MUNICIPAL WATER SUPPLIES, INTERBASIN TRANSFERS AND INTERSTATE WATER PROBLEMS CONFRONTING ALABAMA

Monograph 4

Office of Energy and Environmental Law

The University of Alabama
Law Center

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FOREWORD

This publication began as a research project on water use conflict in the state of Alabama. The four major areas of conflict are 1) interbasin transfer of water; 2) ground water withdrawal; 3) riparian rights; and 4) resolution of interstate water use conflicts.

Professor Harry Cohen of the University of Alabama Law Center, who has been involved in the study of water rights, has produced an exhaustive study of this increasingly important subject. We feel that this work will prove helpful not only to legal scholars but to municipal and county officials and landowners as well.

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INTRODUCTION

Although Alabama, Georgia and Mississippi have been considered water rich because of their humid climate and their geographical location, the advance of population and consequent urban development have caused serious burdens on water sources and municipal and other water suppliers in these states. Present water sources are often those utilized before intense national concern for water quality and purity. Many municipal water suppliers take water from rivers and other water sources which were once adequate for their needs but because of increased use and burdens, are now being reduced in flow and purity. A good example of the general problem is the Cahaba River in central Alabama.

The Cahaba River flows from its source in St. Clair County near the City of Birmingham, through Jefferson County and then southward to a point in Dallas County where it empties into the Alabama River. The river is the source of some two-thirds of the water supply of the Birmingham Water Works Board (BWWB).[1] Water is usually drawn directly from the Cahaba River, but in periods of low flow Lake Purdy becomes the source. The lake was created from the Little Cahaba River in 1910 to serve as a reservoir for Birmingham's water needs. A small dam below the confluence of the Cahaba and Little Cahaba Rivers directs the flow from the river upstream to the BWWB intake. Much of the water is distributed to BWWB customers outside the Cahaba basin, mainly in the Warrior basin, and much ends up in other rivers like the Warrior. As Birmingham's water needs grow the Cahaba becomes a threatened river. In dry seasons, so much water is taken from the river that several miles downstream the quality of the

water becomes low. At some downstream points the Shades Creek and Patton Creek waste treatment plants empty into the river, thus causing a greater burden on the River's ability to assimilate and purify the received wastes.[2]

In addition to water sources which can be called intrastate, there are numerous rivers, streams and other waterbodies, to say nothing of underground aquifers, which may now and in the future be tapped by citizens and officials of more than one State. The Chattahoochee River forms the boundary between parts of Alabama and Georgia. Because of the Act of Congress which created the Mississippi Territory, from which the State of Alabama was formed, the entire bed of the Chattahoochee River is today part of the State of Georgia. Yet the Alabama boundary line, along the river, consists of riparian lands and thus is entitled to legal rights and privileges.

The City of Atlanta has diverted the waters of the Chattahoochee for years, and a large percentage of the water is not returned to the river. Besides, the river has been dammed at two places along the common border, causing Alabama land to be flooded.

There are other examples of present and future water problems within and in relation to the States surrounding Alabama. The Escatawba River runs near the cities of Pascagoula in Mississippi and Mobile in Alabama. It is probably not too far fetched to suggest that future water controversies will arise between these two cities and the states of Alabama and Mississippi.

Although most of Alabama's water use is claimed from surface water courses, a growing amount is withdrawn from underground aquifers. This is especially true in south Alabama and north central Alabama. Southwest Georgia relies on such ground water for irrigation uses. Several wells with a capacity of over one million gallons per day exist in that area. We are not sure of the extent of the underground aquifers which supply

these areas but it is quite possible that controversy will arise in the future over these water supplies.

A major purpose of this article is to discuss the legal problems which can and will arise from the types of fact situations outlined above. An ultimate purpose is to not only describe and delineate the legal setting of these water controversies but also to give some perspective to those who must assess and plan for the future development of Alabama water resources.

There will be two major parts. The first section will deal with the intrastate problems--Cahaba River type situation. Thereafter, interstate problems such as those relating to the Chattachoochee will be discussed. The interstate water problems are many faceted, dealing not only with uses of surface water bodies but with underground sources as well.

1. The City of Birmingham's Water Supply and the Cahaba River

A. The Right of the BWWB to take and divert the waters of the Cahaba

In the past the Birmingham Water Works Board has utilized the waters of the Cahaba river for some two thirds of its water supply. This taking has been the subject of much discussion and controversy over the years. Initially it can be argued that the city is on delicate legal grounds insofar as their right to take the water for the needs of the city.

The overwhelming general attitude in the United States is opposed to the right of the City.[3] In the states following the riparian theory of water law, a municipality, even though it may own land on a river and is thus a riparian owner, may not divert the waters of a stream for the purposes of a public water supply.[4]

Under the riparian concept, all owners whose lands actually touch the waterway are entitled to use of the water.[5] These rights may not be lost

by non-use[6] and the rights are attached only to the ownership of the riparian land.[7] New uses can arise at any time.[8] A riparian owner may not convey his water rights and he may use the water only on his riparian land.[9] There are two variations of the riparian doctrine, although courts have not always recognized that there are two theories and few have consistently followed either one.[10] Under the so-called "natural flow" theory no owner may impair or diminish the flow of the stream in any manner which may injure his neighbors on the watercourse;[11] the stream is to flow in its natural fashion past all riparians.[12] This rather absolute approach was tempered by the "reasonable-use" theory under which a riparian owner may use the water in a reasonable manner, but with certain uses preferred over others.[13] When various uses clash, courts decree preferences or sometimes division in the water.[14] Domestic uses, i.e., for cattle, home, and the like, are usually preferred over industrial uses.[15]

The reasonable use doctrine has been utilized to favor municipal use of streams for water supplies.[16] Under a rather liberal use of the reasonable use doctrine, it has been held that a municipality as a riparian owner could utilize the water in a stream to supply its citizens as long as there is no damage to lower riparian owners.[17] However, the municipality had no right to diminish materially the flow of water to the injury of lower riparians by supplying water to those outside of the city or to supply water for power purposes. In Massachusetts, New Hampshire and Vermont there are decisions which have permitted water to be utilized on non-riparian lands.[18] In the famous Stratton v. Mt. Hermon Boys' School,[19] it was held that the riparian owner is not liable for diverting water from the stream in large quantities and using it on non-riparian land for the conduct of a boys school. If there is no actual injury to a lower riparian owner for any reasonable use, other riparian owners can utilize

the water for non-riparian uses. However, the use must be within the watershed of the stream.[20]

It must be realized when viewing decisions discussing the reasonable use doctrine that these courts are ostensibly operating to some extent within the context of traditional riparian dogma. Yet they are actually liberalizing the reasonable use rule. Thus in City of Battle Creek v. Goguac Resort Ass.,[21] the city purchased land on a lake and built a water-works system. The resort association also owned property on the lake and operated a recreation area. The city brought suit to prevent the resort association from allowing swimming in the lake. The court held that the city had no right to divert the water for a municipal water supply and thereby prevent the resort association from its uses of the lake. However, since the diversion did not harm the resort, the use was not an unreasonable use and the city could continue to divert.

Most courts believe that the reasonable use doctrine cannot be stretched so far as to allow municipalities to hide behind the flexibility of the fule. The Kansas Courts[22] have said that a city should not be considered an ordinary riparian owner because municipal use of water is a large and unanticipated burden to other riparians. If cities were accorded ordinary domestic riparian rights, lower riparian owners would never be able to rely on water flow and current.

The Kansas Courts have relied on the Alabama Supreme Court decision in Stein v. Burden saying that while a municipal corporation may be a riparian owner, each citizen of the city is not.[23] Thereafter, the Ohio Court[24] citing the Kansas and Alabama attitudes said that when the taking of water is for a great public necessity, the municipality must pay adequate compensation when condemning or expropriating the water.

The Pennsylvania Supreme Court,[25] in traveling the same path, recognized that riparian owners hold a property right in the stream which must be compensated for when utilized by the City. The remedy of the riparian owner is for actual injury suffered such as loss of water power used for a factory wherein the owner is forced to purchase other power.

In light of these decisions, the Alabama cases on the subject of municipal uses of riparian rights seem to provide some authority for all we have seen, although it is surely arguable that Alabama accords each riparian his property rights in the stream as it passes the land.

In the earliest reported case involving riparian rights, the Alabama Supreme Court in Hendricks v. Johnson[26] refused to accept the prior appropriations doctrine. Although the court talked in terms of both reasonable use and natural flow, no clear choice was made. In a subsequent pair of cases,[27] both involving two tracts of land situated on a watercourse near Mobile, the court adopted the absolutistic natural flow doctrine. The controversy involved, in effect, land of the city of Mobile and another riparian owner. The city, through a lessee of the land, wished to consume the water for what it called the "domestic needs" of its inhabitants. Each riparian landowner was said to have a property right in the "stream" but not in the water as such.[28] The court held that a landowner could consume all water necessary to satisfy his domestic needs, but he could not do so for other reasons such as supplying the inhabitants of an "artificial" entity.[29]

As was the case generally in many eastern states at that time, the natural flow theory was adopted because flowing waterways were a necessity for powering the grist, flour, and cotton mills of the day.[30] Farmers also depended on stream integrity, and adoption of the natural flow theory encouraged a consistent quality and flow of the water.[31]

With the growth of the mining and other industries, the Alabama courts felt forced to adapt to economic necessity in many areas. Although there were earlier indications that the natural flow doctrine might be rejected,[32] the opening wedge came in the much cited Ulbricht v. Eufaula Water Co.[33] The complainant had conveyed one acre on the stream in question to the defendant. The defendant was a corporation which supplied water to the city of Eufaula and in the dry summer months took most of the water in its operation. Although the complainant was not using the stream for any purpose, he filed a bill for an injunction to prevent this diminution of the stream. The lower court held that the defendant could not consume any part of the stream "to the sensible injury or damage of the complainant for any purpose for which he may now, or in the future, have use for said water,"[34] but the court stated that the defendant was entitled to reasonable use of the stream. The Alabama Supreme Court affirmed the decree, stating that there was a cause of action for "diverting or unreasonably obstructing a watercourse."[35] The court also made it clear that it would protect complainant's future rights and that mere non-use would not impair his rights. However, complainant was warned that if his injury was trivial he would be entitled only to an interruption of the period necessary for gaining a prescriptive right and merely nominal damages.[36]

Although these are the only cases which deal directly with municipal uses of riparian rights for water supply purposes, they influenced later decisions on water rights, especially where pollution was involved. Cases in the late 1800's allowed mining interests to pollute streams and even ruin domestic water supplies, but the later cases such as Elmore v. Ingalls[37] and Montgomery Limestone Co. v. Bearden[38] reverted back to the earlier standards. It was held that there was a limit to the duty to yield to public or private corporations.[39] In Elmore the court acknowledged that "modifi-

cations of individual right must be submitted to, in order that the greater good of the public must be conserved and promoted," but added that "there is a limit to this duty to yield, to this claim and right to expect and demand. The watercourse must not be diverted from its channel, or so diminished in volume, or so corrupted and polluted, as practically to destroy or greatly impair its value to the lower riparian proprietor."[40]

The riparian owner still must be able to show that he has suffered substantial injury, that the damages occurred within the preceding year, and that the defendant caused at least a portion of his injury.[41] And he also must contend with the defenses of prescriptive right and estoppel.[42] Even so, in some instances, he may succeed; for example, cities have been enjoined from dumping sewage into a stream.[43]

In spite of this background, in 1973 the Alabama Supreme Court held that all riparian owners have a right to have "a natural stream flow through his land in its natural channel, without obstruction or alteration even in its natural level."[44]

These authorities seem to point to a conclusion that the City of Birmingham has a right to utilize some water from the Cahaba River but when lower riparian owners demonstrate that damage is being sustained, the City must cease taking that quantity of water which causes injury.

B. The Prescription Problem

The Birmingham Water Works Board (BWWB) has been taking water from the Cahaba since at least 1910. As shown above, the riparian owners below them have a property right in the stream. Although riparian owners may legitimately divert water from the stream the right is contingent upon the return of the water to the stream.[45] Yet, if the riparian owner diverts water without returning it to the stream, other riparians are under

an obligation to abate this intrusion on their rights or suffer the possibility of a prescriptive right being created. Often riparian owners will sue for the diversion of the stream even though they can show little or no damage. This is done for the purpose of interrupting the prescriptive period which the diverter has started running.[46]

In the early Alabama decisions it was said that the time period for prescriptive rights in water was twenty years. The period was conceived by analogizing the prescriptive time limit to that of the adverse possession statutory term. Since the early decisions, the adverse possession period has been reduced to ten years and case law relating to water changed accordingly.[47]

In order to acquire a right to take water by prescription, the water use must divert the water in a uniform and uninterrupted fashion for ten years.[48] Once the right is gained by prescription, the user may continue to use as of right, but uses of a greater amount or different modes of use will not be part of the prescriptive right.[49]

Applying these attitudes to our facts, it is possible that the BWWB has acquired a prescriptive right to an ascertainable amount of water from the Cahaba. However, if the amount of water utilized has been steadily rising over the years, and the taking has not been in any uniform pattern it can be argued that the use has been too unpredictable to be specified. Thus, there may be no factual basis for a prescriptive right. The eventual result would depend on the records and evidence the BWWB can demonstrate.

C. Municipal Water Use and Its Relationship to Pollution in Alabama

The Alabama Water Improvement Commission (hereafter called AWIC) has very broad control over water pollution in Alabama. The Commission has the power to "exercise general supervision over the administration and enforcement of all laws relating to pollution of the waters of the state."[50]

Pollution was originally defined under the statute in part as any "alteration of the physical, chemical or biological properties of any water."[51] In the summer of 1979 the legislature changed the definition to read in part that pollution was the "discharge of pollutant or combination of pollutants." Pollutants are described in rather great detail.

For many years environmental groups and interested individuals have said that the Cahaba River is being polluted slowly at many points and that the AWIC is not reacting to numerous instances of pollution. The major disturber of the river, they say, is the Birmingham Water Works Board which is taking out great volumes of water and not returning it. The chief administrative officer of the AWIC has said that there is no real adverse discharge into the river now. In the past he has said there have been adverse discharges but not at the present time. As to the BWWB, he holds that the AWIC has no jurisdiction over the taking of the large volume of water they often utilize. He admits they may be adversely affecting the river quality during times of low water conditions.

The dilemma we face on this subject, it is submitted, ensues from the statutory jurisdiction of the AWIC. At the present time the drawing off of water from a stream, thus affecting the existing balance of the water probably is not covered by this statute although it can be argued that coverage is possibly provided under section 22-22-9 (j)(1)(a) where the Commission may prohibit or abate discharges "directly or indirectly." Obviously, this is somewhat tenuous reasoning.

Today in the United States and particularly in Alabama, many municipalities and other water users are drawing off from rivers and streams a large volume of water, which in times of draught and even in normal flow periods, could cause otherwise "clean" waters to become polluted. In turn, others who are discharging into the stream could be cited for discharging

into the water that amount of effluents otherwise considered reasonable. It can be argued that the earlier language of the statute, "alteration of the physical, chemical or biological properties of any waters," is a much more efficient and effective definition of pollution than the present verbiage.

It is obvious from the prior discussions in this report that riparian owners along the Cahaba have a cause of action for the diversion of the river waters by the BWWB.[52] If the natural flow doctrine is applied, there is no doubt that the flow is adversely affected. The recent case of Roberts v. Brewer[53] is the latest authority for this position. Even under the reasonable use doctrine, riparian owners cannot be damaged or injured by diverting or unreasonably obstructing the river. All of the past Alabama authorities subscribe to this view.

In other states a cause of action for diversion is possible in this type of case. For example, in Weidmann Silk Dyeing Co. v. East Jersey Water Co. et. al.,[54] an upper riparian water company diverted over twenty three million gallons of water a day from a river on which a lower riparian owner had a textile mill. Because of the huge diversions, the mill was deprived of the use of the river and pollutants accumulated which otherwise would have been carried away by the flow of the stream. The textile mill owners were granted an injunction, with the condition that the water company have the right to condemn or compensate the riparian owners for their losses.

In 1973, the Federal District Court for the northern District of Alabama was presented with a case which could well have gone a long way to halt the large diversions of water without compensation by those who utilize our rivers and streams for their own private or public use. However, such a result was not forthcoming. In Beaunit Corp. v. Alabama Power Co.,[55] the

plaintiff was a textile manufacturer and lower riparian owner who alleged that it was injured by the defendant's activities on the river. The defendant had initially constructed a dam in order to provide electricity. The diversion of water caused by the dam was temporary and the net result was that the same amount of water was released as naturally would flow down stream. The plaintiff, in connection with its manufacturing operations, discharged pollutants into the river. Originally the flow and amount of water in the river dissipated the pollutants and the AWIC authorized plaintiff to continue the discharges. However, another dam was constructed by the defendant and the resultant lowering of the river flow caused plaintiffs pollutants to adversely affect the quality of the river. The AWIC ordered the plaintiff to build a water treatment facility due to the impurity of the plaintiff's discharge. Plaintiff brought this action for damages to the diminution in the flow of the stream caused by the defendant's activities on the river. The Court held that the reasonable use doctrine prevailed in Alabama and that defendants temporary detention, use, and release of the water in a reasonable manner is a reasonable use.

2. Alabama's Rights in and on the Chattahoochee River

A. Riparian Rights on the River- An Introduction to a Complex Interstate Water Problem.

Recently an inspector for the Alabama Water Improvement Commissioner, (called a pollution control specialist) and a biologist, worried aloud that Alabama was hard pressed to apply its water quality standards to the Chattahoochee. He said that he had been threatened by Georgia people with fine and/or imprisonment if he continued to take samples from the river.

Although he declared that he would not be deterred by the Georgia officials, he wondered what rights Georgia had to stop Alabama trying to

protect its citizens who had to deal with the Chattahoochee either as riparian owners or as users of the river generally.

Some initial answers are relatively easy to come by. For example, the Chattahoochee River forms the lower half of the boundary between Alabama and Georgia and by Act of Congress and a decision of the Supreme Court of the United States,[56] the State of Georgia owns the bed of the stream up to the line of the river bed as made by the average and mean stage of water during the year. Since the bed is in the State of Georgia, they claim jurisdiction over such things as fishing and the placing of structures.[57] However, there are riparian rights in the navigable stream which are entitled to protection. The Georgia Supreme Court has said that the riparian rights grow out of the ownership of the banks of streams and not out of the ownership of the bed on the waterway. Thus a riparian owner has the right to insist that the water flowing past the land be reasonably used by all other riparians, and that the flow be continued without material injury to any of the owners.[58]

Traditionally in the United States, the beds of rivers and streams which serve as boundary lines between states are owned by each state to the middle or thread of the stream.[59] However, there are exceptions to this rule such as the Ohio river between Kentucky and Indiana,[60] where Kentucky owns the bed to the low water mark on the Indiana side, similar to the case of Alabama and Georgia.

It is obvious that Alabama has a stake in the Chattahoochee but the extent of its claim is open to question. Alabama has jurisdiction over any use of the bank on its side of the river,[61] but its actual control over fishing and other normal uses of the river is not clear. The two States have a reciprocal agreement on fishing licenses but Georgia reserved all other rights.[62] Yet Alabama does have the right to protect its riparian interests and it is here that the jurisdiction of the Alabama Water Improvement

Commission may enter the picture. A riparian interest encompasses the right to have the river flow in its normal quality and flow, although subject to reasonable uses thereof. Pollution and diversion of the river by the state of Georgia or its citizens are invasions of that right.

It can be now argued that federal law governs interstate pollution suits. In Illinios v. City of Milwaukee, Wisconsin,[63] Illinois filed a complaint in the Supreme Court of the United States against four cities of Wisconsin, the Sewerage Commission of Milwaukee, and the Metropolitan Sewerage Commission of the County of Milwaukee. It was alleged that they were polluting Lake Michigan and adversely affecting the citizens of Illinois by dumping some 200 million gallons of raw or inadequately treated sewage and other waste material daily into the Lake. The Supreme Court held that this problem was under the Federal Water Pollution Control Act and the Act makes it clear that it is federal, not state, law which controls the pollution of interstate or navigable waters. The court told the State of Illinois to file its action in the appropriate Federal District Court, and a district judge found that Milwaukee was causing a common law nuisance. The judge imposed more stringent standards than those of the Environmental Protection Agency. The Seventh Circuit Court of Appeals upheld the District Judge and held that even though the defendants had complied with EPA directives and had received a permit, such compliance was not a bar to a common law nuisance action.

Although large numbers of relevant cases are not available on the issue of use and power over interstate waterways, perhaps the most analogous authorities are those emanating from the Pennsylvania, New Jersey and New York dispute over the waters of the Delaware River. In the first case on the subject, New Jersey v. New York,[64] the Supreme Court of the United States found that the river and its tributaries were a necessity of life to be "rationed among those who have power over it" and the Court applied

the federal common law doctrine of equitable apportionment so as to grant all the states involved uses of the river. It is interesting to note that Pennsylvania acquired no interest in the bed of the Delaware River under a compact between it and New Jersey in 1783.[65]

In a 1978 decision, Elwood v. City of New York,[66] relying on the earlier Supreme Court decision, five riparian owners of land in Pennsylvania along the Delaware River and its west branch brought suit claiming that New York's diversion of the headwaters of the River for public water supply purposes diminished the value of their lands. The Court went into rather great detail in describing what New York City had done concerning the waters of the River under successive Supreme Court of the United States decisions in 1951 and 1954. It described the 1961 Interstate Compact, entered into by all of the states touching on the Delaware River, which specifically prevented the Compact Commission from impairing rights created by the decree of the United States Supreme Court in 1954. Under the Compact, however, the states themselves relinquished their rights to apply to the Supreme Court for a modification of the 1954 decree. In 1976, however, the New York State Legislature passed an Act which allowed the New York Commissioner of Environmental Conservation to promulgate rules regulating the volume and rate of release of waste in the river. In 1977, the parties to the 1954 Supreme Court decree agreed to a two year redistribution of the quantity of water discharged into the river.

What all of these actions did, in effect, was to cause a marked decrease in the average stream temperature of the water and drastic temperature fluctuations during the summer months. In addition the uneven diversion and its releases of water adversely affected the flows in the river. A diminished volume of water flowed in the old bed of the river and parts of the river were at times turned into a swamp.

The City of New York relied on the Supreme Court's decrees apportioning the river and the courts retention of jurisdiction in New Jersey v. New York as a defense to the plaintiff's actions. The Court in Elwood held that it had jurisdiction and the Supreme Court's decrees were "certainly not intended as licenses for the City to commit such injuries without liability."[67] The court said that the Supreme Court was dealing with conflicts between the states and it apportioned the "total waters of the stream among the various competing interests.[68] The federal common law itself did not abrogate riparian rights because a riparian's property interest in the stream may be the land's most valuable feature.[69]

The court held that New York choice-of-law rules bound it and under the conflict of law rules the law of Pennsylvania applies. A tort was committed against the riparian rights of the plaintiffs, which property rights were in Pennsylvania.[70] Thus, under Pennsylvania law, whether the riparian rights were on a navigable or non-navigable stream, the owner could not be deprived of riparian rights because of a diversion of the stream.[71] Although thermal pollution of water is a fairly new activity and there are relatively few cases, Pennsylvania law includes the right to be free from such unreasonable fluctuations in water temperature which would cause actual damage. The City's diversion of such enormous quantities of water was unreasonable, and even if the City were a riparian owner, under the reasonable use rule, the activities would still be unreasonable.[72]

Under this and other authorities, riparian rights of Alabama residents along the Chattahoochee River could be protected Such rights are invaded if large quantities of water are diverted from the river in Georgia, and under the Elwood decision since the tort is to Alabama land, Alabama law would apply.

B. Relationships Between Alabama and Georgia

1. Pollution Control and the Federal Water Pollution Control Act

As shown above, although private rights may well be injured by diversion of the Chattahoochee River in Georgia, any pollution to the river caused by either Alabama or Georgia interests or lack of pollution enforcement standards are covered by the Federal Water Pollution Control Act. (FWPCA).

Under section 1342 of the Act,[73] the "National Pollutant Discharge Elimination System" (NPDES) permit system is created, which is the enforcement heart of the process. National effluent limitation guidelines are applied to "point source discharges" (waters from any discernible, continued and discrete conveyance, including but not limited to any pipe channel, ditch, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operations, or vessel or other floating craft, from which pollutants are or may be discharged . . . .")[74] Point source dischargers are subject to two sets of requirements: technologically based effluent limitations guidelines, and water quality standards, both enforced through a permit system.[75]

The Federal Water Pollution Control Act is administered by the Environmental Protection Agency (EPA) an if the state involved has a program approved by EPA, then it is the state which issues the permit. If the state agency is certified, they are delegated the right to issue permits and regulate pollution within their boundaries.[76] States may create standards which are stricter than EPA effluent limitations and if so, these are the appropriate standards,[77] but the state must submit "from time to time . . . the waters identified and the loads for such waters" as EPA determines necessary to implement water quality standards for such waters;[78] and under the 1977 amendments to the Act, EPA has the final word on the issuance of all permits.[79]

The FWPCA also includes provisions which recognize that there are substantial water quality control problems which can be attributed to so-called "urban-industrial concentrations or other factors."[80] Because it is assumed that these water quality problems are not point source discharges, EPA is charged with making overall plans which provide for area wide waste treatment management. These areas may even include more than one state, and EPA is supposed to attack broadbased pollution, what could be called "macro" pollution, as well as point source discharges, i.e., "micro" pollution.

Under the statute, EPA is to create guideline "procasses, procedures and methods to control pollution resulting from such non-point sources of pollutants."[81] The taking of enormous quantities of water in Georgia or Alabama thus affecting the water quality of the Chattahoochee can bring the provisions of the FWPCA into effect. There is no doubt that EPA has the final say over both the Georgia and Alabama water quality control authorities, and a plan for the Chattahoochee should be forthcoming. Although it can be argued that the Alabama Water Improvement Commission has jurisdiction perhaps jointly with Georgia over the Chattahoochee in order to protect riparian rights of Alabama and her citizens, the authorities probably point in the direction of Georgia holding the prime jurisdiction. For example, it has been held that the State courts of Iowa are without jurisdiction to enjoin a nuisance east of the middle of the main channel of the Mississippi River, even though the river is a boundary with other States and there is concurrent jurisdiction over the waters.[82]

2. Public Trust, Equitable Apportionment and Alabama's Ability to Protect its Riparian Interests in the Chattahoochee.

States have, in the past, endeavored to protect their sovereign rights and their citizens rights to natural resources against interstate injury. Resources such as navigable rivers and streams are protected by the Individu

States in trust for their citizens generally. The Supreme Court of the United States has recognized, for example, that the states may protect their citizens from interstate pollution both to air and water.[83] Thus, it is possible for Alabama to protect its citizens in general from pollution of the Chattahoochee river by a suit in parens patriae. However, a parens patriae suit brought to recover damages for injury to individual property rights would be barred by the Eleventh Amendment to the United States Constitution.

> "Parens patriae suits must involve a sovereign or quasi-sovereign interest of the states, rather than a 'mere collectivty' of the private interests of their individual citizens (citations omitted). In equitable apportionment cases in which the plaintiff state has pleaded its own private interest as a riparian, the Court has specifically excluded such interests from consideration. See, e.g. Kansas v. Colorado, 206 U.S. 46, 98, 27 S. Ct. 655, 688, 51 L. Ed. 956 (1907) ("We need not stop to consider what rights such private ownership of property might give.") In addition, any parens patriae suit brought against another state to recover for injury to the property rights of individual citizens would be barred by the Eleventh Amendment. See, New Hampshire v. Louisiana, 108 U.S. 76, 2 S.Ct. 176, 27 L.Ed. 656 (1883)."[84]

While individual rights may not be raised in any suit by a state against another, there are other devices the states can use against each other to ultimately protect all riparian property rights. Although many states promulgate statutes which state that all waters within the state belong to the public, such statements are not to be taken literally. There is little doubt that each state has jurisdiction over the waters within the boundaries thereof, but such jurisdiction is subject to federal interests and power.

States have the power under the federal constitution to bring suits against other states in the original jurisdiction of the United States Supreme Court for apportionment of the waters of interstate rivers. The Court has often held that there is a federal common law doctrine of equitable apportionment of interstate waters, which is resolved by taking into consideration a variety of factors. In such suits "the state, when a party to

a suit involving a matter of sovereign interest, 'must be deemed to represent all its citizens.'"[85] The issue of equitable apportionment cannot be raised in a suit between individual interstate water users.[86]

The Supreme Court has apportioned the waters of interstate rivers on many occasions in the past. Each state through or along which a river flows is said to be entitled to an equitable, or legally fair portion of the water in the river.[87]

No non-riparian state has ever petitioned the United States Supreme Court for apportionment of a river beyond its borders, and there is no law on the subject.[88] However, it seems safe to say that no state will be given such apportionment rights where the state is out of the water basin.[89] One outgrowth of the concept of equitable apportionment is probably the number of Interstate Compacts which have developed.

3. Working with Goergia Concerning the Chattahoochee and Other States on Other Rivers-Interstate Compacts

Rather than bring suits against each other concerning interstate waterways, the states have often entered into interstate compacts. The Supreme Court of the United States itself has said that such a method should be utilized by the states rather than invoking the adjudicatory power[90] and Congress has noted that it will look favorably upon compacts dealing with flood control and water quality.[91] Authority for interstate compacts is found in the compact clause of the Constitution. The compact between states must be approved by Congress, and thereafter the agreement is the law between the states. No state may withdraw or modify the compact unless the partner states and Congress approve.[92]

The first interstate compact to apportion waters of an interstate stream was negotiated in 1922 by the Colorado River Basin States.[93] There have been eighteen more such water compacts since that time.[94] In addition,

In 1935 the Delaware River compact was entered into by New York, New Jersey, and Connecticut to deal with water quality problems, and at least ten others have been created to deal with pollution.[95] Other water related compacts deal with flood control, reclamation, and water conservation.[96]

Although there are numerous continuing problems where compacts are created, always looming is the threat of federal uses and controls. Ordinarily it is difficult to anticipate federal water use projects since a federal use may destroy a state use and a federal regulatory scheme may supercede a state plan. Even if Congress approves a compact, it still has the power to enact legislation inconsistent with its prior approval. What are called reserved water rights of the federal government may always loom over any water compact.[97] In addition, even if the federal government is a signatory, it can be argued that future Congresses may interpret the commerce clause in a different manner than the Compact agreement.[98]

Within the individual states which have signed the compacts there can be questions raised about the powers of the states to act. In the case of West Virginia ex rel. Dyer v. Sim,[99] the State Auditor of West Virginia refused to issue a warrant upon the state treasury to pay West Virginia's portion of the Compact expenses. The West Virginia Supreme Court had held that the Compact was an unlawful delegation of the State's police power to other states and the Federal Government and also under the West Virginia Constitution future legislatures cannot be bound by prior sessions as to future appropriations. The Supreme Court of the United States overturned the West Virginia Court. The United States Supreme Court said that the court's experience led them to suggest that states enter compacts rather than litigate between themselves, and such legal agreements are not improper delegations of the legislature's power. The court said that the compact was drawn with great care to meet state constitutional objections and the

annual budgets must be approved by the Governors of the signatory states.

Although this case upheld the power of the states to delegate authority to an interstate compact to control water pollution, it is important to note that the compact agreement must be written with each individual state constitution in mind along with legislative mandates.

4. Another Interstate Water Problem: Ground Water Management

Another interstate water problem which could arise between Alabama and surrounding states is the extensive problem of ground water management and ownership in the water itself.

It is quite possible for underground aquifers to be located under the territory of two or more states, and in this era of using water in a coal slurry delivery system or for use in supplying large urbanizing areas, such uses could create interstate disputes of great magnitude. Under traditional American and Alabama law, a landowner may make a reasonable use of water which he takes from under his land, but that water must ordinarily be utilized on the land from which it is taken, and the water may not be wasted or diminished or destroyed in an unreasonable manner.[100]

Thus if one state or its citizens started to take great amounts of ground water from an interstate aquifer, other landowners and adjoining states could be injured in the extreme, and under the law which is generally accepted in the country, each landowner would have a cause of action. However, all of the same problems which we saw in the prior sections come to light here. May a citizen of Alabama sue in the Georgia courts for the unreasonable taking of ground water? May the State of Alabama sue in the Supreme Court of the United States for the unreasonable taking of ground water by another state? Should the states enter into ground water compacts to prevent these problems from arising?

Although there are no cases on interstate ground water problems of this nature,[101] the Supreme Court of the United States has mentioned the problem in two cases dealing with interstate surface waters. In Washington v. Oregon[102] the court said that wells which were affecting underground surface water sources were legally acceptable where the water was used in reasonable quantity for the beneficial use of the overlying lands and where the water was percolating rather than in a undergound stream. It is significant to note, however, that the court said that there was no satisfactory proof that the use of the water from the wells materially lessened the quantity of water available for use within the State of Washington.

Also, in Colorado v. Kansas[103] the Court noted that Kansas was not adversely affected by the use made of the Arkansas River in Colorado because "the arid lands in western Kansas are underlaid at shallow depths with great quantities of ground water available. . .at low. . .cost."[104] The court did not discuss whether or not the ground water involved was part of the Arkansas River!

Interstate ground water problems are very similar to interstate surface water problems. The two problems should be dealt with, not only in a similar fashion, but often together.

Conclusion and Suggestions

In this article we have discussed a number of major water conservation issues either confronting or to be confronting the State of Alabama. Unless some action is taken in the very near future on these problems, litigation, at the very least, will be the result.

The Cahaba River situation can only get worse. The municipal and metropolitan water needs of the City of Birmingham and of Jefferson County are continually growing and they cannot continue indefinitely to rely on the

Cahaba River.[105] The State generally has a deep and important interest in this historic and scenic river and the legislature should enter the situation with some urgency.

At the present time there is no unified office of water control and adjudication in the State. Although there is surely a proliferation of commissions and boards in our body politic, there is need for a commission or board to oversee and protect the Cahaba River with the power to negotiate with the City of Birmingham and Jefferson County concerning the river. Such a body should have power to bring suits to protect the integrity of the river and its banks.

The interstate problems concerning Georgia demonstrate the issues involved in all of Alabama's water relationships with surrounding states. These discussions show that there is real possibility of litigation along the borders of the states on major water issues. Most of the commentators[106] in the country believe that the lack of compacts between states with problems such as those discussed herein will lead the states toward litigation which is time consuming, costly and complicated. It is about time for the states to at least begin discussion of coming together in interstate water compacts. Such a device offers the advantages of flexibility, finality and allows the states to make decisions based on mature consideration of technical problems by experts. Such compacts can become guides to thoughtful and specific consideration of each state's planning and development of their future water needs.[107]

Bibliography

1. The Selma-Times Journal, Nov. 28, 1976, p. 12.

2. Ibid.

3. 141 A.L.R. 639, 640 (1942).

4. Clark, Water and Water Rights. 614.2 (1976). A municipality does not gain riparian rights even if it is situated on the banks of a stream. Lyon v. City of Binghamton, 228 A.D. 585, 240 N.Y.S. 647 (1930). Binghamton diverted the water, distributed it, and discharged the waste back into the stream before the watercourse flowed out of the city's boundaries. The plaintiff was a mill owner located in between the intake point and place of discharge, and so was adversely affected by the city's upstream diversion. The city's use was held to be unreasonable.

5. Beuscher, Appropriation Water Law Elements in Riparian Doctrine States, 10 Buffalo L. Rev. 448, 449 (1961).

6. Id.

7. Id.

8. See, e.g., Willis v. City of Perry, 92 Iowa 297, 301-02, 60 N.W. 727, 729 (1894); R. Clark, supra note 3, at 34.

9. Beuscher, supra note 8, at 449.

10. Trelease, supra note 7, at 36.

11. Tyler v. Wilkinson, 24 Fed. Cas. 472, 474 (No. 14, 312) (C.C.D.R.I. 1827) Ingraham v. Hutchinson, 2 Conn. 584, 590.

12. Tyler v. Wilkinson, 24 Fed. Cas. 472, 474 (No. 14, 312) (C.C.D.R.I. 1827) Lux. v. Hoggin, 69 Cal. 255, 4 P. 919 (1884). Ingraham v. Hutchinson, 2 Conn. 584, 490 (1818).

13. Redwater Land & Canal Co. v. Reed, 25 S.D. 466, 474-75, 128 N.W. 702, 707 (1910).

14. Davis, Australian and American Water Allocation Systems Compared, 9 B.C. Ind. & Com. L. Rev. 647, 695-96 (1968); Lauer, supra note 2, at 9; Trelease, Preferences to the Use of Water, 27 Rocky Mt. L. Rev. 133, 134-43 (1955).

15. See, e.g., Ulbricht v. Eufaula Water Co., 86 Ala. 587, 6 So. 78 (1888); Willis v. City of Perry, 92 Iowa 297, 60 N.W. 727 (1894); Lone Tree Ditch Co. v. Cyclone Ditch Co., 26 S.D. 307, 128 N.W. 596 (1910); Gors, The Law of Water Distribution in Iowa and South Dakota: A Comparison of the Riparian and Appropriative Systems, 20 Drake L. Rev. 256, 266 (1971).

16. In City of Philadelphia v. Collins, 68 Pa. St. 116 (1871), the court found that citizens residing in towns along a stream retained their riparian rights to use the water for all their domestic needs. It was of no consequence to the court that the use was one of a greatly exaggerated degree. A like result was reached in Barre Water Co. v. Carnes, 65 Vt. 629, 27 A. 609 (1893), where reasonable use of the water included the domestic, fire and sanitary needs of each inhabitant in the town. These collective rights could be transferred to the water company, who then distributed the water to persons living in the town.

17. In City of Canton v. Shock, 66 Ohio St. 19, 63 N.E. 600 (1902), the court decided that if a municipality could be sued in its corporate capacity as a riparian proprietor for its diversion, then such a suit is an admission that the city possesses riparian rights. The court further said supplying water to the entire population is reasonable use by a riparian city. A Tennessee court also found it was reasonable use for a city along the banks of a river to supply its citizens with water. American Ass'n., Inc. v. Eastern Kentucky Land Co., 2 Tenn. Ch. App. Rpts, 132 (1901). The decision in that case revolved around the unfair result if city dwellers next to the river were allowed to divert water, while such rights were not accorded city dwellers who did not own property adjacent to the stream.

18. 14 A.L.R. 330, 337-338.

19. 216 Mass. 83, 103 N.E. 87 (1913). In 14 A.L.R. supra note 16 at 338, the editors stated: "In Stratton v. Mt. Hermon Boys' School (1913) 216 Mass. 83, 49 L.R.A. (N.S.) 57, 103 N.E. 87, Ann. Cas. 1915A, 768 it is held that the riparian owner is not liable for diverting water from the stream in large quantities and conducting it to his non-riparian land for the uses of a school there located, if he causes no actual injury to a lower riparian owner for any present or future reasonable use. The court says: Although the right to flowing water is incident to the title to land, there is no right of property in such water in the sense that it can be the subject of exclusive appropriation and dominion. The only property interest in it is usufructuary. The right of each riparian owner is to have the natural flow of the stream come to his land, and to make a reasonable and just use of it as it flows through his land, subject, however, to the like right of each upper proprietor to make a reasonable and just use of the water on its course through his land, and subject, further, to the obligation to lower proprietors to permit the water to pass away from his estate unaffected except by such consequences as follow from reasonable and just use by him. . . .In the main, the use by a riparian owner by virtue of his right as such must be within the watershed of the stream; or, at least, such that the current of the stream shall be returned to its original bed before leaving the land of the user. This is implied in the term "riparian." . . .These principles, however, are subject to the modification that the diversion, if for a use reasonable in itself, must cause actual perceptible damage to the present or potential enjoyment of the property of the lower riparian proprietor before a cause of action arises in his favor. . . . Any other conclusions. . .would lead to the absurd result that every lower riparian proprietor, from near the source of a river, or any of its confluents, to the sea, could maintain an action and recover nominal damage for

an obstruction and diversion so trifling as to be beyond the possibility of ever causing actual injury. . . .A proprietor may make any reasonable use of the water of the stream in connection with his riparian estate and for lawful purposes within the watershed, provided he leaves the current diminished by no more than is reasonable, having regard for the like right to enjoy the common property by other riparian owners. If he diverts the water to a point outside the watershed or upon a disconnected estate, the only question is whether there is actual injury to the lower estate for any present or future reasonable use. The diversion alone, without evidence of such damage, does not warrant a recovery even of nominal damages."

20. The First Restatement of Torts and the majority of jurisdictions do not allow diversion of water for use off the riparian land. Restatement (First) of Torts, § 855 B (1939); Appeal of Marupt, 125 Pa. 211, 17 A. 436 (1889). Therefore, even if Canton was the rule in Alabama, Birmingham, as a non-riparian municipality, would not be accorded the domestic preference. The Second Restatement of Torts, along with a minority of jurisdictions, would allow water to be permanently diverted to non-riparian lands, as long as such use was reasonable. Restatement (Second) of Torts § 855 B (1979); Stratton v. Mount Herman Boy's School, 216 Mass. 83, 103 N.E. 87 (1913); Filbert v. Dechert, 22 Pa. Super. 362 (1903); Bank of Hopkinsville v. Western Ky. Asylum for the Insane, 108 Ky. 357, 56 S.W. 525 (1900); City of Battle Creek v. Goguac Resort Ass'n., 181 Mich. 241, 148 N.W. 441 (1914).

21. 181 Mich. 241, 148 N.W. 441 (1914).

22. 25 Kan. 588, 25 Kan. Rep. 410 (1881). See also Wallace v. City of Winfield, 95 Kan. 35, 149 P. 693 (1915).

23. Alabama was one of the first states to deny municipalities the right to permanently divert water for public water supply. In Stein v. Burden,

24 Ala. 130 (1853), the Alabama Supreme Court said the city of Mobile was a corporation which could have no natural wants, and thus had no right to divert water merely to fulfill its artificial wants. In City of Emporia v. Soden, 25 Kan. 588, 25 Kan. Rpts. 410 (1881), it also was held that a municipality was not an ordinary riparian owner. The city has purchased land on a pond and began to divert huge quantities of water into the town. The Kansas Supreme Court found this use to be unreasonable because it was unexpected as well as immense. There was no way for a lower riparian to anticipate such a large diversion in the same way he might anticipate domestic use by an average riparian. Even if each citizen of the city was treated as a riparian landowner, their collective individual uses would not equal the amount diverted by the municipality to fulfill all of its needs. Stein and Emporia are the two leading cases denying the domestic preference to a municipality. There are a number of decisions following the Alabama and Kansas courts.

24. In Warder v. City of Springfield, 12 Weekly L. Bull. 398, 9 Ohil Dec. 855 (1887), the city purchased land upon which it built a reservoir, then pumped water to the town. Since the city had the power to condemn the land for the public good, and had not done so, the court refused to extend full riparian rights to the municipality. It felt the statutory right should be exercised, rather than enlarging the common law right. Similar reasoning was followed in a case with converse fact. Appeal of Haupt, 125 Pa. 211, 17 A. 436 (1889). The city of Ashland had the statutory authority to obtain water after making compensation to injured riparians. When another town interfered with Ashland's water supply, Ashland attempted to enjoin the upstream city. An injunction was issued to protect Ashland's statutory rights, but the court noted the city had no riparian rights to be protected. Riparian rights extended only to the tract of land bordering the watercourse.

25. In Irving v. Borough of Media, 194 Pa. St. 648, 45 A. 482 (1900), the city purchased land on a stream outside the city limits to provide water for its inhabitants. A tributuary of this stream did run through the town, so Media claimed every citizen had riparian rights. The city said it was an agent supplying water to its riparian inhabitants for their domestic needs, and thus its diversion was reasonable. The court found this use by the town was not connected with the piece of riparian land which lay outside the city limits, and so the diversion was not justified under the reasonable use doctrine. The same result was reached in a case with similar facts in Lonsdale Co. v. City of Woonsocket, 25 R.I. 428, 56 A. 448 (1903). Since the city's waterworks were built outside the city limits, riparian rights did not extend to the corporate limits of the town, but applied only to the tract of land upon which the waterworks were built.

A constitutional reason for denying a city the right to permanently divert water was cited in Kennebunk v. Maine Turnpike Authority, 147 Me. 149, 84 A. 2d 433 (1951). The court found that to allow a city to divert huge quantities of water without compensation could never be reasonable use. The diversion was an effective taking of property by the city, and thus such use of water by a municipality was only allowed if the injured riparians were accorded due process of law through condemnation proceedings. A Federal court in Texas gave another reason for refusing to extend traditional riparian rights to a city. El Paso County Water Imp. Dist. No. I v. City of El Paso, 133 F. Supp. 894 (W.D. Texas 1955), aff'd and reformed, 243 Fed. 2d 297 (5th cir. 1957). The District Court judge found the large withdrawals by El Paso to be incompatible with the principle of riparian equality.

Other decisions of the mid-twentieth century ceased to cite new reasons for denying the domestic preference to municipalities. In the comparitively recent cases of Perrell v. City of Henderson, 220 N.C. 79, 16 S.E. 2d 449

(1941): Purceville v. Potts 179 Va. 514, 19 S.E. 2d 700, 141 A.L.R. 633 (1942) and Dimmock v. City of New London, 157 Conn. 9, 245 A. 2d 569 (1968); the various courts relied on precedents to explain why cities were not entitled to divert water for municipal supply.

26. 6 Port. 472 (Ala. 1838). See Comment, The Development of Riparian Law in Alabama, 12 Ala. L. Rev. 155, 159 (1959).

27. Stein v. Burden, 29 Ala. 127 (1856) and Stein v. Burden, 24 Ala. 130 (1854).

28. Stein v. Burden, 29 Ala. 127 (1856).

29. Stein v. Burden, 24 Ala. 130 (1854).

30. Comment, The Development of Riparian Law in Alabama, supra note 45, at 162.

31. Id.

32. Id. at 164.

33. 86 Ala. 587, 6 So. 78 (1889).

34. Id. at 590, 6 So. at 78.

35. Id. at 590, 6 So. at 79.

36. Id. at 591-92, 6 So. at 79.

A municipal water supply company has no greater right than a city to permanently take water from a stream. The Ulbricht v. Eufaula Water Co., supra note 30 case is a leading decision. Two Pennsylvania cases determined that diversion by a water company was a trespass, in spite of their position along the banks of rivers. Lord v. Water Co., 135 Pa. 130, 19 A. 1008 (1890); Wagner v. Purity Water Co., 50 Pa. Super. 500 (1912).

On the whole, municipal water supply companies are not accorded the riparian right of reasonable use for the same reasons municipalities themselves are denied such a right. The illegality of using water for needs not intimately associated with the riparian property upon which the

waterworks is built is an oft cited reason for not extending riparian rights, especially in a long line of New York cases, Crownen v. Wellsville Water Co., 3 N.Y.S. 177 (1888); Gilzinger v. Saugerties Water Co., 21 N.Y.S. 121 (1892); Standon v. New Rochelle Water Co., 36 N.Y.S. 92 (1895); Duesler v. City of Johnstown, 24 A.D. 608, 48 N.Y.S. 683 (1898); Gray v. Village of Ft. Plain, 105 A.D. 215, 94 N.Y.S. 698 (1905).

Diversion is also disallowed under the common law merely because the water company has other legal means of obtaining its rights to use the water. Either the water company itself has the power of eminent domain as in Rigney v. Tacoma Light and Water Co., 9 Wash. 576, 38 P. 147 (1894), or the city for which it supplies water is entrusted with such powers, as in Weidmann v. East Jersey Water Co., 88 N.J. Eq. 397, 102 A. 858 (1918). Such statutory means of obtaining water from the stream are preferred by courts than extensions of the common law.

Another reason water companies are denied riparian rights is the use they make of the water. Selling the water to its customers is not within the bounds of ordinary domestic use. City of Elkhart v. Christiana Hydralics, 223 Ind. 242, 59 N.W. 2d 353 (1945); Wallace v. City of Winfield, 95 Kan. 35, 149 P. 693 (1915).

In a diversity action in which the water company took water from a stream in one state to sell to city inhabitants in a neighboring state, the federal court treated the waterworks company like any other riparian owner, since it was acting outside of the jurisdiction of its corporate charter. The court examined the amount of water diverted, and did not look at the reason for the diversion at all. The amount diverted was determined to be unreasonable, and the company was enjoined from using the water. Saunders v. Bluefield Waterworks and Imp. Co. 58 F. 133 (W.D. Va. 1893).

37. 245 Ala. 481, 17 So. 2d 674 (1944).

38. 256 Ala. 269, 54 So. 2d 571 (1951).

39. City of Tuscaloosa v. Williams, 229 Ala. 542, 158 So. 753 (1935).

40. Elmore v. Ingalls, 245 Ala. 481, 484, 17 So. 2d 674, 676 (1944).

41. Jones v. Tennessee Coal, Iron & R.R., 202 Ala. 381, 80 So. 463 (1918).

42. Comment, The Development of Riparian Law in Alabama, supra note 45, at 169-170.

43. Howell v. City of Dothan, 234 Ala. 158, 174 So. 624 (1937); Mayor & Alderman of Birmingham v. Land, 137 Ala. 538, 34 So. 613 (1902).

44. Roberts v. Brewer, 290 Ala. 329, 276 So.2d 574 (1973).

45. Stein v. Burden, 29 Ala. 127 (1856).

46. Regardless of the theory under which the aggrieved party proceeds, he is entitled to damages or an injunction. Alabama allows the recovery of nominal damages even if the lower riparian is not perceptibly injured by the diversion. Stein v. Burden, 24 Ala. 130 (1854). Nominal damages are awarded so the diverter cannot gain title by prescription. Some jurisdictions do not follow Alabama's method of awarding nominal damages, and will only give that remedy when the lower riparian is actually injured by the diversion. Irving v. Borough of Media, 194 Pa. St. 648, 45 A. 482 (1900). Of course, the lower riparian is entitled to compensation for all damages he actually sustains and which he can prove were caused by the diversion. Beaunit v. Alabama Power Co. 370 F. Supp. 1044 (N.D. Al. 1973). The downstream owner may also claim prospective damages when it appears the diversion may be permanent. Restatement (Second) of Torts, § 850 A. Comment m (1979).

Since the lower riparian can often prove no real injury, and thus would receive only nominal damages, Alabama courts are prone to issue narrow injunctions to protect the lower riparian's property right. Burden v. Stein, 27 Ala. 104 (1855). The narrow injunction issued in Ulbricht would

operate to restrain the city from diverting any water whenever the lower riparian suffered any measurable injury. Until such injury occurred, though, the diversion could continue. This narrow injunction protected the lower riparian's present and future property rights, while allowing the city to continue providing a vital public service.

The lower riparian may ask the court to issue an injunction against the diverter. It appears this remedy is not favored by the courts. A New Jersey court stated the general rule of equity to be that injunctive relief is not available to protect property rights when there is a remedy at law for damages. Paterson v. East Jersey Water Co., 74 N.J. Eq. 49, 70 A. 472, affd., 77 N.J. Eq. 588, 78 A. 1134 (1908). The court may issue an injunction, but keep it from going into effect until the upper riparian has condemned or purchased the property rights within a prescribed time. Weidman Silk Dyeing Co., v. East Jersey Water Co., 88 N.J. Eq. 397, 102 A. 858, affd. 89 N.J. Eq. 541, 105A. 194 (1918).

47. Alabama Consolidated Coal & Iron Co. v. Turner, 145 Ala. 639, 39 So. 604 (1906). The right to take water, an incorporeal right, is analog to the statute governing the adverse possession of corporeals, Ala. Code § 6-5-200 (1975). Wright & Rice v. Moore, 38 Ala. 593 (1863).

48. Stein v. Burden, supra note 43 at 130, 148.

49. Irving v. Borough of Media, supra note 23.

50. Code of Ala. § 22-22-9 (f) (1975).

51. Code of Ala. § 22-22-1 (4) (1975).

52. Assuming Birmingham has not acquired the right to divert by eminent domain, prescription, or purchase, the lower riparian owners have several remedies available to them. If they can prove Birmingham's diversi was unreasonable, they may sue under two common law tort theories or under

the Alabama Code.

The lower riparians have a statutory right to damages sustained by anyone's diversion of water from the natural channel of a stream. Ala. Code § 33-7-4 (1975). No cases have been litigated under this statute, which has been in effect for over a century.

Unreasonable diversion by an upper riparian is a private nuisance, because the taking of water interferes with the lower riparian's use and enjoyment of his land. Ulbircht v. Eufaula supra note. The lessening of the flow of water in a stream by unreasonable diversion is also an interference with the downstream proprietor's property right, and thus is actionable in trespass. Stein v. Ashby, 17 Ala. 521 (1854). The vast majority of cases are based on the nuisance theory.

53. Supra note 41.

54. 88 N.J. Eq. 397, 102 A. 858, aff'd. 105 A. 194 (1918).

55. 370 F. Supp. 1044 (N.D. Ala. 1973).

56. The Chattahoochee River forms the lower half of the boundary between Alabama and Georgia, and by the Act establishing the Mississippi Territory, 1 STAT. 549. April 17, 1798, Georgia retained the portion of the Chattahoochee River forming the Alabama border entirely within her boundary. Alabama v. Georgia, 64 U.S. 505 (1859); Howard v. Ingersol, 54 U.S. 381 (1851); Ga. Code Ann. § 15-101 (1976). The general law of land cession by a state is in accord with the boundary thus drawn along the western bank. See e.g., Handley's Lessee v. Anthony, 18 U.S. 374 (1820); Indiana v. Kentucky, 136 U.S. 479 (1890); 15 LRA 188. The Alabama border situated along the western bank of the Chattahoochee River has been judicially interpreted as along the mean 1798 high water mark. Alabama v. Georgia, supra. In contrast, however, by the Treaty of Paris between the United States and Great Britain, September 3, 1783, the middle or thread

of the Chattahoochee River was fixed as part of the boundary between Georgia and Florida. See, Florida Gravel Co. v. Capital City Sand and Gravel Co., 170 Ga. 855, 154 S.E. 255 (1930) and cf. Patton on Titles § 87 supp.

57. Roberts v. Fullonton, 117 Wis. 222, 65 L.R.A. 956 (1903).

58. Rome Ry. & Light Co. v. LOEB, 141 Ga. 202, 80 S.E. 785 (1914).

59. 65 L.R.A. 953, 954 (1904).

60. Indiana v. Kentucky, 136 U.S. 479.

61. Louisville Bridge Co. v. Louisville, 81 Ky. 189 (1883).

62. Ga. Code Ann. § 45-731 (1976).

63. Illinois v. City of Milwaukee, Wisconsin, 406 U.S. 91 (1972).

64. New Jersey v. New York, 283 U.S. 336 (1931).

65. 65 L.R.A. supra note 56 at 959. See also the later decisions on the Delaware controversy, New Jersey v. New York, 343 U.S. 974 (1952) and 347 U.S. 995 (1954).

66. 450 F. Supp. 846 (1978).

67. Id. at 867.

68. Id. at 866.

69. Id. at 867.

70. Id. at 861.

71. Id. at 863.

72. Id. at 864. The decision in Bean v. Morris, 221 U.S. 485 (1911), can stand for the proposition that water rights in one state can be adversel affected by diversion or interference in another state.

73. 33 U.S.C. § 1342 (1970).

74. Id. at § 1362 (14).

75. Id. at § 1342

76. Id. at § 1362(14).

77. Id. at § 1341 (a)(1).

78. Id. at § 1313 (d)(D)(2).

79. Id. at § 1342 (d)(1)(2)(3)(4).

80. Id. at § 1288 (a)(1) and (2).

81. Id. at § 1314 (f)(b).

82. Buck v. Ellenbolt, 84 Iowa 394, 51 N.W. 22 (1892)

83. The right of the states to protect their natural resources for their citizens in parens patriae suits is founded upon sovereign or quasi-sovereign interests. Missouri v. Illinois, 180 U.S. 208 (1901). Missouri recognized the state's interest in pollution free interstate waters. And in Georgia v. Tennessee Copper Co., 206 U.S. 231 (1906), the Supreme Court recognized the sovereign interest of the State of Georgia against interstate pollution. In both Missouri and Tennessee Copper air pollution statutes in both states were violated. Several recent cases indicate that public trust suits can provide separate avenues of relief in and of themselves, especially when other avenues fail. In Maryland v. Amerada Hess Corp., 350 F. Supp. 1060 (D. Md. 1972), the federal district court upheld public trust as a cause of action after striking down the state's two remaining causes of action; nuisance and violation of a water pollution statute. Also in Ohio v. Bowling Green, 380 O. St. 2d 281, 313 N.E. 2d 409 (1974), the Ohio Supreme Court recognized that a separate cause of action for trust protection existed at common law.

84. Elwood v. City of New York, supra note 63 at 866.

85. Id. at 865.

86. Vineyard Co. v. Twin Falls Co., 245 F. 9 (9th Cir. 1917).

87. Clark, supra note 2 at § 132, p. 132.

88. R. W. Johnson, Major Interbasin Transfers Legal Aspects-Legal Study Number 7, Nat. Water Comm., 61 (1971).

89. Id. at 57.

90. Colorado v. Kansas, 320 U.S. 383, 392 (1943).

91. Muys, Interstate Compacts and Regional Water Resources Planning and Management, 6 Nat. Res. Law 153, 156 (1973).

92. Comment, Federal Reserved Rights and the Interstate Allocation of Water, XIII Land and Water L. Rev. 813, 826 (1978).

93. Id. at 153.

94. Id.

95. Id. at 157, 158.

96. Id. at 159.

97. Comment, Federal Reserved Rights and the Interstate Allocation of Water, supra note 90.

98. C. J. Meyers and A. D. Tarlock, Water Resource Management 383 (1979).

99. 341 U.S. 22 (1951).

100. Cohen, Water Law in Alabama-A Comparative Survey, 24 Ala. L. Rev. 453, 472-475 (1972). See also 109 A.L.R. 395, 399 (1938).

101. Comment, Interstate Groundwater Rights: Protecting the Interests of The States, 20 S.D.L. Rev. 641, 650 (1975).

102. 297 U.S., 517 (1936).

103. 320 U.S. 383 (1943).

104. Id. at 399.

105. Birmingham is not without a means of obtaining water for its public supply, even though it is denied the common law right to take water from the Cahaba. Municipalities in Alabama are accorded the power of eminent domain. Ala. Const. I, § 23 (1901). Provided just compensation i made to those whose property rights are condemned, Birmingham may take wha property it needs for public use. Ala. Const. XII, § 235 (1901). 'For the purpose of securing and maintaining a water supply sufficient for its

inhabitants and users within contiguous areas, any municipal corporation is vested with full authority to have condemned for its use sources of water and water supplies or necessary watersheds, rights-of-way for its pipelines and lands for its water reservoir anywhere in the state." Ala. Code §11-50-4 (1975). Furthermore, municipal waterworks corporations have been given the same power of eminent domain. Ala. Code § 10-5-6 (1975). Procedures for condemnation are outlined in Ala. Code §§ 10-1-1 through 18- (1975).

Under the above provisions, Birmingham could forcefully purchase land from lower riparians to gain access to the water it needs for its municipal supply. These statutes and constitutional sections serve the dual purpose of allowing a city to provide water for its citizens, while protecting the property rights of affected downstream landowners. Much of the case law notes that a municipality cannot be given the right to divert water under the common law, but still can exercise its power of eminent domain. It is obvious Alabama is in accord with most states in extending such powers to cities.

Eminent domain, though, is not considered a practical solution. Roberts, Municipalities as Riparian Owners, 12 Ky. L.J. 10 (1923). Compensation for land in suburban Shelby County may be prohibitively expensiv Birmingham would have to purchase all riparian land affected by the dimini flow. Because Brimingham wants the water, and not the land adjacent to th water, the city might opt to use a less expensive method of gaining the right to divert.

There is no Alabama statute on point, but there is dicta in most of the cases, including Stein, that a city is allowed to purchase the propert right of using the water rather than purchasing the land itself. Lower riparians along the Cahaba could sell their rights to a natural flow,

subject to reasonable use. It is doubtful whether Birmingham could ever purchase the right to use all the water. Lower riparians should always be allowed enough water for their most beneficial use, such as household and farm needs. New Jersey v. New York, 283 U.S. 336 (1931). The New Jersey Case is a large scale analogy to the Birmingham situation, with residents along the lower Cahaba standing in the place of the residents of New Jersey. In the first of several decisions dealing with the Delaware River Compact, the United States Supreme Court recognized the pressing need of the city of New York for pure water. But it balanced this need against the legitimate property interests of lower riparian owners. Any taking of water by Birmingham as a proprieter must also involve this same balancing of interests.

106. Comment, Allocating Buried Treasure: Federal Litigation Involving Interstate Ground Water, XI Land & Water L. Rev. 103, 129 (1976).

107. Fischer, Management of Interstate Ground Water, VII Nat. Res. Law. 521, 522, 546 (1974).