

INTERBASIN TRANSFER IN GEORGIA AND BASIN OF ORIGIN PROTECTION

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Abstract. For effective statewide water management in Georgia, an effective, efficient and equitable interbasin water transfer law is essential. The law must provide clarity as to when, where, and for what purpose an interbasin water transfer can occur, and it must provide a process that gives a voice to the citizens and stakeholders in the basin of origin that is equal to those in the receiving basin.

The recommendations of the 2002 Georgia Joint Water Plan Study Committee Final Report provide a good model for the proposed Georgia interbasin water transfer laws. These recommendations must be supplemented, however, with more specific basin of origin protection provisions that provides some degree of certainty for the citizens and stakeholders.

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INTRODUCTION

Economic prosperity and quality of life in Georgia depend upon effective water management. No issue in water management is more important than interbasin transfer of water (IBT) and basin of origin protection.

A significant water management challenge for Georgia is the geographic location of her rivers and aquifers. Georgia's largest and most densely populated population centers are located in North Georgia's headwaters region where source water is limited. One proposed management option is to expand the use of interbasin transfer of water. This proposal gives rise, however, to a series of critical questions about how extensively the practice should be used.

Who decides when IBT is necessary? What uses for water legitimize interbasin transfer? Will water sharing through IBT occur only between nearby cities and counties or between adjacent river basins? Will IBT between distant river basins within the state or within adjacent states be approved? Will IBT be authorized within adjacent states or with distant states? Will stakeholders in the basins of origin have a voice equal to

that of the receiving basins to which the water is transferred?

THREE CHALLENGES FOR GEORGIA

An interbasin transfer will provide the receiving basin with an additional source of water to continue to support its economic growth and an expanding population. However, IBT can harm the long-term economic prosperity and quality of life of the basin of origin. The degree of harm to the basin of origin depends largely on the magnitude of the water loss, and the current and future water needs in the basin.

Interbasin transfers of water have already been and will continue to be used in Georgia. The reason for the need for IBT can be found in the hydrogeography of North Georgia where almost 54% of the population of Georgia lives. The river basins within the Metropolitan Atlanta Region are long and narrow and, consequently, many of the cities in the region spread over more than one basin. (Metropolitan Atlanta, 2001) But the question of whether interbasin transfer should be used as a first or last resort remains.

Three major challenges for interbasin transfer in Georgia exist. The first challenge is to determine what, if any, restrictions should be imposed on interbasin transfers. The second challenge is how the basin of origin can be protected from serious, perhaps irretrievable, harm that may result from the loss of its water. The third challenge is how Georgia law should be structured to provide an efficient, effective and equitable interbasin law that meets the needs of potential receiving basins while protecting the basins of origin.

FOUR ISSUES FOR INTERBASIN TRANSFER OF WATER IN GEORGIA

The Georgia IBT law and the drafters of Georgia's proposed comprehensive statewide water management plan need to provide some certainty for the basins of origin that may be the source of potential interbasin transfers. Prior to proposing and adopting the suitable laws and policies, Georgia's lawmakers and policy-

makers must examine four issues concerning IBT in Georgia.

The first issue is the role of the Georgia State-wide Water Management Plan (GSWM Plan) in formulating and developing efficient, effective, and equitable interbasin transfer laws and policies. The second issue is the need for credible knowledge about the magnitudes of the surface water and groundwater that may be involved in various interbasin transfer proposals and the harms that may be inflicted on the basins of origin. The third is the importance of an understanding of the difference between IBT of “treated water” by municipal water supply and IBT of “raw,” or source, water. The fourth is an appreciation for why laws for basin of origin protection are needed when interbasin transfers of water are contemplated.

THE JUSTIFICATION FOR INTERBASIN TRANSFER OF WATER

The justification for interbasin transfer is largely economic. The underlying argument is that water should be allocated to the “highest and best use” (Tarlock, 1997), maximizing economic efficiency. “Financial” value and economic value are often taken to be synonymous and, therefore, maximizing the economic efficiency of water allocation is equated to maximizing the financial return gained from the use of the allocated water. Thus, in their view, IBT is justified when it provides a better financial return compared to the use of the water in the basin of origin.

This view often gives little attention, however, to the environmental, health, and social effect of water transfers on the basins from which the water is taken.

Significant costs to the basin of origin must be evaluated along with the benefits to the receiving basin before an interbasin transfer is permitted. One cost is the opportunity cost to the basin of origin for future economic growth and prosperity. (Keeler, et al, 2002) It is unusual to find a situation in which the water proposed for an interbasin transfer could not be put to a productive use within the basin of origin, either for increased output of existing uses or potential future uses. Values associated with any use of water in the basin of origin, which would be foregone as a result of the water transfer, should be included as a cost to the proposed interbasin transfer. (Brookshire, et al)

Interbasin transfers of water may have a negative effect on public health within the basin of origin. One of the basic requirements for clean water is a sufficient amount of water to absorb, or assimilate, pollutants. While the Clean Water Act requires that discharges from point sources be sufficiently treated to meet standards that are not hazardous to human health, non-point discharges generally are “treated” only through assimilation by the water body that receives the discharge.

The CWA recognized this problem with its imposition of the TMDL (Total Maximum Daily Load) standards, which limit the loads of pollutants within a water body. Loss of flow within the basin of origin, if sufficiently large, may make it more difficult to meet TMDL standards in the basin of origin, inhibiting economic growth and quality of life. Remediation or compensation to the basin of origin for this effect is difficult to quantify or value.

The risk of harm to the environment of the basin of origin from the loss of water resulting from IBT is an especially difficult cost to quantify or value. Incremental degradation of the ecosystem may have minor short-term economic and quality of life effects, but over the long-term they may be significant, even catastrophic. A case in point is the long-term negative effects on the Everglades National Park in Florida. (South Florida, 2000) Preserving the opportunities for future generations, often presented as intergenerational justice, is an also important value (Page) that is seldom considered in determining the justification for interbasin transfer.

GEORGIA WATER LAW & INTERBASIN TRANSFER OF WATER

The laws of Georgia related to the interbasin transfers of water are limited in number and ambiguous in scope. The Georgia Code authorizes interbasin transfers by allowing the Environmental Protection Division (EPD) to grant permits involving interbasin transfers of water “if such diversions are in the public interest.” (O.C.G.A § 12-5-31[n])

The surface water withdrawal statute requires the EPD Director to “give due consideration” to existing uses and applications that do not involve interbasin transfers before granting a permit for such a transfer. (O.C.G.A. § 12-5-31[n][1])). EPD must give notice in the form of a press release for issuance of interbasin transfer permits. (O.C.G.A. § 12-5-31[n][2]) For the sixteen-county area in the Metropolitan North Georgia Water Planning District, Georgia law provides that the District, in formulating its water supply plan, “shall neither study nor include in any plan any interbasin transfer of water from outside the district area.” (O.C.G.A. § 12-5-584[f]) Georgia currently has no provision for compensation to the basin of origin for the costs associated with interbasin transfer. (IBT Working Group)

CREATING LAW FOR INTERBASIN TRANSFER OF WATER

Effective, efficient and equitable laws follow certain guiding principles (Braithwaite, 2000). Among those is the principle of certainty; statutes and regulations should set out the applicable law with the greatest possible degree of

clarity. Second is the principle of equality and universality; all persons, citizens or corporations must be accorded equal treatment without discrimination on any basis. Legal certainty in law is an absolute requirement for effective and efficient business and commerce (Takis, 2000). It follows that the pending interbasin water transfer law developed for Georgia must provide clarity, certainty and equality for both the basin of origin and the receiving basin.

A Georgia IBT law must have the certainty for the basin of origin that it needs to effectively manage business or industry, tourism or outdoor recreation, public health or ecological protection.

Without a more detailed basin of origin protection provision, the basin of origin in Georgia can never be certain what the result of the interbasin transfer evaluation may be and can never be certain of the future water supplies that are essential for economic progress and prosperity, quality of life or ecological sustainability. There must be some standards that the citizens and stakeholders in the basin of origin can depend on to protect their interests.

Essentially, provisions for basin-of-origin protection can be placed in four categories: limitations on interbasin water transfers, financial compensation to the basin of origin, return of a portion of the transferred water, and legal causes of action for the harm caused by the water transfers. With all of these strategies, a means for developing an adequate "interbasin transfer impact statement," similar to the environmental impact statement, is essential. This means placing into law an adequate funding mechanism. An equitable arrangement might be to have the receiving party fund the impact statement, to be done by either the state or by a "disinterested" party.

The first potential basin of origin protection provision is limiting or prohibiting interbasin transfer under certain clearly defined conditions. As an example, interbasin transfer can be limited to water supply needs for municipalities, counties, or other political units that are located across river basins and prohibit other uses. A distance limitation on the transfer may be imposed.

Removing water for interbasin transfer can be prohibited from basins of origin that do not conform to CWA TMDL standards. Additionally, the law can place limitations on, or curtailment of interbasin transfers during periods of drought based on a specific hydrologic standard. An appropriate standard might be the interbasin transfer ceases when the flow of the main stem of the river in the basin of origin diminishes to the minimum flow standard imposed by the state.

The IBT law can place limitations on the cumulative amounts of interbasin transfer that occurs. South Carolina has limited individual interbasin transfers to five percent of the seven-day, ten-year low flow, or one million gallons or more of water a day on any day. In Georgia,

some similar limitation can be developed for the cumulative amount of interbasin transfer based on the cumulative effect on the basin of origin.

Financial compensation to the basin of origin for the loss of the water may serve as a form of basin of origin protection. While this approach does not provide the certainty that adequate water will be available to the basin of origin, it does provide compensation for the loss. A number of compensation strategies exist, to include payment to a special authority for income foregone by the basin-of-origin, as well as reimbursement of any costs that may be associated with the loss of water, such as programs necessary to meet TMDL standards. Another method of compensation would be to base payment on a share of the economic gain provided to the receiving party as the result of the interbasin transfer.

A third approach involves an engineering solution to basin of origin protection, where interbasin transfer of water may be permitted on the condition that all non-consumed water be returned to basin of origin, if reasonable and practicable. Under this proposal, existing municipal and county treatment systems would be grandfathered, but new treatment facilities would be located in the basin of origin so that the treated waste water would be discharged into the basin of origin. Under this method, the basin of origin would reduce the loss of water in the basin of origin by as much as 58%. (GA Environmental Protection)

Finally, there is the legal option to resolve the issue by allowing a private cause of action to riparians in donor basins and letting the judicial system determine the remediation and/or compensation to the basin of origin.

CONCLUSIONS

For effective statewide water management in Georgia, an effective, efficient and equitable interbasin water transfer law is required. The law must provide clarity as to when, where, and for what purpose an interbasin water transfer can occur, and it must provide a process that gives a voice to the citizens and stakeholders in the basin of origin that is equal to those in the receiving basin.

The recommendations of the 2002 Georgia Joint Water Plan Study Committee Final Report provide a good model for the proposed Georgia interbasin water transfer laws. These recommendations must be supplemented, however, with more specific basin of origin protection provisions that provides some degree of certainty for the citizens and stakeholders. Georgia's economic viability for future generations and the very fate of the state's 14 major rivers and 6 major aquifers depend on the laws that will address interbasin transfers of Georgia's surface water rivers and groundwater aquifers while protecting the basins of origin.

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