

William & Mary Environmental Law and Policy Review

Volume 11 (1986)
Issue 1 *Environmental Practice News*

Article 4

April 1986

Virginia Water Rights

James O. Reavis

Follow this and additional works at: <https://scholarship.law.wm.edu/wmelpr>



Part of the [Property Law and Real Estate Commons](#)

Repository Citation

James O. Reavis, *Virginia Water Rights*, 11 Wm. & Mary Env'tl. L. & Pol'y Rev. 9 (1986),
<https://scholarship.law.wm.edu/wmelpr/vol11/iss1/4>

Copyright c 1986 by the authors. This article is brought to you by the William & Mary Law School Scholarship Repository.

<https://scholarship.law.wm.edu/wmelpr>

VIRGINIA WATER RIGHTS: TWO RULES FOR ONE SOURCE

By James O. Reavis

There are two main sources of water in Virginia: surface water and ground water. The first is the water that we can see in lakes, streams, and reservoirs, while the latter is found in porous layers of sand between layers of rock and clay, in what is known as an aquifer. Water gets into these aquifers either through underground rivers and streams, or through seepage from the surface. It was once thought that the two sources of water were separate, but scientists now recognize that they are actually one large, interconnected system.

The law, however, still separates surface from ground water in the manner in which water rights are allocated. Rights to surface water in Virginia, as well as in most Eastern states, are allocated based on the riparian doctrine. This rule gives an owner of land bordering on water the right to use that water so long as he does not unreasonably affect the usage of other riparian land owners.

Rights to ground water, on the other hand, are governed by the American Rule. This permits an unlimited use of ground water so long as it is not wasteful and is used in a manner consistent with the use of the land lying above the water.

The legal problems caused by this dual system are numerous. Conflicts concerning surface water rights are fairly straightforward because we can see how one party has affected the other, but ground water conflicts are not so simple. These conflicts are resolved through the common law, but there are many questions and exceptions to confuse the issue. First, although we know how an aquifer works, we do not know much about their size.¹ Thus, when a well is put into place, there is no way to determine the source of the

water that the well draws. The aquifer may be completely under the well owner's land, or it may also be under neighboring land.

Ground water is rarely in a large underground pool; instead, the sand that it is stored in is like a sponge with the water spread out over a large area. A well acts as a giant straw, often pulling in water from outside the aquifer. In this way, the well may draw in water which lies under a neighbor's land, thus harming the neighbor without either party knowing it.² Draining an aquifer may also increase the speed at which surface water "seeps" underground. The result is that the well owner, in addition to taking water from beneath his neighbor's land, may also be draining his neighbor's surface water.³

A third problem is the pollution of ground water. When the surface sources are polluted, the pollution is drawn into the aquifer. If the water is allowed to seep at a natural rate, most of the toxins become diluted, making the water safe for consumption. However, if water is withdrawn too quickly, it may not have time to cleanse itself and will therefore become unusable.⁴

These problems have led to several studies that call for changes in the present system. The Water News reported in 1983 that a more efficient use of ground water can reduce costs by as much as 15%, as long as the aquifers are not overdrawn.⁵ In December of 1984, Worldwatch Institute reported that we must reverse present trends if we are to avoid a worldwide water crisis by the turn of the century. The report says that usable water will decline 24% by the year 2000 because of pollution, mismanagement, and mining of ground water.⁶ An example of the increased demand is seen in the City of Chesapeake. Between 1985 and 1990, the city will increase its water consumption from 8.1 to 11.8 million gallons per day. To meet this demand, Chesapeake will have to develop alternative water sources.⁷

Virginia has attempted to solve its water problems in several ways. Since 1972, the law has required dischargers of waste into surface water to obtain a permit.⁸ Companies with pollution control equipment are given tax breaks, and municipalities are given grants to build sewage treatment plants. However, there is still a pollution problem from other sources, such as farms and dumps, which threaten the surface water. In addition, there is no protection from the pollutants that get into the ground water.⁹

Virginia also has a statutory structure for protecting water rights. The Ground Water Act of 1973 allows the State Water Control Board (Board) to designate ground water management areas within which one must obtain a permit to withdraw water or install a well. However, the act gives exceptions to municipalities and farmers, the two biggest consumers of water.¹⁰ Amendments have been proposed to help alleviate the inadequacies in this law.¹¹ One such proposal would require anyone withdrawing more than 300,000 gallons per month to obtain a permit. The Board would consider several factors in determining whether to grant the permit. These factors include how the water will be used and the overall benefit to the general well-being of the Commonwealth. The Board would also reserve the right to inspect the water withdrawal to verify that it meets standards set by the permits. Finally, the proposal provides for a maximum penalty of \$1000 per day per violation for those who fail to comply with the Act or fail to comply with the permit.¹²

These proposals are a start, but there are still major problems that

Virginia faces. Although the State is attempting to prevent shortages by requiring permits to withdraw ground water, the law still fails to recognize the connection between ground and surface water, and pollution is still a major and unsolved concern. Unless Virginia can solve these problems, the predictions of severe future water problems may come true.

ENDNOTES

1. W. Cox and L. Shabman, A Proposal for Improved Management of Inter-jurisdictional Water Transfer, Special Report No. 19, September 1985, at 2.
2. Id.
3. Id.
4. Toward a New Dominion: Choices for Virginians, Report of the Governor's Commission on Virginia's Future, December, 1985, at 30.
5. Combination of Options Would Produce Least-Cost Solution to S.E. Water Problems, Water News, April, 1983, at 3.
6. Report Calls For Conservation To Prevent World Water Crises, Water News, February, 1985, at 4.
7. Findings Reported in Two Water Studies, Water News, April, 1985, at 5.
8. Report of the Governor's Commission, at 31.
9. Id.
10. Ausness, Water Rights Legislation in the East: A Program for Reform, 24 Wm. & Mary L. Rev. 574-5 (1983).
11. Proposed amendment to the Virginia Water Withdrawal Act, as under consideration by The State Water Commission, August-September, 1985.
12. Id.