

Watersheds and Water Quality



A watershed is the land area that drains to a stream, lake or river and affects the water quality in the water body that it surrounds. **Healthy watersheds help protect water quality**, and farmers and others involved in agriculture also work to protect the water in our watershed.



Tillage is a practice that has typically been used to allow planters to function properly and to control weeds, however, heavy tillage is no longer needed for planting because of advanced planter technology. In fact, using a **combination of no-till, cover crops and a three-year rotation or a precision management plan can reduce soil loss by 85%**.

Additionally, **pesticides are an alternative weed-control method that allow farmers to till less, control weeds and maintain yields**. By using less tillage combined with proper management systems, the amounts of erosion, nutrient runoff and pesticide runoff can be minimized, which keeps our water clean!

Method	Result	Amount of Topsoil Erosion	Amount of Nutrient Loss	Amount of Pesticide Loss	Overall Negative Effect on Water Quality
Traditional Tillage	Less than 15% residue cover left on the surface after planting	High	Medium	Medium	Medium-High
No Tillage + Pesticides	Management practices: Cover Crops & Rotations & Management Plan OR No Tillage & Chemical Incorporation	Low	Low-Medium	Low-Medium	Low-Medium
No Tillage + Pesticides + Beneficial Management Practices	Management practices: Cover Crops & Rotations & Management Plan OR No Tillage & Chemical Incorporation	Negligible-Low	Negligible-Low	Negligible-Low	Negligible-Low