

GUILFORD COUNTY ENVIRONMENTAL BULLETIN

DRAINAGE

This bulletin discusses drainage issues as they exist in Guilford County and the way they affect homeowners and developers. These examples cover many of the questions posed to County Staff over the years. Almost all cases involve an alteration in the flow of surface water.

In general, a downhill property owner has to receive water coming from property uphill. Basically, water has a right to go where it wants to go. There are no specific ordinances or laws that deal with this – it is a common law civil matter over damages.

North Carolina, for the most part, has followed a modified version of the civil-law rule in governing the rights of property owners with respect to drainage of surface waters. Three propositions emerge from the civil-law rule:

- 1) The easement of the upper owner includes the right to accelerate and increase the natural flow, but does not include the right to divert waters.
- 2) "Natural flow" of water means that the upper owner cannot divert the water, that is cause it to flow upon the lower land in a different manner, nor in a different place from which it would naturally flow.
- 3) The lower owner may not obstruct the natural flow from above in any way.

However, in 1977 in the case of <u>Pendergrast v. Aiken</u>, the North Carolina Supreme Court formally adopted the reasonable use rule as a guideline for settlement of future drainage cases (293 N.C. 201,236 S.E.2d 787). Since, the reasonable use rule would deny specific rights to one landowner over another landowner; it would view all conflicting interests on the facts of each individual case and recognize the right of each owner, and the general public, to deal with the surface water in any manner so long as the acts are reasonable under the circumstances. Hence, each reasonable use rule case must be decided on a multitude of differing factual situations. Liability is incurred only when this harmful interference is found to be unreasonable.

TYPICAL DRAINAGE QUESTIONS

- 1. Lots in a subdivision have recorded drainage easements, which control all surface drainage. A lot owner fills in the drainage easement to facilitate mowing. The adjacent owner receives flooding in the carport or basement. A drainage easement grants the right for water to pass across property by open channels or enclosed pipes. Any change to prohibit or restrict flow would be a violation of the development ordinance. Plans to alter any drainageway must be reviewed by the Guilford County Planning Department prior to any construction. If the work has already taken place, the owner can be forced to restore the drainage back to its original condition or to submit plans for the proposed construction. Any damage to adjacent owners is a private civil matter between the two parties.
- 2. A developer, when grading a series of lots, fills in a low area in order to develop more lots. This causes water to back up onto an upstream owner. As a result, the upstream owner's land is made less usable. Grading over one (1) acre requires plan review and permitting by the Guilford County Planning Department. Typically, these problems are discovered in the plan review process. However, if the disturbed area is less than one acre, a plan is not required and consequently, no review takes place. The downstream owner cannot prohibit or restrict flow without violating the development ordinance. Damage resulting from grading remains a private civil matter between the two parties.

3. A developer installs a street as part of a development. A culvert with inadequate capacity is installed where the street crosses a stream. As a result, land upstream is flooded during moderate rainfall. In some cases, homes (particularly basements) are flooded.

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A culvert has been installed where a street crosses a stream. The culvert had adequate capacity initially as the watershed is rural and has low runoff-producing capabilities. However, as the watershed is developed, particularly with commercial and industrial property, peak flows increase. With time, the culvert becomes inadequate and flooding occurs on the property upstream. The North Carolina Department of Transportation is the contact party for questions involving drainage pipes under roadways. In the first case, the Department of Transportation reviews the size of pipes within their right-of-way under their normal plan review procedure. Under the second scenario, if a street has been accepted under the State maintenance program, the owner should contact the North Carolina Department of Transportation (334-3161) to discuss possible upsizing of the pipe. If the street is not under NCDOT maintenance, the property owners would be responsible for any maintenance for the streets. The property owners are encouraged to contact the NCDOT to request that their street be accepted for State maintenance.

- 4. A culvert is placed in a new road at the lower edge of a subdivision. The culvert is placed in a broad shallow swale (the natural water course), where runoff has always occurred. The downstream owner is upset because of the additional flow and particularly because of the concentrated flow from the culvert. While a downstream owner must accept the additional flow, the developer has the responsibility to control velocity and prevent soil erosion. If damage occurs due to increased runoff, then any issue of damage is a private civil matter between the two parties.
- 5. A number of property owners are concerned that fallen and leaning trees and logjams are blocking a stream. They ask the County to clear these out to prevent flooding and to clean up the area. In some cases, the petitioners do not own the property alongside the stream. There is neither a County or Federal program that funds cleaning out streams. Maintenance of drainageways (open channel and piped) are the responsibility of the property owner or, in some cases, the Homeowners Association. If flood damage is caused by an adjacent owner, then it is a private civil matter between the two parties.
- 6. A stream has severe bank erosion at a bend with the result that a home or other structure is in danger of being undermined and destroyed. All stream restorations are susceptible to state and federal regulations. An engineer and applicable agencies should be contacted to assess the condition of the endangered building and stream channel. If the erosion is caused by increased flows from an adjacent owner, then it is a private civil matter between the two parties.
- 7. A corporation develops a large shopping center. In the grading plan, they make a deep cut alongside an adjacent owner. Later, this rather steep slope is subject to a landslide with the result that parts of the adjoining owner's land and fence are damaged. The developer must control the erosion on his property and has a duty of subjacent support. The damage issue is a private civil matter between the two parties.
- 8. A homeowner has a swampy area in the rear of his property (which could be classified as a wetland). The owner wants to fill the area to eliminate wetness, mosquitoes, etc. If the disturbed area is greater than one acre, a permit must be secured from Guilford County.

The owner should also contact the U. S. Army Corps of Engineers regarding possible permitting requirements for construction work in the wetlands. If permitting is not required, the property owner can proceed at his own risk. The Guilford County Environmental Health Department is an excellent resource for information on mosquito control.

- 9. A homeowner has a problem with a wet basement or crawl space due to a high water table (particularly in the spring or winter). In most cases, wet basements and crawl spaces are caused by roof drains not being directed away from the house or by intrusion of ground water. The property owner should call a contractor or waterproofing consultant.
- 10. A landowner is experiencing mud or muddy water in his pond or stream. The sediment can be from a development being graded or from a farm upstream of their property. If the sediment is from the construction, the developer is responsible for controlling the erosion on his particular site. If silt has been deposited in the stream or pond from the upstream development, the County can only require the upstream owner to maintain and/or fortify his erosion control measures to prevent sedimentation downstream. Guilford County cannot require that the upstream owner clean up sediment deposited downstream. If the sediment is originating from a farm, the Guilford Soil and Water Conservation District has jurisdiction over agricultural issues. Any issue of damage is a private civil matter between the two property owners. Sometimes discoloration of water is caused by turbidity. Turbidity is caused by extremely fine particles being held in suspension in water. Erosion control devices will not remove these particles from the runoff. This is a common problem, given the amount of clay in our soils. Normally, the discoloration disappears in time as the particles settle out.
- 11. A property owner wishes to pipe a ditch on his property. Plans to alter any recorded drainage easement must be prepared by a registered engineer or land surveyor and must be reviewed by the Guilford County Planning Department prior to any construction. The designer or property owner should verify that the site is not located in a Watershed Critical Area, where piped drainage is not allowed.
- 12. An upstream property owner has installed gutter drains that discharge onto an adjoining property owner. The Guilford County ordinance does not address gutter discharges and considers this a private civil matter between the property owners.

WHAT CAN GUILFORD COUNTY DO?

- 1. Guilford County cannot use taxpayer funds to solve individual problems or private disputes between owners.
- 2. Guilford County does not maintain drainageways. Maintenance of pipes and open channels on a lot are the responsibility of the individual property owner or Homeowner's Association.
- 3. Guilford County has regulatory authority for sediment and erosion control, water quality protection, and zoning. If the developer is applying for a grading permit or is securing approval of a subdivision plan, the County can refuse to approve drainage which is inadequate; that is, culverts which are too small or at the wrong location. It can refuse to approve filling in the floodplain, building in the floodplain, or any other action which would cause flood damage, either on the proposed development or adjacent to it.
- 4. If the developer is seeking approval of a subdivision plan, the County can require drainage easements along natural swales. It can only recommend diversions and property line swales to prevent surface runoff from one lot to another.
- 5. Almost all the examples above are a "private nuisance action", and can only be resolved through the courts as a civil matter.

6. Approval of a plan by Guilford County does not relieve a developer/owner from duties and responsibilities under the common law.

There are several exceptions where the County has the authority to take action:

- A. If the situation is causing erosion and particularly sedimentation on neighboring land and streets, this is a violation of the Erosion and Sedimentation Control Ordinance.
- B. If the drainage easements are recorded for measures, which are part of a water quality protection system, and actions are taken to reduce the effectiveness of any part of the system, this is a violation. As an example, a series of diversions and swales are planned, approved, and built to divert water to a water quality pond. If the diversions or swales are filled in so as to render them ineffective, this would be a violation of the ordinance, and action by the County could be instituted.

In summary, almost all "drainage complaints" brought to County staff cannot be corrected by Guilford County. County staff can give technical advice as to the solution.

Guilford County Watershed – 336-641-5565

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