

LEGAL ISSUES SURROUNDING STREAM FLOW IN GEORGIA

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Abstract. Georgia has been operating under an interim instream flow protection policy since May 2001. This paper explores other federal and state statutes and regulations that implicate stream flow along with selected court cases. Finally, the paper examines stream flow policies in other Southeastern states as examples of the directions that Georgia could take if it updates its stream flow policy in the process of creating a comprehensive statewide water management plan.

INTRODUCTION

The issue of stream flow, the amount of water that a stream carries at different points in its course, will only become more important as Georgia continues to grow in population. Water needs for human consumption, agricultural use, industry, and recreation are all competing for a finite quantity that exists in our state's surface and subsurface waters. Balancing those needs is important, but equally critical is making sure that adequate flow remains to keep the stream healthy. Stream health is measured by such factors as a stream's ability to filter out harmful pollutants, the vibrancy of the river ecosystem, the presence and extent of natural habitat, and the existence of endangered and threatened species. This paper explores the different legal frameworks in which the issue of stream flow arises in Georgia. The paper begins by providing an overview of the most pertinent federal environmental laws and United States Supreme Court jurisprudence, and then describes Georgia's current stream flow policy along with those of some of its sister states.

THE CLEAN WATER ACT

The Clean Water Act, 33 U.S.C. §§ 1251 *et seq.* ("CWA"), contains several provisions that could implicate stream flow. The most relevant is Section 313, which requires states to establish their own water quality standards, to be approved by the Environmental Protection Agency ("EPA"). These standards consist of a designated use for a water course, along with numerical and narrative

criteria such as temperature, pH, etc. to meet that designated use. 33 U.S.C. § 1313. Under Section 401 of the CWA, any activity or project that requires a federal license or permit and that may cause a discharge of pollutants into waters of the United States must obtain a certification from the state in which the discharge will occur that the discharge will comply with, among other things, the water quality standards set forth pursuant to Section 303. 33 U.S.C. § 1341(a)(1). A state must include in its certification "effluent limitations and other limitations and monitoring requirements" needed to ensure that the activity will comply with applicable effluent limitations and other limitations imposed by other sections of the CWA, as well as "any other appropriate requirement of state law." 33 U.S.C. § 1341(d). In P.U.D. No. 1 of Jefferson County v. Washington Department of Ecology, 511 U.S. 700 (1994), the Supreme Court held that states may include minimum stream flow requirements in a certification issued pursuant to Section 401 of the Clean Water Act to the extent that they are necessary to enforce a designated use contained in a state water quality standard. This authority gives states latitude to establish strict stream flow requirements so long as they are tied to the attainment of state water quality standards

THE ENDANGERED SPECIES ACT

The Endangered Species Act, 16 U.S.C. §§ 1531 *et seq.* ("ESA"), establishes protections for federally-designated endangered and threatened species, along with any habitat determined to be critical to their survival. Specifically, Section 7 of the ESA requires federal agencies to consult with the U.S. Fish and Wildlife Service ("FWS") or the National Marine Fisheries Service ("NMFS") if any of its activities, including permitting, may jeopardize the continued existence of an endangered or threatened species or designated critical habitat 16 U.S.C. § 1536(a)(2). For example, the EPA considers its approval of a state's water quality standards pursuant to the CWA as triggering the consultation requirements of Section 7. 66 Fed. Reg. 11202, 11214 (Feb. 7, 2001). Section 9 of

the ESA prohibits any action by any person that results in the “take” of an endangered species. The ESA and its implementing regulations define “take” broadly to include more than simply killing a species; the definition encompasses disrupting normal behavioral patterns and significantly modifying or degrading habitat such that it actually kills or injures wildlife. See 16 U.S.C. §§ 1538(a), 1532(19); 50 C.F.R. § 17.3. There is precedent in the 11th Circuit that local governments can themselves be held liable for takings under Section 9 because of policies harmful to endangered species. See Loggerhead Turtle v. County Council of Volusia County, 148 F.3d 1231, 1252-1253 (11th Cir. 1998) (holding that a local government could be held liable under Section 9 if it did not sufficiently regulate beach lighting harmful to listed turtles).

Water diversions or other disruptions to normal flow regimes can result in the “taking” of endangered species. According to the NMFS, this can occur, for example, by “removing water or otherwise altering stream flow when it significantly impairs spawning, migration, feeding or other essential behavioral patterns.” 64 Fed. Reg. 60727, 60730 (Nov. 8, 1999). In Georgia, the goldline darter and blue shiner are two threatened minnow species in northwest waters of the state. They require habitat consisting of rivers with “swift to moderate current” for survival. See 57 Fed. Reg. 14786 (April 22, 1992). Clearly, the amount of flow these rivers receive is critical to preserving these species and their habitat. Courts have recognized that flow must be maintained at adequate levels in order to sustain endangered and threatened species populations. In 2001, a California court enjoined the federal Bureau of Reclamation from withdrawing water for irrigation from a reservoir whenever the flows in the Klamath River dropped below those necessary to sustain the threatened coho salmon. Pac. Coast Fed. of Fishermen’s Ass’ns v. U.S. Bureau of Reclamation, 138 F. Supp.2d 1228, 1250 (N.D. Cal. 2001).

THE NATIONAL ENVIRONMENTAL POLICY ACT

The National Environmental Policy Act, 42 U.S.C. §§ 4321 *et seq.* (“NEPA”), along with its implementing regulations, require federal agencies to prepare environmental impact statements for all major federal actions significantly affecting the quality of the human environment. Federal actions are those undertaken directly by a federal agency or those that require a permit or substantial funding from a federal agency. Projects can impact the quantity of flow in streams both directly (via a single dam or withdrawal) and cumulatively (multiple projects in the same watershed), and these direct and cumulative effects must be evaluated thoroughly in a NEPA analysis. The NEPA regulations promulgated by

the Council on Environmental Quality define the “effects” or “impacts” that must be examined by an agency when evaluating a particular project; these impacts specifically include ecological impacts, or “the effects on natural resources or on the components, structure, and functioning of affected ecosystems.” 40 C.F.R. § 1508.8. Since stream flow quantities are crucial to assessing ecological health, an agency must address any impacts to stream flow in its NEPA analysis. Although NEPA is a procedural statute (i.e. it is not outcome-determinative), an environmental impact statement issued pursuant to NEPA revealing that a proposal will have serious negative effects on stream flows may act as a deterrent to an agency and as an incentive to the public to oppose the project or press for modification.

PRINCIPLES OF INTERSTATE WATER ALLOCATION

Georgia and South Carolina are in the early stages of forming a compact to determine how to allocate the waters of the Savannah River, which forms the border between the two states. However, negotiations between Alabama, Georgia, and Florida have broken down, and the fate of interstate water allocations in the Alabama-Coosa-Tallapoosa (“ACT”) and the Apalachicola-Chattahoochee-Flint (“ACF”) Basins is now in the hands of the courts. The U.S. Supreme Court will likely decide the ultimate water-sharing arrangement through an equitable apportionment action. In this federal common-law action, the Court will likely weigh such factors as physical and climatic conditions, the consumptive use of water in the several sections of the river, the character and rate of return flows, the extent of established uses, the availability of storage water, the practical effect of wasteful uses on downstream areas, and the damage to upstream areas as compared to the benefits to downstream areas if a limitation is imposed on the former. This is a nonexhaustive list. Nebraska v. Wyoming, 325 U.S. 589, 618 (1945). Many of these factors are directly related to stream flow, especially physical conditions, the amount of return flow, and downstream effects. The list therefore demonstrates that the robustness of a state’s stream flow policy will likely be relevant to an ultimate apportionment of water between Georgia and its neighbors.

GEORGIA’S WATER WITHDRAWAL STATUTES AND CURRENT INTERIM STREAM FLOW POLICY

At the state level, Georgia regulates large withdrawals of both surface and ground water by statute. Each statute refers to stream flows, at least indirectly. Surface water withdrawals are regulated under the Georgia Water

Quality Control Act, O.C.G.A. §§ 12-5-20 *et seq.* One of the factors to consider in determining how to classify competing applications for water withdrawals from a given source is “diversion from or reduction of flows in other watercourses.” O.C.G.A. § 12-5-31(e)(8). The Ground-water Use Act contains a similar provision. O.C.G.A. § 12-5-96(d)(8). Additionally, an application for surface water withdrawals must include a drought contingency plan, and that plan must contain a description of low flow protection and include stream flow monitoring. *See* GA. COMP. R. & REGS. r. 391-3-6-.07(4)(b)9.(iii).

In May 2001, Georgia adopted an interim instream flow protection policy that remains in place today. Under that policy, all new or expanded water withdrawal permits must contain one of three flow regimes:

- 1) the monthly 7Q10 – that is, the lowest seven-day continuous flow for a given month looking back over the past ten years;
- 2) a seasonably variable minimum flow of 30/40/60% of annual average flow for streams with regulated releases of water from dams, and 30% of annual average flow for streams without dam releases; or
- 3) a site-specific flow study approved by the Wildlife Resources Division of the Department of Natural Resources.

Most water withdrawal permits are issued using the first criterion listed above, the monthly 7Q10. However, the other two criteria more closely approximate a stream’s natural flow regime. Using 7Q10 as the stream flow standard means that many streams may be reduced to low-flow conditions for periods at a time, which may not be enough flow to maintain natural functions and habitat.

OTHER STATE STREAM FLOW POLICIES

Georgia’s sister states in the South have varying degrees of stream flow protection, with the most protective being Virginia, Tennessee, and North Carolina. Virginia, for example, has a relatively protective stream flow policy designating all state waters for recreation and for “the propagation and growth of a balanced, indigenous population of aquatic life,” as well as wildlife and the production of fish and shellfish. 9 VAC 25-260-10(A). Virginia’s regulations further state that “man-made alteration in stream flow shall not contravene designated uses including protection of the propagation and growth of aquatic life.” 9 VAC 25-260-40. Tennessee prohibits “physical alteration” of waters to the point that the diversity and/or productivity of aquatic life is adversely affected. TENN. COMP. R. AND REGS. R. 1200-4-3-.03(3)(j). In North Carolina, the best use of all surface waters is a general standard of “aquatic life propagation

and maintenance of biological integrity (including fishing, and fish), wildlife, secondary recreation, agriculture, and any other usage except for primary recreation or as a source of water supply for drinking, culinary or food processing purposes.” N.C. ADMIN. CODE tit. 15A, r. 2B.0211(1). Biological integrity is further defined as “the ability of an aquatic ecosystem to support and maintain a balanced and indigenous community of organisms having species composition, diversity, population densities and functional organization similar to that of reference conditions.” *Id.* at 2B.0202(11). “Any water pollution sources that preclude any of the above-described uses are considered to be violating a state water quality standard.” *Id.* at 2B.0211(2). Therefore, in North Carolina, the water quality standard which includes the preservation of biological integrity could be violated by sources of water pollution that undermine that standard, either by discharging pollution into waters with that designation, or indirectly by reducing flows so that existing pollution concentrations in the remaining water increase.

CONCLUSION

The CWA and the ESA are the two most relevant federal environmental statutes to issues of stream flow. The CWA creates a duty for states to enact water quality standards, which can include stream flow requirements. States can then incorporate these stream flow requirements into their certification of federally-permitted projects that could discharge pollutants into waters of the United States. Under the ESA, federal agencies must provide for adequate stream flow for endangered and threatened species that rely on certain flows for feeding, breeding, sheltering, or other essential biological activities. Some court precedent suggests that state or local government entities whose programs result in the taking of endangered or threatened species may themselves be liable under the ESA. NEPA directs federal agencies to take a hard look at direct, indirect and cumulative impacts to major federal actions with significant environmental consequences; these impacts include impacts to water quality and water quantity, both of which affect ecosystem health. At the state level, Georgia’s water withdrawal statutes require examination of whether a new surface or groundwater withdrawal will reduce surface water flows. In an interstate water dispute such as the Tristate water wars, the U.S. Supreme Court may use factors directly related to state stream flow policies when deciding the equitable allocation of interstate waters. As Georgia moves forward in creating a permanent instream flow policy, it can look to some of its neighbors for examples of ways to protect its water resources in an ecologically sustainable manner.

