



Irrigation: Solving Potential Challenges Policy Development 2013

Issue:

Farmers are taking advantage of the benefits from large scale irrigation. The use of pivot irrigation systems are growing each year especially in feed grain and cotton regions. This is good for agriculture because irrigation increases yields, provides risk management from weather extremes, and overall increases farm cash receipts for the state. However, water is a public resource. The public and policy makers on the local and state level are paying attention to the increase in irrigation. Farmers need to consider two issues related to the increase in irrigation: 1.) developing a history of use on each farm to protect individual water rights in the future, and 2.) potentially being required to comply with the state's water management laws designed for major water users. Some farmers recognize these issues and believe there is a potential solution. They want to be proactive by implementing farmer governed organizations to manage future issues that could affect irrigation.

Questions:

1. Should agriculture develop a system to voluntarily compile water use data?
2. Should farmers who withdraw over 10,000 gallons per day be required to register and report water withdrawals to the state?
3. Do you believe irrigation districts would be advantageous to farmers in Tennessee?
4. What are the disadvantages of this concept?
5. Would water districts serve as a resource when dealing with environmental agencies?

Background:

Accurate statistics on the amount of growth in irrigation is difficult to determine statewide because of the diverse types of irrigation. In 2012 the Tennessee Department of Environment and Conservation reported there are over 764 wells alone for agricultural irrigation compared to 90 for commercial uses, 61 for municipalities and 32 for industrial uses. The Department of Agriculture reports as of 2007 there were approximately 25 pivot irrigation systems installed. In 2012 that number had increased to 270 systems installed, representing over 40,000 acres placed under irrigation each year. This trend will increase dramatically due to the high number of systems sold each year.

Water Rights

Tennessee is considered a riparian law state. The doctrine of riparian water rights means landowners who border a waterway have equal rights to use the water passing through or by their property. This doctrine mainly applies to surface waters, however groundwater rights are a type of riparian right with modifications. Riparian law in the U.S. is considered common law developed from English common law. Many states have adopted statutes to modify the riparian doctrine. These states, including Tennessee, are considered "regulated" riparian states.

Through the Tennessee Water Quality Control Act, the state claims to “own” and exercise public trust over all surface and groundwater within the borders of Tennessee for the purpose of keeping waters unpolluted so the water may be used by all Tennesseans. However, there is very little statutory or court case law surrounding the withdrawal of water. Therefore, it is assumed common law governs water withdrawals in Tennessee. Even though water is considered a public resource, the riparian landowner has a specific right to the use of the water. Because of so little background cases in water rights it is very difficult to prepare for future water conflicts both within Tennessee and with bordering states.

Conflicts between riparian users of surface water in Tennessee fall under the “reasonable use doctrine”. The concept of reasonable use in riparian rights law is that each riparian landowner has a right to a reasonable use of the water adjoining his land if it does not affect water available to lower riparian landowners. The term “reasonable” is usually limited to uses on or for the benefit of the riparian land. There is very little guidance from Tennessee courts regarding the factors that determine “reasonable”. There are general factors used nationwide such as economic benefits, time when each use began, amounts of water needed by competing users and adverse effects on other users.

Groundwater conflicts are decided based on “correlative rights doctrine”. This means that all landowners over an aquifer must limit their withdrawals to a reasonable amount and must consider the needs of other landowners. It is assumed Tennessee uses this same doctrine however again, there are virtually no court cases to reference. Conflicts over groundwater are very difficult to settle under this doctrine. Since groundwater cannot be seen and total amounts in an aquifer are difficult to estimate, there is not an amount of water or a specified pressure level given to any one landowner. There must be unreasonable harm to other landowners or unreasonable uses before a landowner is liable for affects to other landowners.

Riparian water rights are a type of property right. Even though riparian landowners do not own the water, they have a right to use the water as long as it is a reasonable use from streams and from aquifers. Just as in adverse possession in property rights, a landowner can establish over time an amount of water used and defend their right to that amount of water. Many states require reporting of water withdrawals within the state to build a database over time. This information is used to protect state citizens in the event an adjoining state files a federal court case to withdraw water from another state. However, this also applies in water conflicts between landowners. If a landowner can document an amount of water needed over a period of time then it would be a defense if there ever was a conflict with another landowner.

Tennessee Water Management Laws

The Tennessee legislature passed the Tennessee Water Resources Information Act in 2002 to document current demand for water and projected growth in demand. This act recognized other states surrounding Tennessee could or would want to tap into Tennessee’s aquifers and rivers. This law instituted a system to obtain adequate information on water demand in the event Tennessee had to defend the state’s water resources.

The law requires anyone who withdraws 10,000 gallons or more per day from surface or groundwater to register with the Department of Environment and Conservation and annually report withdrawal amounts. Agricultural water withdrawals are exempt from the registration and reporting requirements. The legislature did not want to expose farm operations to the penalties, inspections, and regulatory burdens used to enforce the act. Most agricultural operations, such as beef cattle or poultry, would not have the equipment or the ability to determine when or if their withdrawal amounts exceeded the threshold for registration.

Irrigation Districts

Tennessee is new to large scale irrigation compared to other states in the Southeast. There are Tennessee farmers who believe we need to look to initiatives taken by other states to protect their ability to irrigate. These producers point to irrigation districts in the state of Missouri.

The state of Missouri adopted legislation in 1992 to allow the formation of water districts. It allows the county governing bodies in a region to call a meeting of agricultural landowners within a county to vote whether to become a part of the regional water district. The governing body of the district is composed of one locally appointed person from each county. The district monitors the quality and quantity of ground and surface water within its boundaries, implements cooperative agreements and develops water management plans in consultation with their state environmental agency. It also requires all water users with wells over six inches to annually report water usage. The district may also initiate water studies and establish criteria for water quality or quantity assessments. Fees are established by the district governing body within the confines of the legislation to carry out the responsibilities of the district.

Tennessee proponents of this concept do not want to regulate water use within a district but have a local, farmer led effort to monitor and solve any issues that may arise from irrigation. They do not advocate establishing districts identical to Missouri or other states. They have two primary objectives: 1.) record water usage within the district to establish background water usage data and 2.) monitor water quality and establish background data to determine if agriculture is causing degradation of water. There could be other secondary benefits of a regional irrigation district depending on the scope of the legislation. The establishment, size, and scope of the district would be determined first by a vote of producers. If established there would be fees to fund the obligations of the district.

TFBF Policy (*partial*)

Water is one of Tennessee's most valuable natural resources. In the future, many decisions will be made to protect this resource.

We support the English doctrine of riparian water rights to surface and groundwater. We support the right of farmers to irrigate from streams and wells. Actions by state government to regulate water usage should recognize that crop irrigation and livestock watering is critical to maintain a stable food supply. Availability of water for human consumption, sanitation and production agriculture should supersede all other uses. Farmers should not be charged fees or required to receive permits for surface or groundwater withdrawals for purposes of maintaining a water budget in a basin or watershed. Any efforts to quantify water usage for agricultural purposes should be on a voluntary basis without mandatory reporting to state agencies. Farm Bureau should stay current on water issues and be involved in the decision making process.