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The Evolution of Georgia's Water Resources Policies

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State water policies are a manifestation of many factors, including geohydrology, social and economic forces, legal traditions, political realities, abilities of water managers, the experiences of other states, and actions of both federal and local governments. Due to these factors, no state simply begins a mature water management program. Such a program instead evolves from the multitude of water resource decisions. Since each state must face a unique set of circumstances, no two states have the same water management program. States are beset, however, by similar types of water problems, a few alternatives to resolve their problems, and common federal mandates, particularly for water quality. So similarities do exist among state water management programs (Kundell, 1989a). This paper examines the evolution of state water resource policies in Georgia.

Water Doctrines

A major distinction in water policies among states is associated with the mechanisms adopted for allocating water to competing water users. State law governing the allocation of water resources among users evolved under two distinct doctrines: riparian rights in the eastern United States, and prior appropriations in the West. The English common law theory of riparian rights was brought to this country by the Colonists. In the eastern United States, where rainfall is plentiful, it has worked well and has been adopted by the states.

Riparian rights were acquired simply by owning property along a waterway entitling the owner to withdraw and use water from the passing stream. This right, however, was not absolute since downstream riparians were also entitled to the natural quality and quantity of stream flow. Gradually, over the past 100 years, the absolutist natural flow doctrine, which was anti-development, evolved to a reasonable use theory. This change entitled riparians to the use of a reasonable amount of water even if it altered the

downstream quality or quantity of water. The riparian doctrine, with the reasonable use modification, worked well in the early history of the eastern United States because there was an abundance of water and the demands of all users could be fulfilled. Groundwater allocation in eastern states was also dependent on common law to resolve conflicts. Originally, groundwater users were entitled to all the water they could capture. Most states, including Georgia, have been faced with modification of this principal to require sharing and conservation of groundwater (Bowman).

Settlers going to the West during the gold rush of 1849 realized that the riparian doctrine of water rights would not work in arid lands. In place of the riparian system, a doctrine of prior appropriations was adopted. Miners treated the right to withdraw and use water much the same way as they treated the staking of a mining claim. Those who first made beneficial use of the water claimed a vested right to its continued diversion, irrespective of downstream property owners. A water right could also be claimed whether or not the person was a riparian owner on the waterway (Kundell, 1988).

Although the prior appropriation doctrine has worked well for allocating a scarce resource among competing uses, weaknesses in the approach have been recognized in recent years. Most noticeable is the lack of incentives for conservation and the lack of recognition for certain beneficial uses (like instream water uses such as recreation and fish and wildlife habitat). As a result some western states are interested in changing the prior appropriation doctrine (Lord).

After the severe drought of 1954 at least nine eastern states, including Georgia, considered adopting the prior appropriation doctrine of the more arid western states. Mississippi, however, was the only eastern state to alter its common law doctrine with the passage of the 1956 Water Rights Act (Hatcher & Kundell). A 1955 study of water allocation in Georgia concluded there would be major problems in converting from the riparian doctrine to the prior appropriation doctrine (Vinson Institute). As a result, Georgia remained a riparian doctrine state. A 1969 study found that little had been done since 1955 to address water law in Georgia (Kates).

Water Statutes

In addition to the choice of water doctrine, all states have found it necessary to statutorily address water policy problems related to both quality and quantity. Eastern states have found that the riparian doctrine is too vague for water management purposes. So at least 14 eastern states have adopted administrative mechanisms for allocating surface water, groundwater, or both (Ausness).

Georgia enacted its water quality protection law in 1964 (GA. L. 1964, pg. 416) but in 1972 three pieces of legislation were enacted that have profoundly influenced the direction of water management in the state. At the national level, the Federal Water Pollution Control Act (P. L. 92-500) was enacted making it a national goal to have "fishable and swimmable" waters in the United States by 1977. Thus, all states were placed under a common federal mandate to meet surface water quality standards and were provided funds and technical assistance.

The first legislation enacted in Georgia in 1972 was the Executive Reorganization Act (Ga. L. 1972, pg. 1015). This Act assigned the responsibility for more than 30 agencies, commissions, authorities, and departments to the newly created Department of Natural Resources (DNR). Water resource responsibilities under federal and state law were assigned to DNR's Environmental Protection Division (EPD). This reorganization led to an integrated water management program and a "one-stop-permitting" process for issuing environmental permits.

The Ground Water Use Act (Ga. L. 1972, pg. 976) was the second piece of state legislation enacted in 1972 with long-term implications for water management. This law created a system for permitting withdrawals of groundwater in excess of 100,000 gallons per day. Permits were granted for a 10 year period and were renewable, but not transferable without the approval of the director of EPD. In issuing permits, EPD was mandated to consider the impact of a new withdrawal on the aquifer as well as other water users. The law provided enforcement and emergency procedures, and established civil penalties for noncompliance. The law exempted agricultural withdrawals from the permit requirement. It also required the creation of "capacity use areas" before water permits would be required. In 1973, however, the law was amended to remove the capacity use area requirement, (Ga. L. 1973, pg. 1273) a move that led to the state-wide water management program in place today.

In 1977, the Georgia General Assembly extensively amended the Water Quality Control Act of 1964 to include requirements for administratively assigning surface water in excess of 100,000 gallons per day (Ga. L. 1977, pg. 368). The amendments stated that no person could make any withdrawal, diversion, or impoundment, of surface water without getting a permit from the director of EPD. In considering applications, the EPD decisions were based on the effect of the proposed withdrawal on the water source and other water users. Permits could be granted for 10 to 20 year periods except for municipalities where permits could be authorized for up to 50 years to aid in bond retirement. The law allowed for modification

and renewal of permits but not for the transfer of permits. The 1977 amendments also established emergency procedures for water shortage periods but did not establish a system for prioritizing water uses. As with groundwater, agricultural water uses were exempted from the surface water permit requirement.

Concern over the exemption of agriculture from the water management program surfaced in the late 1970s (Kundell, 1978). Between 1975 and 1980, a major increase in agricultural irrigation occurred in Georgia, primarily in the upper coastal plain. This increase in water withdrawals by an exempted water user raised questions about the impact of such withdrawals on the water resources, the effectiveness of the water management system, and the rights of water users. In 1980 legislation was introduced to include irrigation in the water management program. This legislation, however, was not enacted by the General Assembly (Kundell, 1980). In 1982, legislation was passed that required reporting of irrigation withdrawals through the Cooperative Extension Service to EPD (Ga. L. 1982, pg. 2304 and pg. 2306). This legislation was designed to provide information on the quantity of water being used for agricultural purposes but not to regulate such use. Since no enforcement measures were included in this legislation, management level information was not obtained.

Finally, in 1988, legislation was enacted to establish a permit mechanism for agricultural water uses (Ga. L. 1988, pg. 1694). The law directed the EPD to issue permits for irrigation water uses in excess of 100,000 gallons per day that occurred before July 1, 1988 and established a procedure for issuing new agricultural water use permits. Unlike other permitted water uses, agricultural water use permits have no expiration date and need not be renewed. They are also transferable to later owners of the land. The reporting requirement enacted in 1982 was removed from the law. Due to the variation in irrigation water needs resulting from the vagaries of nature, agricultural water use permits, unlike those for other water uses, can not be revoked as a result of nonuse. Thus there are a number of significant differences between the permits issued for agricultural water use and those for other water uses. The importance of this legislation was to include all major water users in the state's water management program.

Growth Strategies Legislation

The 1989 session of the Georgia General Assembly may be viewed by water management historians as being as significant as 1972 in establishing state water policy. The Growth Strategies Commission, appointed by Governor Harris, released its report in November, 1988 (Governor's Growth Strategies Commission). The Commission's recommendations were trans-

formed into four major pieces of legislation passed during the 1989 session of the General Assembly.

The keystone piece of Growth Strategies legislation was HB 215 (Ga. L. 1989, pg. 1317) which set up a framework for comprehensive state-wide planning and development at the local, regional, and state levels of government. Of particular significance for water policy was Part 5 of the bill which required DNR to issue standards for wetlands, water supply watershed, and groundwater recharge area protection to be included in local government plans. This approach may enable local governments, with technical help provided by the state, to identify those areas and to incorporate protective measures in their land-use control programs. House Bill 215 is a potentially significant step in addressing water problems that result from inappropriate land uses (Kundell, 1989b).

A second piece of Growth Strategies legislation was SB 84 (Ga. L. 1989, pg. 1295) which amended the Erosion and Sedimentation Act of 1975 (O.C.G.A. 12-7-1). Senate Bill 84 strengthened the 1975 Act by requiring state agencies to meet the standards of the law. It also lowered the exemption for meeting the requirements of the law from 5 acres to 1.1 acres, and allowed local governments to have more stringent requirements than the state. The Erosion and Sedimentation Act has been amended three times since its passage in 1975 (Ga. L. 1980, pg. 942; Ga. L. 1985, pg. 1224; Ga. L. 1989, pg. 1295). The 1989 amendments appear to have removed the last major loopholes in the law.

A third piece of Growth Strategies legislation is only indirectly related to water resources but is associated with an activity that may have a direct impact on water quality—solid waste management. Senate Bill 83 (Ga. L. 1989, pg. 1289) gives the Georgia Environmental Facilities Authority the power to provide low interest loans to local governments for solid waste management programs.

Finally, SB 86 (Ga. L. 1989, pg. 1304), was proposed to address water supply concerns in the northern part of Georgia. North Georgia is the major urban-industrial portion of the state so it is a high water demand area. The region however, has limited surface water since its streams originate in the area. The area also has no natural lakes and few wetlands resulting in limited storage of surface water and is a hard rock region with limited groundwater. To help meet the water demands of the increasing population, SB 86 provided DNR with the authority to construct and operate regional reservoirs and to sell water to local governments.

Senate Bill 86 was one of the more contentious pieces of legislation considered by the General Assembly in 1989 due to the program costs;

the concentration of development, regulatory, and rate setting authority in one agency; and the potential environmental impacts of the proposed program. Although there are still several issues to be resolved about the regional reservoir program, there is little doubt that it will have a significant impact on the future of north Georgia.

Legislation enacted in 1989 is noteworthy in that it advances the state into two new (for Georgia) water-related arenas. The first is the reservoir development and operation arena as provided for by SB 86, and the second is the land-use arena as provided for by HB 215. Both of these thrusts will have long-term water resource policy and management implications for Georgia.

Conclusions

Georgia's water policies have evolved over time from a point at which there was virtually no state role in water management to one in which the state is a dominant player in protecting water quality and allocating water for competing uses. This evolutionary process has been toward a program in which surface and groundwater and water quality and quantity decisions are made in an integrated manner. Certainly, this evolutionary process will persist as competing demands for water resources continue to increase. We can expect higher water quality standards and continued clarification through the legislature, and the courts, of water rights. Additionally, the days of free water are gone. As a conservation forcing mechanism, and as a means for allocating water among competing uses, the value of water must increasingly be reflected in economic terms.

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