



Extension
UNIVERSITY OF WISCONSIN-MADISON
DUNN COUNTY

Ag101: Soil and Water Conservation

Farmers use soil and water conservation practices to help retain crop productivity while making the best use of their limited soil resources. The Red Cedar River Basin is 1,893 square miles of land, a portion of which is found in Dunn County. Soil and wind erosion are factors contributing to phosphorus entering our waterways and causing algal blooms. To limit phosphorus loading from happening, government agencies and peers are urging farmers to implement some of the following best management practices.

Soil and Water Conservation Practices

Conservation tillage practices leave at least 30% crop residue on the soil surface after planting.



No-till is the growing of crops with minimal disturbance to the soil. Undisturbed soil tends to maintain good aggregation which increases water infiltration.



Contour tillage is where tillage and planting occurs on the contour of the land instead of up and down hills. Crop rows planted on the contour impede surface water runoff, reducing soil loss.



Contour strip cropping is growing row crops on the contour with alternating strips of a perennial crop. The perennial crop slows water runoff from the row crop, holding soil. Grass waterways are important to maintain when using contour strip cropping.



Grass waterways are wide, shallow, vegetated channels. They are designed to carry peak runoff following severe rainstorms.



Cover Crops are interim plants grown to protect the soil between regular row crop intervals. Plants can protect the soil from erosion, add organic matter, and minimize loss of nutrients by leaching.



Buffer or filter strips are grassy vegetated strips planted on the contour within fields or at the edge of fields. They are designed to trap soil in runoff water to keep it from entering surface waters.



Stream easement is restructuring the streambank at key points to limit washouts. Allows water to flow while minimizing erosion in surface waters after severe rainstorms. (Photo: NRCS)



Cost-sharing offered by organizations, including USDA's Natural Resources Conservation Services (NRCS), Wisconsin's Department of Natural Resources (WDNR), County's Land and Water Conservation Division (LWCD), the Department of Agriculture, Trade, and Consumer Protection (DATCP), USDA's Farm Services Agency (FSA), and local special interest groups, can make implementing conservation practices possible. Soil and water conservation best management practices give farmers the opportunity to improve the quality of their soil, leading to increased yields while limiting soil erosion into surface waters

Source: Schulte and Walsh. *Management of Wisconsin Soils. Extension publication A3588, P29 to 43*
For more information please visit Extension Dunn County website at <https://dunn.extension.wisc.edu/> or <https://extension.soils.wisc.edu/>

The University of Wisconsin-Madison Division of Extension provides affirmative action and equal opportunity in education, programming and employment for all qualified persons regardless of race, color, gender, creed, disability, religion, national origin, ancestry, age, sexual orientation, pregnancy, marital or parental, arrest or conviction record or veteran status.