

Montgomery Soil & Water Conservation District

Drainage Project Fact Sheet

Background: Ohio's Natural Resources and Drainage Systems

With annual rainfall between 30 and 40 inches per year, Ohio doesn't have water shortage problems like those of western regions of the United States. Combine this fact with Ohio's typical clay-laden soils and flat topography, and it isn't hard to understand that most of the state's glaciated regions were wetlands prior to European settlement.

Agriculture in this part of the state would not be possible without lowering the natural water table through surface and subsurface structures. Drainage structures such as tile or open ditches are often referred to as *the improvement*. Tiles and ditches were built across much of the state's agricultural areas during the period from the late 1800s to the early 1900s. Like any man-made system, it requires maintenance. Because of changes in land ownership however, there are many rural areas where drainage systems were not maintained and are therefore in need of reconstruction.

The Importance of Drainage

Farmers are well acquainted with the need for drainage. However, for new homeowners in rural areas this important fact of life in Ohio is often difficult to appreciate or understand. Inadequate drainage can lead to basement flooding, wood rot, ponding on lawns, septic system malfunction, and /or flooded driveways and roads. There is considerable cost in building and maintaining drainage systems in rural areas, not unlike the costs for city residents who rely on storm sewers.

Who is Responsible?

Historically, farmers would construct and maintain their own drainage systems either as individuals or in neighborhood groups. In group situations, they would reach agreement among themselves about distribution of construction and maintenance costs. Unfortunately, this early spirit of cooperation did not become the norm as farm ownership changed hands and land was converted to non-agricultural uses. **In Montgomery County, costs for rural drainage system construction and maintenance remain a shared responsibility among private landowners.**

A group drainage project involves all the landowners in a watershed. A watershed refers to the area of land that drains to a centrally located lower-lying area, which may be an open ditch, or tile main. In nature, this is usually a stream or river. Not all parcels in the watershed will have water problems. That is, the higher your elevation in the watershed, the less likely you are to have drainage problems. However, parcels in low-lying areas are receiving water runoff from higher elevations.

Landowners may petition Montgomery Soil & Water Conservation District (SWCD) for technical assistance with drainage projects. See the section of this document called *Drainage Project Protocol Overview*. The Montgomery County Engineer is not responsible for maintenance of drainage ditches on private property, only those associated with roadways and bridges.

Another important aspect of responsibility involves existing drainage structures on private property. These drainage structures cannot be closed, obstructed or altered in any way, which would reduce the capacity for conveying storm water across private property. **Any landowner can be held liable for upstream or downstream property damage for failure to properly maintain storm drainage facilities across her or his own property.**

Financing and Procedures

There are two basic procedures for financing group drainage projects. One is referred to as a volunteer project; the other is under Ohio Revised Code (ORC) Chapter 1515. A volunteer project involves agreement among landowners as to how the costs of construction will be distributed among group members. Monies must be collected before construction starts. An ORC Chapter 1515 process involves the project being financed through the County Commissioners, with the landowner having the option to pay their construction assessment in a lump sum or in installments over a maximum of fifteen years. To initiate a group drainage project, a neighborhood group representative must file a request with Montgomery SWCD. This initiates a procedure that is outlined in the section of this document called *Drainage Project Protocol Overview*. It is important for new rural residents to realize that the benefits of maintained drainage far outweigh the cost of the assessment. If the project is not approved, landowners have to resort to civil legal action to resolve drainage problems. Of course the best option is for neighbors to reach a friendly agreement rather than resort to litigation.

Easements and Assessments

Much like your house, drainage systems require periodic maintenance and repairs because of exposure to the elements and other natural decay processes. Ohio drainage law provides legal mechanisms necessary for access to private property in order for Montgomery SWCD to conduct maintenance and repair activities. Easements are recorded in County property records (see attached easement form). When construction is completed under ORC Chapter 1515, construction assessments are levied and the project is put on maintenance. Maintenance assessments are in proportion to construction assessments. Volunteer projects may be put on maintenance if a petition is filed with the County Engineer.

It is important for homeowners in rural areas to remember that their property may contain drainage easements, which may be found at the County Recorder's office. Objects such as sheds, fencing and trees should not be placed in the easement area and can be removed at the landowner's cost.

Ohio's drainage laws are complex; the Reasonable-Use Rule allows landowners to alter surface drainage on their land only if it causes "reasonable" damage to upstream or downstream neighbors. However, **landowners can be required to pay for damages if a court deems their actions to be unreasonable**. Cutting a drainage tile, filling a ditch and doing new construction can all impact the flow of surface water and be found to be unreasonable.

Water Quality Concerns

Nonpoint source (NPS) pollution refers to that which comes from many diffuse sources, being washed over the land's surface (runoff) when carried by rainfall or melting snow. Farm and lawn runoff into ditches, streams or lakes is a serious problem for water quality. Livestock feedlots, failing home septic systems, and improper use or disposal of fertilizers, pesticides or other household hazardous wastes are major contributors to NPS pollution. Contact Montgomery SWCD for more information about how homeowners and farmers can improve our water quality.