is something that needs fixed, he’ll fix it.”

Kintzle feels government support for conservation is strong for Iowa farmers. “I think farmers are offered enough tools, programs and incentives to help put and maintain conservation on the land,” he said.

For more information about a conservation plan to help you protect your natural resources, visit your local USDA Service Center or go online to www.ia.nrcs.usda.gov.

**Inspect For Practice Damages**

A great time to inspect your farm for conservation practice damages and gully erosion is after harvest, when the land is clear of crops. If you see signs of blown-out terraces, small grassed waterways that are not functioning properly, gullies forming on slopes, or other problems that need attention, visit your local NRCS office. Financial assistance may be available to install or rebuild conservation practices damaged by this year’s floods and severe weather.

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