IROQUOIS COUNTY SOIL AND WATER CONSERVATION DISTRICT

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Before photo: Eroded bank prior to Streambank Stabilization

After photo: Stone Toe Protection on Sugar Creek Tributary

STREAMBANK STABILIZATION PROJECT

The Iroquois County SWCD had been searching for a good streambank stabilization project. In February of 2008 the District was approached by Marvin Andris, tenant on a farm in Stockland Township, about a severe bank erosion issue that was beginning to impact his cropland. SWCD and Natural Resources Conservation Service (NRCS) personnel, in conjunction with Wayne Kinney, Streams Specialist, visited the site with the tenant.

Approximately 500 feet of streambank was actively eroding; the bank itself had eroded to a point that the vegetation and the attached soil on the bank was sloughing into the creek, leaving a bare side slope. The bank slope was at a ratio of less than 2 to 1. Once the bank erosion started, small to medium size trees had fallen into the creek, forcing the channel to re-route.

Per field visit, a Stone Toe Protection (STP) practice was selected. RR4 size rock (avg diameter 9-12") was placed, using an excavator, at the toe of the bank to a height of 3 feet; rock keys were dug into the bank at 75 to 100 foot intervals in the bend of the bank to provide additional erosion barriers during higher stormflow events.

Nearly 390 tons of rock was used in the STP practice to stabilize the bank. The bank was left to stabilize naturally, and the tenant plans to seed the bank down to a protective cover this spring.

One hundred ninety tons of soil was saved using STP. The landowner received cost-sharing through the Iroquois County SWCD at a 75% rate not to exceed the estimated cost. Keeping this soil out of the creek decreases water turbidity, increases fish and microinvertebrate habitat, and increases the carrying capacity of the stream channel downstream, benefitting both upstream and downstream landowners.