

Water Quality Enhancement Activity– WQL10 – Plant an annual grass-type cover crop that will scavenge residual nitrogen

Enhancement Description

Plant an annual, grass-type cover crop that will scavenge nitrogen left in the soil after the harvest of a previous crop.

Land Use Applicability

This enhancement is applicable on cropland.

Benefits

Planting an annual cover crop to scavenge residual nutrients from cropland after the harvest of a previous crop effectively utilizes residual nutrient resources to supply following crops with nutrients required to efficiently produce food, forage, fiber, and cover while minimizing environmental degradation.

Criteria for Planting an Annual, Grass-type Cover Crop That Will Scavenge Residual Nitrogen:

Follow the Michigan Cover Crop (340) practice standard.

Refer to Table 1. Cover Crop Species, to choose a plant species identified as EN (Excessive Nutrients). Follow the Additional Criteria to Manage Excess Nutrients in the Soil Profile.

The amount of N that is scavenged by the cover crop is estimated to be approximately 50% of the available soil nitrates. An estimate of available soil nitrate after harvest can be developed using the farm nutrient balance spreadsheet.

Reference:

Cavigelli, M.A., S.R Deming, L.K. Probyn, and R.R. Harwood (eds.), 1998. Michigan Field Crop Ecology: Managing Biological Processes for Productivity and Environmental Quality. Michigan State University-Extension Bulletin E-2646, 92 pp.