

Report to the North Carolina General Assembly

Study of Subbasin Transfers per SL 2020-79 (4)

January 15, 2021

Division of Water Resources



**NORTH CAROLINA
DEPARTMENT OF ENVIRONMENTAL QUALITY**

Directive

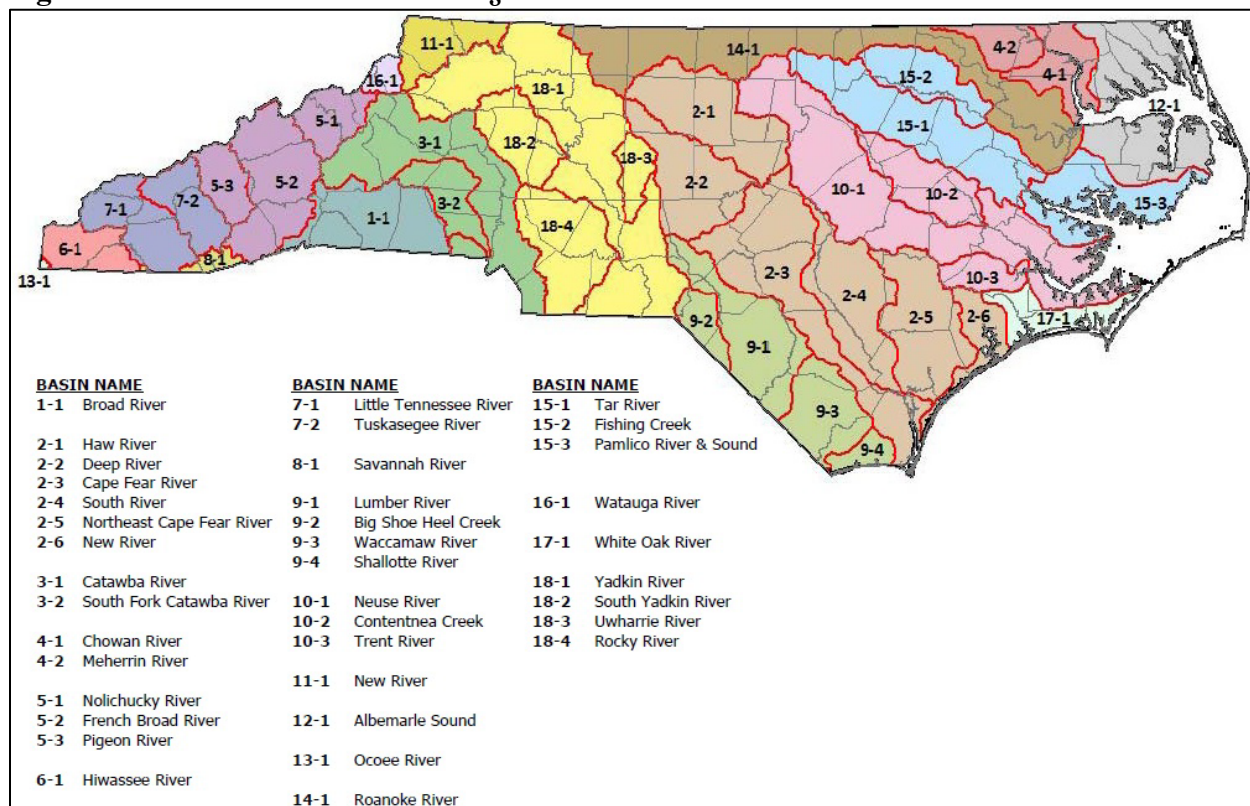
Session Law 2020-79 (4) directed the Department of Environmental Quality (DEQ) to study the statutes and rules governing subbasin transfers and make recommendations as to whether the statutes and rules should be amended. More specifically, DEQ was asked to:

- (1) examine whether transfers of water between subbasins within the same major river basin should continue to be required to comply with all of the same requirements under G.S. 143-215.22L as transfers of water between major river basins; and
- (2) consider whether the costs of complying with specific requirements, including financial costs and time, are justified by the benefits of the requirements, including the production of useful information and public notice and involvement.

Background

North Carolina has a long history regulating interbasin transfers, dating back to the 1950's. The purpose of the Interbasin Transfer (IBT) Law is to ensure it is good public policy to move water from one basin into another. An interbasin transfer, as defined in § 143-215.22G, is the withdrawal, diversion or pumping of surface water from one river basin that is then discharged into a different river basin. § 143-215.22G establishes 18 major river basins and 38 subbasins, as designated on the map entitled "*Major River Basins and Sub-basins in North Carolina*" and filed in the Office of the Secretary of State on April 16, 1991.

Figure 1. IBT Basins as defined in § 143-215.22G



Importance of Major and Subbasin Boundaries

How basins are defined is critical since a receiving basin's water needs are subordinate to the source basin's water needs. The State's policy on IBTs states:

§ 143-215.22L

- (t) *Statement of Policy. - It is the public policy of the State to maintain, protect, and enhance water quality within North Carolina. It is the public policy of this State that the reasonably foreseeable future water needs of a public water system with its service area located primarily in the receiving river basin are subordinate to the reasonably foreseeable future water needs of a public water system with its service area located primarily in the source river basin. Further, it is the public policy of the State that the cumulative impact of transfers from a source river basin shall not result in a violation of the antidegradation policy set out in 40 Code of Federal Regulations § 131.12 (1 July 2006 Edition) and the statewide antidegradation policy adopted pursuant thereto.*

IBT Certificate

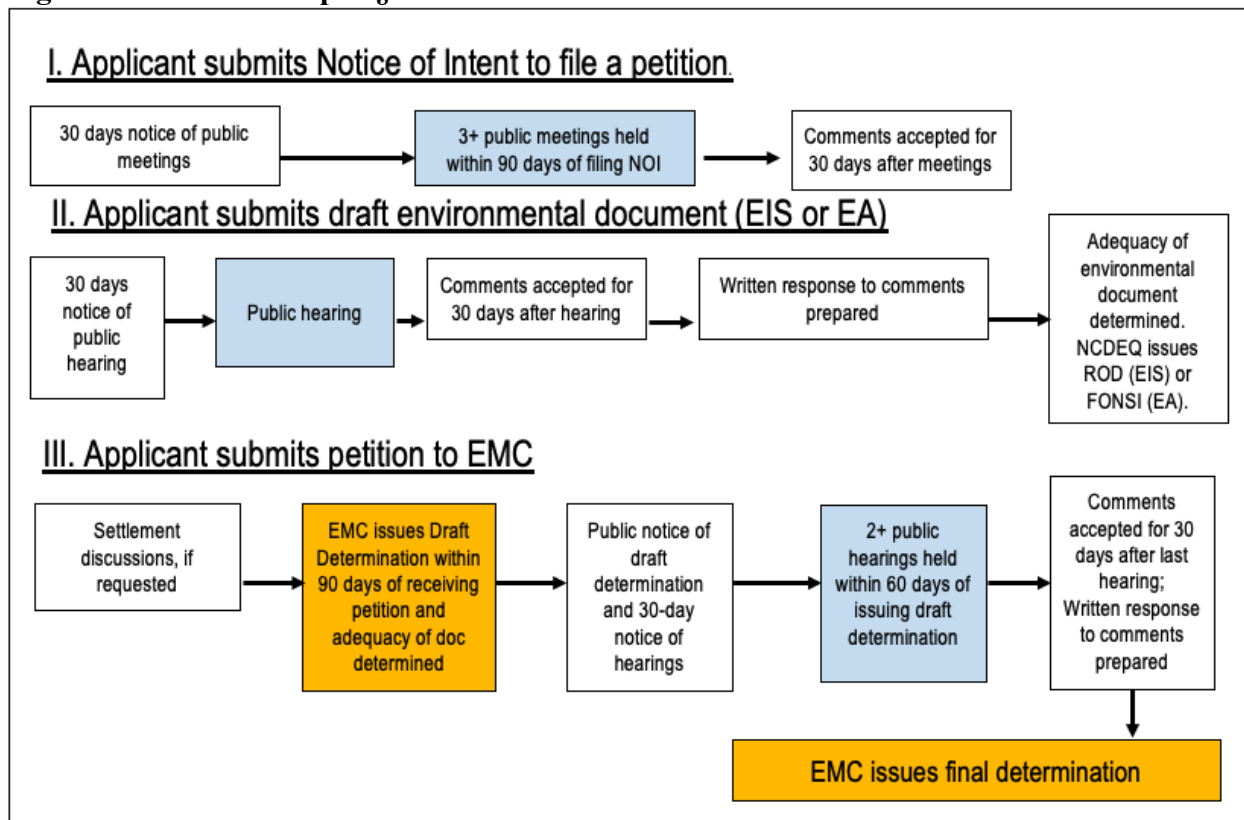
An IBT Certificate¹ from the N.C. Environmental Management Commission (EMC) is required to:

- (1) initiate a transfer of 2,000,000 gallons of water or more per day, calculated as a daily average of a calendar month and not to exceed 3,000,000 gallons per day in any one day, from one river basin to another;
- (2) increase the amount of an existing transfer of water from one river basin to another by twenty-five percent (25%) or more above the average daily amount transferred during the year ending 1 July 1993 if the total transfer including the increase is 2,000,000 gallons or more per day; or
- (3) increase an existing transfer of water from one river basin to another above the amount approved by the Commission in a certificate issued under G.S. 162A-7 prior to 1 July 1993.

An applicant for an IBT Certificate first submits a Notice of Intent (NOI) to file a petition and then holds at least three public meetings. Next the applicant submits a draft environmental document, either an Environmental Assessment (EA) or an Environmental Impact Statement (EIS), and the EMC holds at least one public hearing. After DEQ issues either a Finding of No Significant Impact (FONSI) on the EA or a Record of Decision (ROD) on the EIS, the applicant shall petition the EMC for an IBT Certificate. After issuing a draft determination on the petition, the EMC holds at least two public hearings prior to issuing their final determination. (Figure 2)

¹ An IBT Certificate shall not be required to transfer water from one river basin to another up to the full capacity of a facility to transfer water from basin to another if the facility was in existence or under construction on July 1, 1993.

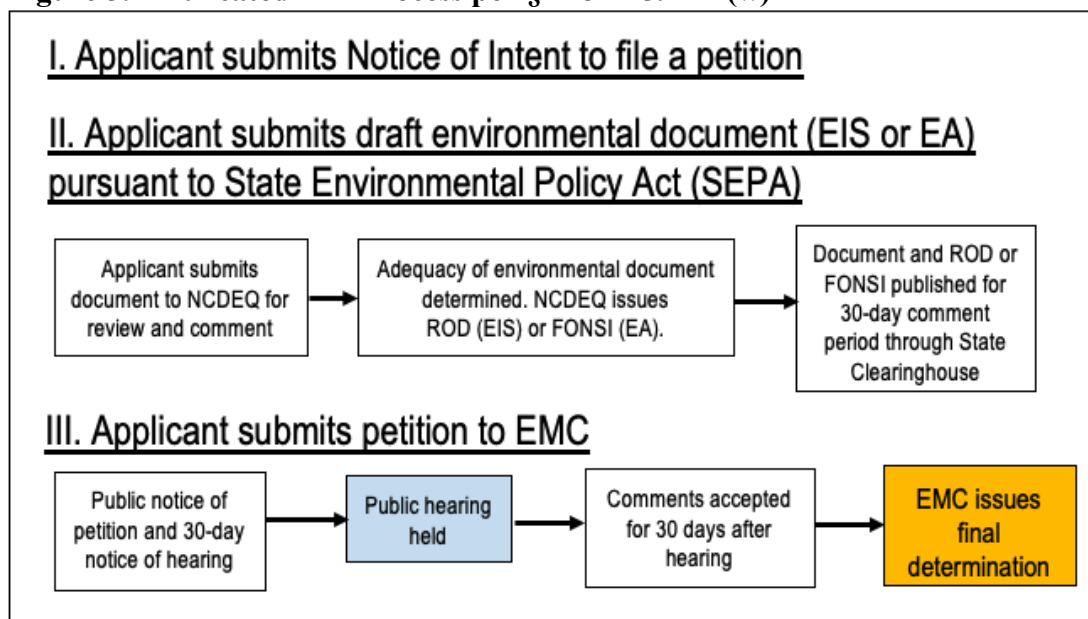
Figure 2. IBT Process per § 143-215.22L



In the coastal counties and reservoirs constructed by the U.S. Army Corps of Engineers, projects² may follow a truncated process. First the applicant shall submit a Notice of Intent to file a petition with the EMC, however no public hearings are required at this step. Next the applicant submits a draft environmental document (an EA or EIS), again no public hearings are required at this step. Finally, upon determining the documentation is adequate, DEQ holds a public hearing on the petition and accepts public comments for a minimum of 30 days prior to the EMC issuing their final determination (Figure 3).

² See § 143-215.22L (w) for full description of projects that fall under the truncated process.

Figure 3. Truncated IBT Process per § 143-215.22L (w)



Status of Surface Water Transfers

Currently, there are 133 public water systems across North Carolina that transfer surface water between river basins. Of the 133 surface water transfers, 27 systems are transferring more than 1 million gallons per day (MGD), with 11 of those 27 systems regulated under nine IBT certificates.

Since 1993, nine IBT certificates have been issued by the EMC. Five of the nine IBT certificates transfer water between major river basins (Piedmont Triad RWA, Charlotte Water, Greenville Utilities, Brunswick County, and Kerr Lake RWS). Two of the nine IBT certificates transfer water between subbasins, but the water remains within the respective major river basins (Union County and Pender County). Finally, two IBT certificates transfer a portion of water between subbasins, with the remaining portion transferred between major river basins (Cary-Apex and Concord-Kannapolis). (Table 1)

In addition to the public water systems with IBT certificates, there are ten public water systems that have a grandfathered allowance for their surface water transfers that exceed the 2 MGD threshold requiring a certificate¹. Of the ten public water systems with a grandfathered allowance, three are transferring water between subbasins. (Table 1)

There are also six water systems below the IBT certificate threshold that are transferring between 1 and 2 MGD. Of those six systems, one is transferring surface water between subbasins. (Table 1)

Table 1. Water Systems Transferring More Than 1 MGD

Water system transfer classification	Subbasin transfer	Major basin transfer	Total number transfers
Systems with IBT certificate	2	9	11
Systems with grandfathered allowance	3	7	10
Systems transferring 1.0-2.0 MGD	1	5	6
All Systems transferring >1.0 MGD	6	21	27

Time and Cost Estimates

The six public water supply systems that have received an IBT certificate in the past 10 years were contacted by the Division of Water Resources and asked to provide an estimate of the time and cost involved in obtaining their IBT certificates (Table 2). The categories and values were provided directly by the applicants with little direction from NCDEQ staff.

The time spent for an IBT, from NOI submission to IBT certificate issuance, ranged from 18 months to over six years (Table 2). Just as every water system is a unique entity, so too is every proposed IBT, with its own particular set of conditions and variables. This can create widely differing timetables for the issuance of an IBT Certificate. The range in time can be attributed to issues including, application of different subsections of the statute (i.e., processes) under which a certificate would be issued; legislative changes to the statute while an applicant was pursuing an IBT certificate; length of time to produce the environmental document or other required analyses; and settlement discussions as allowed under N.C.G.S. 143-215.22L (h). Importantly, time spent in planning phases before the submittal of the NOI to the EMC is not captured in the table.

The costs borne by the applicant to go through the IBT process varied greatly as well (Table 2). Systems such as Greenville Utilities Commission (GUC) and Kerr Lake Regional Water System (KLRWS) provided a total cost with no itemization, while Cary-Apex³ and Union County⁴ included line items that are beyond the anticipated scope of a typical IBT.

Table 2. Time and Cost Estimates for IBT Certificates Issued from 2010-2018

Water System with IBT	Brunswick Co.	Cary-Apex	GUC	KLRWS	Pender Co.	Union Co.
Statute under which certificate was issued	G.S. 143-215.22L	G.S. 143-215.22L (v) - modification	G.S. 143-215.22I	G.S. 143-215.22L (w) - USACE reservoirs	G.S. 143-215.22L (w) - coastal counties	G.S. 143-215.22L
Time spent for IBT to be issued	4 years, 9 months	1 year, 6 months	4 years, 11 months	6 years, 10 months	2 years, 4 months	3 years, 9 months
Year certificate issued	2013	2015	2010	2015	2018	2017
Cost for IBT (consulting engineer, estimated staff time, etc.)	\$ 511,764	\$ 1,617,990	\$ 309,132	\$ 899,606	\$ 430,400	\$ 2,675,000
Other costs provided by Water Systems ^{3, 4}		\$ 219,856,923				\$ 47,900,000

³ Cary-Apex: \$458,000 for Attorney-IBT & contested case support and \$219,398,923 for the Western Wake Regional Wastewater Management Facility to be in compliance with the IBT Certificate

⁴ Union Co: \$1,400,000 for Attorney-IBT & contested case support; \$8,500,000 for settlement commitments; and \$38,000,000 for 5-year construction delay

Potential Impacts from Changing Statutory Requirements for Transfers Between Subbasins

When examining whether transfers of water between subbasins within the same major river basin should continue to be required to comply with all of the same requirements under G.S. 143-215.22L as transfers of water between major river basins, DEQ considered changing the requirement for transfers between subbasins to follow the truncated process (Figure 3) outlined in G.S. 143-215.22L (w). The advantages and disadvantages to both are discussed in more detail below.

Advantages to Changing Statutory Requirements for Transfers Between Subbasins

If the current statutory requirements for surface water transfers were eliminated for subbasins, it would save substantial time and money for those systems seeking to transfer water between subbasins (see above) by not having to go through a lengthy IBT certificate process. Changing the requirements to follow the truncated process outlined in subsection (w) would reduce the cost and time to obtain an IBT certificate. The current statutory requirements identify three separate points in the process through public notices to solicit review and comment as well as public hearings. The initial public meetings following the NOI are often not well attended as the proposed project is in the scoping stage with many aspects of the project still unknown.

Changes in the requirements, either through truncation or elimination, for subbasin transfers could make it easier for neighboring systems to have interconnections. This could increase water systems' resiliency to water shortage conditions such as drought or emergency situations such as line breaks.

Disadvantages to Changing Statutory Requirements for Transfers Between Subbasins

Changes to, or the elimination of, the current requirements for subbasin transfers could reduce opportunities for public involvement and transparency, and adequate review to protect both the source and receiving river subbasins' water users and the environment.

Many of the current requirements for obtaining an IBT certificate are in place to protect the state's water resources and comply with the federal Clean Water Act. Without a thorough environmental review of a proposed surface water transfer, there could be impacts not identified, resolved or mitigated to both water users and the environment in both the source and receiving river basins. This is a significant concern to ensure adequate protection of both water quality and quantity for the affected river basins. There could be sensitive areas with protected species, impaired waters, segments of a river disproportionately impacted, or different water systems more at risk during water shortages. Without thorough environmental review and documentation, water systems may be at increased risk for litigation.

Public involvement is a key element in the current statutory process required for water systems seeking an IBT certificate. Public involvement provides a more complete picture to both DEQ and the EMC, including additional facts and perspectives. Eliminating the opportunity for public notice, review and comment throughout the process could result in critical issues being left unaddressed or coming to light late in the review process. It can also make the decisions seem less legitimate and ultimately more susceptible to litigation.

Recommendation

DEQ finds that the current process for obtaining an IBT certificate for transfers between subbasins within the same major river basin is appropriate and protective of the state's water resources and recommends that such transfers should continue to be required to obtain an IBT certificate. However, if changes to the process are deemed necessary, DEQ recommends that transfers between subbasins within the same major river basin should follow the truncated process (Figure 2) outlined in G.S. 143-215.22L (w) instead of the full IBT process outlined throughout G.S. 143-215.22L. Such an approach would likely provide time and cost savings for the water systems seeking to transfer water between subbasins while preserving an environmental review process. There would still be public involvement, though reduced, and transparency throughout the process. It should be noted that specific landscape, infrastructure, or flow conditions may necessitate a full review of a sub-basin IBT to avoid potentially significant detrimental impacts.