

Michigan Supplemental Enhancement Activity

Soil Quality Enhancement Activity – SQL03 – Drainage water management for nutrient, pathogen, or pesticide reduction

Conditions where Practice Applies

1. The topography is relatively smooth, uniform, and flat to gently sloping.
2. A water table will be maintained without excessive seepage and without having an adverse impact on adjoining properties

General Criteria

1. Drainage water will be controlled by the use of water control structures or pumps.
2. Drainage water management will be planned, designed, and installed to meet all federal, state, local and tribal laws and regulations.
3. Water velocity in the soil near the drain shall be kept slow enough to prevent soil particles from entering the drainage system.
4. NRCS eFOTG Drainage Water Management (554) standard will be followed.
5. Drain water will be managed annually for a minimum of 90 days between September 1 and April 1.

Additional Criteria to Improve Water Quality

1. The system will prevent automatic discharge of storm water during minor rainfall events.
2. The controlled discharge of excess water shall account for water not otherwise removed by evapotranspiration and seepage.
3. The uniformity of storm water draw down shall be improved throughout the areas influenced by the designed system.
4. The distance the water must travel in surface ditches before it reaches the main discharge point shall be maximized when practical.

Additional Criteria to Reduce the Rate of Oxidation of Organic Soils

1. Drainage beyond that necessary to provide an adequate root zone for a crop shall be kept to a minimum.
2. When practical, the water table shall be raised to the surface, or to a designated maximum elevation, for a sufficient time to return the saturated zone to anaerobic conditions.

Additional Criteria to Reduce Wind Erosion

1. The system shall provide sufficient moisture to the soil surface, either by ponding or capillary action, to reduce and/or prevent wind erosion when there is insufficient organic residue or plant material on the surface.