No-Till, More Yield

Problem
Erosion of farmland in southeastern Idaho

How Does No-Till Work?
- Crops left on ground after annual harvest
- Root systems hold soil particles together
- Soil is not washed or blown away

Costs and Benefits

Background
- Prime farmland
- Sporadic heavy rainfall
- High winds
- 5.8 tons/acre/yr lost

Solution
No-till farming

Tillage Comparison
No-Till
- Planting and spraying only

Conventional Tillage
- Cultivating
- Planting
- Disking
- Plowing

Assessment Steps
Measure changes in crop yield, soil erosion, and soil quality
Compare to USDA's Web Soil Surveys from 1981 and 2011
Talk to farmers and local soil surveyors

Economics of Conventional Tillage Vs. No-Till

- Increased crop yield
- Reduced soil erosion
- Low running cost
- More organic soil
- Better for environment
- Soil moisture control

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References
Hoffmann, Glenn. Email interview. 12 Nov. 2013.