

INTER BASIN TRANSFERS (IBTs)

TAR-PAMLICO RIVER BASIN

The regionalization of water systems through interconnections can provide greater water security; however, this can result in the transfer of water from one river basin to another. Interbasin transfers (IBTs) can vary in size, but per NC Session Law 2013-388, any basin transfer that meets or exceeds a daily average of 2.0 million gallons per day (mgd), calculated over a calendar month, requires formal approval from the Environmental Management Commission (EMC).

There is only one water system, Greenville Utilities (GUC), with a surface water intake in the Tar-Pamlico basin that has an IBT Certificate from the EMC to transfer water into the Neuse River and Contentnea Creek (within the Neuse watershed) IBT basins. The GUC IBT Certificate places a combined basin transfer limit of 12.3 mgd, to service the Towns of Farmville and Winterville, as well as Greene County. The interconnection of these water systems and the resulting IBT was encouraged, in part, to reduce their dependency on recognized depleting groundwater resources. This IBT is projected to meet the needs of the service area through 2030.

Another water system, Kerr Lake Regional Water System (KLRWS), has an intake in the Roanoke River Basin (i.e., Kerr Lake) that transfers a portion of its withdrawn water to the Tar River and Fishing Creek (within the Tar watershed) IBT basins. There are three primary partners in the KLRWS (Town of Oxford, Warren County, and City of Henderson) and 10 water systems who purchase water from the primary partners. KLRWS has an allowable basin transfer based upon their approved grandfathered capacity of 10.0 mgd, which allows for the existing basin transfer capacity (based upon the water system capacity in 1993) to continue in perpetuity. In 2004, KLRWS projected that it was transferring nearly 80% of its allowable grandfathered amount; thereby, necessitating the initiation of an IBT Certification approval process for long-range water planning. KLRWS has requested an IBT increase of 14.11 mgd from the Roanoke River basin into the Tar River and Fishing Creek IBT basins. This would result in the total allowable basin transfer to be 22.48 mgd into Tar River IBT basin and 1.63 mgd to the Fishing Creek IBT basin, which represents the projected water supply needs of its service areas through 2040.

All of this movement of water creates a condition in which the Upper Tar River subbasin gains water from the Roanoke River basin; however, much of those gains are lost in the Lower Tar River subbasin from losses to the Contentnea Creek and Neuse River subbasins. There are no other systems in the Tar-Pamlico River Basin with approved grandfathered basin transfers. Other water systems in the Tar-Pamlico Basin that transfer surface waters to other basins or purchase water from a water system in a different basin are listed below. These transfers are below the threshold requiring a certificate as defined in the NC Session Law 2013-388.

WATER SYSTEM	SOURCE BASIN	RECEIVING BASIN	DESCRIPTION
Littleton, Town of	Roanoke	Fishing Creek	Purchase water from Halifax County
Louisburg, Town of	Tar	Roanoke	Sells water to Franklin County
Neuse Regional WASA	Neuse	Tar	15% of service area in Tar basin
Scotland Neck, Town of	Roanoke	Fishing Creek	Purchase water from Halifax County
Elm City, Town of	Contentnea Creek	Tar	Purchase water from Town of Wilson
Halifax County	Roanoke	Fishing Creek	19% of service area in Fishing Creek basin