

## Drainage Water Management Structure

### Ohio NRCS Installation & Management Criteria

#### 587 Structure for Water Control - Tile Stop for EQIP AWM or Structure for EQIP DWM or CREP filter strip

There is no minimum acreage for control required.

The minimum outlet size for a control structure is 6 inches.

Four inch laterals shall be combined into one outlet with a collector submain up to a maximum of 40 acres per submain. This submain and associated control structure shall be designed based on the most cost effective system. Incentive payments are available for the primary collector submain.

All structures will be permanent installations. Structures providing water level manipulation may provide added convenience for winter season control.

Structures are to be closed prior to manure application. The structures shall be set to stop all liquids for manure control. An inspection/pump-out port shall be installed with all systems.

If the subsurface tile main services multiple properties, the applicant shall obtain written permissions from all upstream landowners, or install a new outlet, main or submain, to separate the applicant's system. This submain shall be at the applicant's expense.

#### 554 DWM - Controlled Drainage for EQIP Nutrient Utilization

There is no minimum acreage for control required nor is a systematic (pattern) subsurface drainage system required for a single structure installation.

Additional structures may be installed in a system where "feasible". A Drainage Water Management system is "feasible" where topography allows the control of an average of 10 acres per structure, and where a functional systematic subsurface drainage system is in place or a random system exists and a systematic system is planned to be installed.

Drainage management zones managed by one control structure will have a preferred elevation difference of 2 feet, but are considered to provide effective water quality benefits where controlling up to 4 feet of elevation difference. A structure must control an average of 10 acres minimum per structure, based on the 2 foot elevation difference for all structures, except the most upstream structure where the 4 foot elevation difference for area of control is applicable. System modification may be required, at the owner's expense, to allow the addition of more structures for the control of all acres.

All "feasible" acres must have a systematic subsurface drainage system in place with a maximum lateral spacing of 60 feet. The applicant shall provide verifiable proof of the subsurface drainage system existence and extent (Map or aerial photo showing system extent).

The minimum outlet size for a control structure is 6 inches.

All structures will be permanent installations. Structures providing water level manipulation are recommended for winter and cropping season control.

Structures shall be closed during the non-cropping season. Structures are to be closed within 30 days after crop harvest and opened in the spring no more than 30 days prior to planting. The control is to be set to maintain the water level within 12 inches of the ground surface, as practical, at the structure during the non-cropping season. Structures shall be in closed mode a minimum of 4 months for each non-cropping season.

The structure shall be used to raise water levels during the cropping season to potentially store water for the crop to use in midsummer. The control is to be set to maintain water levels within 18 inches of the ground surface, as practical, at the structure. The structure shall be closed within 30 days following planting and opened no more than 30 days prior to harvest.

The structure shall be managed throughout the cropping season to insure the growing crop is not damaged due to high water levels.

Retro-fitting an existing system to split a field and allow control of additional acres shall be at the applicant's expense; however, any changes should be discussed with an NRCS engineer prior to such work.

## 554 DWM/590 NM - Controlled Drainage for EQIP Nutrient Utilization

Must have CNMP or NMP for applicable acres for 590 NM.

Practices may be applied in combination, but based on individual practice criteria.

Additional management guidance may be found in Purdue Extension publication WQ-44.

<http://www.ces.purdue.edu/extmedia/WQ/WQ-44.pdf>