North Carolina

Department of Environmental Quality

Division of Water Resources

Hearing Officer's Report and Proposed Interbasin Transfer Certificate

Environmental Management Commission

May 2017

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Hearing Officer's Report following Public Hearings on the Draft Determination of the EMC to Grant Union County's Request for an Interbasin Transfer

On April 29, 2016, Union County submitted a petition for an Interbasin Transfer (IBT) certificate to the Environmental Management Commission (EMC or Commission). The requested IBT is for a transfer of up to 23.0 million gallons of water per day (mgd) from the Yadkin River IBT basin to the Rocky River IBT basin. The Town of Wingate purchases water wholesale from Union County and is a co-applicant to the IBT Petition. Union County currently serves unincorporated portions of the county, along with the following jurisdictions: The Town of Waxhaw, the Town of Mineral Springs, the Town of Weddington, the Town of Indian Trail, the Town of Stallings, the Town of Hemby Bridge, the Town of Fairview, the Town of Unionville, the Town of Mineral Springs, the Village of Wesley Chapel, and the Village of Lake Park. The Union County water system does not currently serve the City of Monroe or the Town of Marshville; however, since 2014, Union County has a contract agreement to supply the City of Monroe up to 1.99 mgd of treated water on an as-needed wholesale basis.

Pursuant to N.C.G.S. § 143-215.22L (j), the Commission held public hearings on the draft determination. Three public hearings were held. One hearing was held on August 23, 2016 at the Town of Norwood Community Building in the Town of Norwood (in the Yadkin River IBT basin), another hearing was held on August 24, 2016 at the Anson County Hampton B. Allen Library in the Town of Wadesboro (in the Yadkin River IBT basin), and the last hearing was held on September 1, 2016 at the Union County Government Center in the City of Monroe (in the Rocky River IBT basin).

A total of 21 oral comments were received and 87 individuals submitted written comments during the public comment period which extended from August 23 through October 3, 2016. This report includes a record of the all comments and written responses to questions posed in writing during the comment period.

The three most commonly received comments related to (1) concerns that the proposed transfer would lead to lower water levels for Lake Tillery, (2) the perceived negative economic impact on future growth in the Yadkin River basin if water is sent away to support the growth of Union County in the Rocky River basin, and (3) concerns that public hearings and the proposed water transfer project were not properly noticed.

To assess the potential for lower water levels in Lake Tillery, hydraulic modeling was performed during the Environmental Impact Statement (EIS) phase of the project. The modeling was performed by a reputable, global engineering firm, HDR Engineering, Inc. of the Carolinas (HDR), under the direction of a North Carolina licensed professional engineer, Mr. Kevin Mosteller. Lake Tillery is operated by Duke Energy Progress under a license from the Federal Energy Recovery Commission (FERC), and both HDR and Mr. Mosteller have been an integral part of evaluating the Yadkin River basin with Duke Energy Progress as part of the FERC process. Forecasting future water levels through hydraulic modeling requires both science and experience, and is best evaluated from a relative perspective against other scenarios. In this evaluation, the modeling predicted a maximum of nine inches of future water level reduction

based on the drought of record and the 23.0 mgd IBT request. Based on the size and scale of the lake and the number of variables associated with lake operations management, the Hearing Officer concludes that there will not be a significant impact from the proposed transfer and it would not result in water levels inadequate to support existing and reasonably foreseeable future uses of the reservoir.

Since the hydrologic modeling did not demonstrate an environmental impact to Lake Tillery or other reservoirs in the Yadkin River basin, the Hearing Officer found no evidence to support a potential negative economic impact due to growth limited by the proposed water transfer.

Concern was expressed at the public hearings by representatives of Davidson County and Montgomery County that officials of those counties had not been properly notified. The Department reviewed the notification information and informed both parties that notification of officials of those counties had been provided in accordance with state statutes. Additionally, commenters asserted that neither the Montgomery Herald nor the Stanly News and Press, two local weekly newspapers in the counties nearest to Lake Tillery, had not been requested to run public notifications. Montgomery County further disputed during the public comment period whether the Charlotte Observer was a proper newspaper of general circulation with respect to Montgomery County and other counties. The Hearing Officer consulted with DEQ Counsel who determined that public notification by newspaper publication had been properly performed per state statute. There is nothing in the record that supports a conclusion that public notification did not comply with the requirements of state statue for Montgomery or Stanly County. However, in the course of examining the notification issues expressed in the public hearings and comments, it was discovered that notice in Anson County occurred only via the Enquirer-Journal published in Monroe (Union County). The Department reports the Enquirer-Journal is registered in the periodicals class for Anson County, which would confirm that notice was provided to Anson County in conformance with statutory requirements.

The Hearing Officer notes that there were also comments of support for the Petition for the proposed IBT, including comments from elected officials from the Town of Norwood.

As discussed above, three public hearings were held in August and September, 2016. In consideration of the time that has passed since the public hearings and comment period and having reviewed and considered the entire record, including the petition, the environmental impact statement, the oral and written comments and the accompanying materials submitted during the public review process, the Hearing Officer recommends that the EMC promptly consider the petition. In the opinion of the Hearing Officer, Union County's Petition for an IBT should be approved if the EMC determines that public notices were issued as required by N.C.G.S. § 143-215.22L.

In the event that the EMC takes action to approve the request, the Hearing Officer recommends that the EMC make the finding set forth in the proposed interbasin transfer certificate attached to this Report, and pursuant to N.C.G.S. § 143-215.22L, authorize Union County to transfer an amount of water not to exceed a maximum of 23.0 million gallons per day from the Yadkin River IBT basin to the Rocky River IBT basin, subject to the following conditions:

- 1. Within 90 days of receipt of the Interbasin Transfer Certificate, Union County shall prepare and submit a water conservation plan subject to approval by the Division of Water Resources (Division) that specifies the water conservation measures, including a rate pricing structure, to be implemented by Union County in the receiving river basin to ensure the efficient use of the transferred water. Except in circumstances of technical or economic infeasibility or adverse environmental impact, the water conservation plan shall provide for the mandatory implementation of water conservation measures by Union County that equal or exceed the most stringent water conservation plan implemented by a public water system that withdraws water from the source river basin. The single bulk water customer of Union County, the Town of Wingate and identified as a co-applicant in this Interbasin Transfer Certificate, shall implement a water conservation plan at least as stringent as the requirements imposed on Union County. The Certificate Holder shall not transfer any water to any other unit of local government receiving any transferred water originating from the Yadkin IBT basin by Union County are bound by this condition in full.
- 2. Within 90 days of receipt of the Interbasin Transfer Certificate, Union County shall prepare and submit a drought management plan subject to approval by the Division that specifies how the transfer shall be managed to protect the source river basin (Yadkin River IBT basin) during drought conditions or other emergencies that occur within the source river basin. Except in circumstances of technical or economic infeasibility or adverse environmental impact, this drought management plan shall include mandatory reductions in the permitted amount of the transfer based on the severity and duration of a drought occurring within the source river basin and shall provide for the mandatory implementation of a drought management plan by Union County that equals or exceeds the most stringent drought management plan implemented by a public water system that withdraws water from the source river basin. All bulk water customers of Union County, as identified in this Interbasin Transfer Certificate, shall implement a drought management plan at least as stringent as the requirements imposed on Union County. The Certificate Holder shall not transfer any water to any other unit of local government unless that unit of local government agrees to be bound by this condition in full. Any water provided by Union County to the City of Monroe will be transferred as part of an existing contract agreement to provide water from Union County's Catawba River Water Treatment Plant to an interconnection point located within the Catawba River Basin. The City of Monroe owns the water transmission infrastructure from the interconnection point to its distribution system in the Rocky River Basin. Because the amount transferred is not greater than 2.0 mgd, it is below the statutory threshold requiring an IBT certificate, for which the City of Monroe would be the applicant since it owns the transmission infrastructure which crosses the basin boundary. The City of Monroe is not eligible to receive any water from the Yadkin River IBT basin since the city is not identified as a co-applicant on the IBT certificate.
- 3. Within 90 days of receipt of the Interbasin Transfer Certificate, Union County shall submit a quarterly compliance and monitoring plan subject to approval by the Division. The plan shall include methodologies and reporting schedules for reporting the following information: daily transfer amount calculated as the average daily over the maximum month, compliance with certificate conditions, progress on mitigation measures, drought management, and reporting. A copy of the approved plan shall be kept on file with the Division for public inspection. The Division shall have the authority to make modifications to the compliance and monitoring plan as necessary to assess compliance with the certificate. The Division will monitor the transfer from the Yadkin River IBT basin to the Rocky River IBT basin, as regulated by the IBT certificate, as well as the

transfer from the Catawba River IBT basin to the Rocky River IBT basin, as allowed by the existing grandfathered transfer of 5.0 mgd on a maximum day basis. The quarterly compliance and monitoring report shall be submitted to the Commission no later than 30 days after the end of the quarter. Union County shall employ any methods or install and operate any devices needed to measure the amount of water that is transferred during each calendar quarter, calculated as a daily average of a calendar month.

- 4. The Commission may amend the certificate to reduce the maximum amount of water authorized to be transferred whenever it appears that an alternative source of water is available to the certificate holder from within the receiving river basin, including, but not limited to, the purchase of water from another water supplier within the receiving basin or to the transfer of water from another subbasin within the receiving major river basin.
- 5. The Commission shall amend the certificate to reduce the maximum amount of water authorized to be transferred if the Commission finds that Union County's current projected water needs are significantly less than Union County's projected water needs at the time the certificate was granted.
- 6. Union County will not resell the water that would be transferred pursuant to the certificate to another public water system. This limitation shall not apply in the case of a proposed resale or transfer among public water systems within the receiving river basin as part of an inter-local agreement or other regional water supply arrangement, provided that each participant in the inter-local agreement or regional water supply arrangement is a co-applicant for the certificate and will be subject to all the terms, conditions, and limitations made applicable to any lead or primary applicant. The Town of Wingate is a co-applicant to this IBT certificate.
- 7. The Commission may reopen and modify or revoke this Certificate to ensure continued compliance with N.C.G.S. Chapter 143, Article 21, Part 2A if the Commission determines that information in the record material to its Findings of Fact, pursuant to N.C.G.S. § 143-215.22L(k), was erroneous, incomplete, or otherwise contained material misrepresentations, misstatements, or misinterpretations.

NOTICE: The holders of this certificate are jointly and severally responsible for compliance with the terms, conditions and requirements stated herein, and are therefore jointly and severally liable for all penalties assessed to enforce such terms, conditions and requirements as provided in N.C.G.S. §143-215.6A.

This the 8th day of May, 2017.

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J.D. Solomon, Hearing Officer North Carolina Environmental Management Commission

PART 2 – RESPONSE TO COMMENTS

Union County IBT Certificate Request – Public Comments

Hearings Held August 23, 24 & September 1, 2016

#	Comment	Commenter(s)	Response
1	Public Hearings and the Proposed Transfer Project Were Not Properly Noticed: Notice should have been placed in the Montgomery Herald and the Stanly News & Press; The Charlotte Observer is not considered a newspaper of general circulation for Montgomery and Stanly Counties. Public input was deliberately avoided; public was not informed.	1, 2, 7, 11, 13, 14, 22, 37, 38, 41, 44, 51, 60, 66, 69, 71, 73, 74, 81, 82, 85, 86, 92, 93	All public meetings and hearings regarding the proposed Union County IBT project followed the requirements specified at N.C. Gen. Stat. § 143-215.22L (c) for publishing notice. There were three milestone events in the process which required notification. Those three events were (i) public meetings held in October 2013 regarding Union County's Notice of Intent to request an IBT certificate; (ii) a public hearing held in September 2015 regarding the Draft Environmental Impact Statement, and (iii) public hearings held in August and September 2016 regarding the Draft Determination to Issue an IBT Certificate. Notice to the public was provided through the Department's website, the Water Allocation Committee listserv (295 email addresses), and a press release was issued by the Department. Notice was published in newspapers of general circulation, as confirmed by the U.S. Postal Service, in accordance with N.C. Gen. Stat. §§ 1-597 and 143-215.22L(c). Notice was also sent by first-class mail (total of 238 mailings) or email (total 636 email addresses) to county commissioners and mayors in states contained within the source basin both upstream and downstream of the proposed point of withdrawal, the governing body of any public water systems that withdraw water upstream or downstream from the proposed point of withdrawal or transfer from the proposed source basin, all persons who hold a National Pollutant Discharge Elimination System (NPDES) wastewater discharge permit for a discharge of 100,000 gallons per day or more, and any other individuals who have expressed an interest in the proposed water transfer. State statute requires that notices be placed in newspapers of general circulation in specified counties. The qualifying newspapers must be admitted to the U.S. mail in the periodicals class in the relevant county, be distributed to a greater than <i>de minimis</i> number of actual paid subscribers, and be regularly and continuously issued in the relevant county, at least weekly. The Charlotte

#	Comment	Commenter(s)	Response
			Observer satisfies these criteria for Montgomery County, Stanly County, and
			other counties in which notice was required to be published.
2	Additional Studies Are Needed: Hydrologic	15, 36, 43, 44, 47,	The process for conducting an environmental study of the proposed transfer
	modeling of the Yadkin Basin should be	48, 49, 51, 62, 65,	was carried out as specified in the IBT statute, N.C.G.S. § 143-215.22L (d). The
	conducted by the State or independent third	66, 70, 72, 73, 74,	statute requires a study be conducted of the environmental impacts of any
	party.	76, 84, 85, 86, 88, 92	proposed transfer of water, including secondary and cumulative impacts.
			The statute does not require the state to perform independent modeling in this
			case.
			The CHEOPS [™] model that was utilized, as required in the statute G.S. 143-
			215.22L (g) (7), for the EIS demonstrated that the proposed transfer would not
			have a significant impact and would not result in water levels for the source
			basin reservoir that are inadequate to support existing uses of the reservoir,
			including recreational uses. The CHEOPS [™] model included all major water
			withdrawals and discharges within the Yadkin-Pee Dee River basin and evaluated water quantity distribution between reservoirs. According to statute
			N.C.G.S. § 143-355 (o) (7), if there is an existing hydrologic model for a river
			basin, it is permissible to use that model rather than crate a new model in
			order to evaluate the potential impacts of a requested IBT. As cited in the
			above referenced statute, "The Department shall not develop a hydrologic
			model for a river basin for which a hydrologic model has already been
			developed by a person or entity other than the Department, if the Department
			determines that the hydrologic model meets the requirements of this
			subsection. The Department may adopt a hydrologic model that has been
			developed by another person or entity that meets the requirements of this
			subsection in lieu of developing a hydrologic model as required by this
			subsection. The Department may make any modifications or additions to a
			hydrologic model developed by another person or entity that are necessary to
			meet the requirements of this subsection."
	Determination of a "safe yield" for the Yadkin	15, 36, 43, 48, 49,	The concept of determining a "safe yield" for a hydropower reservoir is not
	River should be made.	72, 84, 88	applicable. Without a fixed or constant storage volume for the reservoir, it is
			not possible to calculate a safe or available yield for such a dynamic system
			driven by the generation of hydropower. The allocation of water from Lake
			Tillery for water supply, or for any purpose other than hydropower generation, must be authorized by the Ecderal Energy Populatory Commission (EEPC). If
			must be authorized by the Federal Energy Regulatory Commission (FERC). If

#	Comment	Commenter(s)	Response
			authorized in its license, then Duke Energy Progress may contract with local utilities for use of Lake Tillery for water supply. Such a contract is for a withdrawal rate, not a storage amount.
3	Lower Water Level for Lake Tillery: Transfer will lead to lower levels of Lake Tillery, negatively affecting boating and recreational opportunities, lakefront property values, Montgomery County tax base, and local economy.	4, 6, 7, 9, 10, 11, 13, 16, 20, 21, 23, 27, 29, 30, 32, 40, 43, 47, 54, 57, 62, 65, 66, 67, 68, 69, 73, 74, 76, 80, 81, 84, 85, 86, 87, 89, 90, 92	Results from the CHEOPS [™] model indicate there will be very little impact to lake levels. The entire hydrologic period of record (1955-2013) was used to simulate conditions with projected future water demands. A single detectable modeled impact occurred under projected future year (year 2050) basin-wide water demands, with the requested IBT included at the maximum transfer amount allowed, and during the most intense part of the drought of record (August 2002). The single detectable modeled impact was a 9-inch drop in elevation when compared to those same conditions without the IBT included. Lake Tillery never dropped below the operating rules required in the FERC license. Since lake levels were shown by the model to be unaffected except during the most extreme drought scenario, property values and the local economy are not expected to be affected.
4	Increased Fluctuation of Lake Level: Lake Tillery water levels already fluctuate due to hydropower operations by Duke Power; an IBT will serve to exacerbate this. Transfer would lead to loss of power generating capacity.	20, 40, 57, 74, 75	Lake levels at Lake Tillery currently fluctuate due to the operation of hydropower reservoirs in the Yadkin – Pee Dee River basin by both Duke Energy Progress and Alcoa Power Generating, Inc. Duke Energy Progress and Alcoa will continue to be held to the required minimum daily average lake elevations as described in their respective existing FERC hydropower authorization permits. Furthermore, Duke Energy Progress and Alcoa will continue to be held to these requirements even with any additional withdrawals, such as the proposed IBT.
5	Negative Economic Impact on Future Growth of the Source Basin: Water from Lake Tillery should not be sent to (urban) Union County to support uncontrolled/unplanned growth. Sending water away will make this water unavailable for when (rural) Montgomery County needs it, making it more difficult to attract industry and development.	1, 2, 7, 11, 23, 24, 32, 37, 38, 36, 44, 48, 49, 53, 58, 60, 62, 66, 69, 74, 81, 83, 87, 88, 92, 93	The CHEOPS [™] model considers Montgomery County's future water demand projections, including possible industrial growth with the inclusion of a 1 mgd node in the model (serving to replicate that water demand from a future industrial user).
6	Implement Stronger Water Conservation: Union County should implement stronger water conservation practices and charge more for their water to discourage waste, especially for outdoor use such as yard watering.	1, 36, 38, 41, 49, 70, 74, 75, 87	Union County currently maintains a water conservation and efficiency program as described in Section 6.0 of the EIS. Pursuant to the IBT statute N.C.G.S. § 143.215.22L (n) (1), if an IBT certificate is granted, the certificate must contain a condition requiring a water conservation plan. Union County will be required to meet or exceed the highest water conservation standard of any water system in the Yadkin-Pee Dee River basin. Additionally, Union County will be

#	Comment	Commenter(s)	Response
			required to follow the low inflow protocol (LIP) requirements established through the 2007 Relicensing Settlement Agreement for the Yadkin Hydroelectric Project, reducing water use during periods of low inflow.
7	<u>Consider Other Alternatives and Transfer</u> <u>Quantity:</u> Other water supply alternatives should have been considered. Different quantities of water transferred should also have been considered as alternatives.	1, 14, 29, 38, 41, 52, 53, 60, 76, 81, 87, 93	The 12 alternatives evaluated in the EIS encompassed a range of options for Union County to meet its projected water demands; all were deemed by DEQ to be alternatives reasonable for consideration and as such were vetted through the state environmental policy act (SEPA) review process. Transferring less than the 23 mgd requested would not meet the purpose and need of the proposed project to satisfy the projected water demands in Union County's Yadkin River Basin Service area through the year 2050.
8	Future Basin Demands, Effects of Drought and Climate Change: Future water demands within the Yadkin Basin and effects of future droughts and climate change were not adequately considered.	11, 14, 21, 25, 26, 47, 57, 62, 66, 70, 76, 92	Future basin demands, effects of drought and climate change were all adequately considered and incorporated into the hydrologic modeling conducted for the EIS. A series of CHEOPS TM hydrologic model scenarios considering future drought and climate change was utilized. These results can be found in Section 5.0 of the EIS. CHEOPS TM accounts for water withdrawals and return flow projections through the year 2060 for all water users in the Yadkin-Pee Dee River basin (from the W. Kerr Scott Reservoir watershed to the North Carolina-South Carolina border). These projections included future demands for public water suppliers and wastewater utilities, industrial facilities, thermal-electric power facilities (including increased water demand necessitated by increased power demand), as well as agricultural and irrigation uses. All of these future water demands were included in the modeling completed for the EIS. Detailed information on the approach for future water demand projection and summaries of projections for individual water withdrawal and return nodes was included in Appendix E, CD-4, sections 4.2 through 4.5. To estimate future impacts of climate change, the scenarios increased temperature by 2.3 deg F (0.6 deg F increase per decade) and increasing lake surface evaporation by 7.8% (equivalent to an increase of 2% per decade), for year 2050 model runs, when compared to the 2012 baseline conditions. See EIS section 5.12.2.3 for further discussion of how the effects of future climate change were included in the water quantity modeling evaluations of the Yadkin River Basin. The model overlays the above described conditions on two of the most significant droughts over the 59-year hydrologic

#	Comment	Commenter(s)	Response
			period of record to model possible impacts to reservoir levels in the source basin during severe drought conditions. The model also includes the low inflow protocol (LIP) for the Yadkin-Pee Dee River Hydroelectric Projects to account for how the reservoir system, as a whole, will be operated when inflow into the reservoirs is not enough to meet normal water demands while also maintaining lake levels within their normal ranges.
9	Lower Levels and More Fluctuations to Upstream Reservoirs: Upstream reservoirs (High Rock, Tuckertown, Badin, and Falls) will experience lowered water levels and more fluctuations than are already present if there is an interbasin transfer out of Lake Tillery.	2, 5, 10, 15, 17, 19, 22, 27, 35, 36, 42, 43, 48, 49, 50, 58, 61	Water withdrawals from Duke Energy Progress reservoirs (Lake Tillery and Blewett Falls Lake) will not affect the elevations or outflow requirements of upstream Alcoa operated reservoirs: High Rock Lake, Tuckertown Reservoir, Narrows Reservoir (Badin Lake), or Falls Reservoir. This relationship is governed by the operational rules under the Federal Energy Regulatory Commission (FERC) licenses for the Alcoa and Duke Energy Progress reservoirs and was confirmed by the water quantity modeling conducted for the proposed IBT. As indicated in EIS section 5.12.2.6, there are no impacts to reservoir elevations in the upstream Alcoa reservoirs from the proposed Union County IBT when the water is withdrawn from either of the downstream reservoirs operated by Duke Energy Progress (including with the proposed Union County IBT from Lake Tillery) or their associated tributaries. Outflows from Alcoa operated High Rock Lake and Falls Reservoir are only based on the time of year and the Low Inflow Protocol (LIP) (drought management plan) stage. The LIP does not provide downstream support for Duke Energy Progress operated Lake Tillery outflow requirements or minimum elevation support. Therefore, withdrawal of water from Lake Tillery or Blewett Falls Lake has no impact on the upstream reservoirs above Lake Tillery.
10	Selling Water from Transfer: What will prevent Union County from selling "excess" water to another county in need?	58	The IBT statute N.C.G.S. § 143-215.22L (n) (7) explicitly prohibits selling transferred water to another public water system not identified on the IBT certificate.
11	Validate Population Growth and Water Demand Projections: The validity of population and demand projections, as well as model outputs for Union County and other counties in the Yadkin Basin, need to be reviewed and confirmed.	13, 15, 35, 36, 48, 49, 72, 76, 88	The population projections, water demand projections, and model outputs for the EIS followed valid methodologies. The population and water demand projections and model outputs for the EIS have been thoroughly reviewed by NC-DWR staff and gone through NC Clearinghouse agency review. Duke Energy Progress, which is authorized by the Federal Energy Regulatory Commission (FERC) to operate the reservoir at Lake Tillery has also reviewed and provided comment to the regional water demand projections and the water modeling effort. During development of the hydrologic model for the EIS, both NC-DWR

#	Comment	Commenter(s)	Response
			and Duke Energy Progress worked with the consulting team to review model construction and provide calibration and verification efforts.
	Yadkin Stakeholder Committee Needed: A Yadkin stakeholder committee should be formed and confirm the validity of population and demand projections.	4, 15, 33, 36, 48, 49, 76, 88	The Yadkin-Pee Dee Water Management Group was officially formed in September 2016, with all 13 inaugural members having signed a Memorandum of Understanding. The stakeholder group consists of various public water supply utilities and reservoir operators within the Yadkin-Pee Dee River Basin. Union County is a member of this stakeholder group and has been involved in its formation over the past year. The group plans to work together for sustainable regional water supply planning in the Yadkin-Pee Dee River basin. Currently identified projects for the group include: hydrologic and/or hydraulic modeling of the basin, regional water supply master plan, study additional water resource opportunities in the basin, and coordinated drought response plan. Though this stakeholder group has been formed, it will not be used to evaluate population and water demand projections in this case of the IBT certificate request by Union County.
12	Impact of Ongoing Lawsuit Between Rockingham, NC and Duke Energy Progress: The ongoing lawsuit between Rockingham, NC and Duke Energy Progress, and whether additional releases from Lake Tillery may be required in the future, could greatly effect lake levels and downstream flows, on top of the requested 23 mgd transfer.	14, 40, 57, 61	The outcome of pending private party litigation is outside the scope of the IBT process.
13	Reclassify Lake Tillery: Lake Tillery should be reclassified from a WS IV to a WS III to help protect the water quality of this water supply source.	4, 76	A reclassification of Lake Tillery is not required for a decision to be made regarding the IBT request. A reclassification of Lake Tillery could be pursued regardless of the outcome of the IBT process and whether a certificate is granted by the EMC. A waterbody's classification may change at the request of a local government or citizen. DWR reviews each request for a reclassification and conducts an assessment of the waterbody to determine the appropriateness of the reclassification. DWR also conducts periodic waterbody assessments which may result in a recommendation to reclassify the waterbody. In order for a waterbody to be reclassification, complete the "Application to Request Reclassification of NC Surface Water," which may be obtained by contacting staff in DWR's Classifications, Standards & Rules Review Branch.

#	Comment	Commenter(s)	Response
14	Assimilation of Additional Wastewater: How will additional wastewater from the transfer be assimilated; what will be the impacts to the Rocky River?	34, 72, 76	Wastewater that would be generated from the proposed transfer would either be treated through individual septic systems or conveyed for treatment to a wastewater treatment facility. It is anticipated that existing, expanded, or new wastewater treatment facilities would treat the water through a combination of physical, chemical, and biological processes. Wastewater would also be assimilated through natural systems when returned to a surface water source. Any wastewater generated by this proposed transfer and conveyed to a wastewater treatment plant would fall under permitting requirements, including a National Pollution Discharge Elimination System (NPDES) permit that is structured to protect receiving streams and ensure adequate wastewater assimilation. Thus, the impacts to the Rocky River would be managed/mitigated through successful wastewater treatment to achieve NPDES permit limits as determined by NCDEQ.
15	Impacts to Fish and Other Wildlife: Lower lake levels will have a negative impact on fish and other wildlife, possibly lead to mosquito problems, and otherwise change the ecology of this system. The proposed transfer must also take into account downstream flows necessary to protect and conserve fish and wildlife.	2, 15, 20, 57, 62, 76	Duke Energy Progress's operating plan accounts for these concerns, and the IBT request was shown to not impact their current operating paradigm. Since lake levels were shown by the CHEOPS [™] hydrologic model to be unaffected except during the most extreme drought scenario, negative impacts to fish and other wildlife due to the IBT are not expected. The CHEOPS [™] model includes all reservoirs in the Yadkin-Pee Dee River basin, but does not model water quantity below Blewett Falls dam. Instead, a spreadsheet-based post-processing routine was developed for the Pee Dee River downstream of Blewett Falls Lake to the North Carolina – South Carolina state line. Results indicate that there are no distinguishable impacts to the river flow regime downstream of Blewett Falls dam as a result of the proposed IBT for either current (year 2012) or projected future (year 2050) basin-wide water demands. Therefore, the proposed IBT is not expected to affect fish and wildlife in the Pee Dee River downstream of the Yadkin Hydroelectric Project.
16	Norwood Should Not Have the Right to Sell Lake <u>Tillery Water</u> : Norwood should not be the sole municipality bordering Lake Tillery to financially benefit from the transfer.	13, 43, 48, 57, 74, 84, 87	Whether the Town of Norwood has the right to sell Lake Tillery water is outside the scope of the IBT process. Duke Energy Progress operates Lake Tillery under an operating license granted by the Federal Energy Regulatory Commission (FERC). The FERC must approve any proposed use of water in the reservoir that is not for hydropower production, including water supply, for which the FERC may grant an allocation.
17	Concord/Kannapolis water line and contract between Duke Energy Progress and the state: Does the EIS include the recently finished	1, 38, 57, 60, 70	The EIS includes consideration for the approved City of Concord/Kannapolis interbasin transfer from the Yadkin River IBT Basin to the Rocky River IBT Basin. Consideration and evaluation of this transfer is accounted for in the water

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TT	Concord/Kannapolis water line into the Yadkin? Does the EIS include the new contract between Duke Energy Progress and the state allowing Duke Energy Progress to discharge additional water through their hydropower dams, including Tillery?		 quantity modeling for the EIS, including projections of the current and future water demand of the transfer. Appendix E, CD-4 outlines the water use projections for the City of Albemarle and includes the projected wholesale water supply to the Cities of Concord and Kannapolis, based on the IBT certificate requirements for Yadkin River IBT basin flow to the Cities of Concord and Kannapolis prior to utilizing their Catawba River IBT capacity. The water quantity modeling conducted as part of the EIS was completed based on the agreements and proposed operations for Alcoa's and Progress Energy's relicensing of their respective Yadkin and Yadkin-Pee Dee Hydroelectric Projects with the Federal Energy Regulatory Commission (FERC), as of September 2014. These rules included: a. The CSA (Comprehensive Settlement Agreement [for Tillery and Blewett] dated Jun 29, 2007) b. The RSA (Relicensing Settlement Agreement [4 Alcoa plants, dated February 2007]) c. Proposed High Rock operations/logic as shown in the Yadkin License Application Exhibit B (undated file, with footnote date of April 2006) These agreements and proposed operations subsequently became a part of the most recently approved FERC operating licenses for these hydroelectric projects and as such, represent the operating conditions for the reservoirs during the terms of these new licenses. There is no known "contract" between
			Duke Energy Progress and the State of North Carolina regarding discharges through their hydropower dams, since all discharge requirements are under the authority and regulation of the FERC, and have been modeled accordingly.
18	Consider Limiting the Transfer Allowed to Less than 23 mgd.	36, 49, 76	Transferring a quantity of water other than the 23 mgd requested would not meet the purpose and need of the proposed project to satisfy the projected population growth and water demand in Union County's Yadkin River Basin Service area through the year 2050.
19	Disagree with Proposed IBT.	18, 25, 31, 39, 64, 71, 73, 74, 79	Comment noted.
20	Inadequate Water Quality and Quantity Protection to Lake Tillery and other Yadkin Basin Reservoirs: Neither the EIS nor draft certificate adequately address measures to protect the water quality	33	The CHEOPS [™] model that was utilized in support of the EIS and draft certificate helped demonstrate, pursuant to statute G.S. § 143-215.22L (g) (7), that the proposed transfer would not have a significant impact and would not result in water levels for the source basin reservoir that are inadequate to support existing uses of the reservoir, including recreational uses. The CHEOPS [™]

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	and quantity of Lake Tillery and other reservoirs in the Yadkin basin.		model included all major water withdrawals and discharges within the Yadkin- Pee Dee River basin and evaluated water quantity distribution between reservoirs. Because no significant impacts to water quantity were demonstrated, for either reservoir levels in the Yadkin Hydroelectric Project or downstream riverine flow of the Pee Dee River, impacts to water quality due to the proposed IBT were not perceived to be a concern. See the response to comment #9 for additional discussion about upstream reservoirs in the Yadkin River Basin.
21	<u>A Source Water Protection Plan Should Be</u> <u>Developed to Help Mitigate Effects of the</u> <u>Proposed Transfer</u> .	33	Results from hydrologic modeling conducted for the EIS indicate there will be no impacts to Lake Tillery which will require mitigation. City government, water utilities or environmental groups typically initiate the planning process for the development of a Source Water Protection Plan. The process encourages stakeholders to consider protection strategies that are specific and tailored to their community and water supply. Participation in the Source Water Protection Program, administered by DWR's Public Water Supply Section, is voluntary and does not include regulatory or compliance adherence. In the case of this proposed IBT, the source water body is Lake Tillery, located outside of Union County and its jurisdiction. Therefore, source water protection planning efforts would be more effective if spearheaded by a local government in which Lake Tillery is located, since Union County would have no authority to implement strategies or pass local ordinances developed in the plan. Additionally, requirements in pending rules being drafted as a result of HB 894 (S.L. 2014-41, requiring every supplier of water operating a public water system and furnishing water from unfiltered surface supplies to create and implement a source water protection plan) are different from those in current guidance documents for voluntary plans. Therefore, local development of Source Water Protection Plans is largely on hold until the new requirements are finalized.
22	Secondary and Cumulative Impacts on Receiving Basin: Neither the EIS nor the draft certificate adequately address measures to reduce and mitigate the cumulative and secondary environmental impacts that will result from new growth in Union County. There should be more planning and investment in land conservation and restoration.	33	Section 6.0 of the EIS addresses mitigation measures to address direct and indirect impacts. Stormwater, floodplain, riparian buffer, erosion and sedimentation control, wetland protection, open space and parks, water use, land use, historic preservation, tree preservation, endangered species protection, and regional transportation planning measures are discussed for each jurisdiction in Union County that may be served by transferred water provided by the proposed IBT certificate. The relevant local, state, and federal ordinances that may mitigate the potential impacts to the environmental

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			resources listed above are also provided. Also included in this section of the EIS is a discussion of Union County's new Unified Development Ordinance, which updates the county's previous Land Use Ordinance to include new riparian buffer regulations and measures to protect and preserve existing communities of endangered species and their habitat.
23	Montgomery County Excluded from Process: Montgomery County is directly impacted by this IBT request but has been unlawfully excluded from the process.	82	Montgomery County has not been excluded from the IBT process. Notice was provided to county officials of the three public meetings held in October 2013 regarding Union County's Notice of Intent to request an IBT certificate, the public hearing held in September 2015 regarding the Draft Environmental Impact Statement, and three public hearings held in August and September 2016 regarding the Draft IBT Certificate. In each of these cases, notice was provided as required by N.C. Gen. Stat. § 143-215.22L(c). Notice was also published in accordance with N.C. Gen. Stat. § 1-597. Information on the proposed IBT was posted on the Department's website, and information distributed to the Water Allocation Committee listserv (295 email addresses).
24	Inadequate Notice to Montgomery County: Failure to provide adequate legal notice to the people within Montgomery County is a statutory violation that has fundamentally flawed the entire Interbasin Transfer process.	82	Notification was provided in compliance with N.C. Gen. Stat. § 143-215.22L(c). See response to comment #23.
25	Findings of Fact Erroneous Due to Lack of Participation from Montgomery County: The Commission's draft Findings of Fact are erroneous because they did not consider any information that would have arisen from public participation within Montgomery County.	82	Notification was provided in compliance with N.C. Gen. Stat. § 143-215.22L(c). See response to comment #23. The Findings of Fact presented in the Draft Union County IBT Certificate were based on information contained in the EIS prepared for the Union County Yadkin River Water Supply Project. The EIS was reviewed and vetted through the state environmental policy act (SEPA) review process, which involved extensive agency review before distribution through the State Clearinghouse for public review. Both draft and final versions of the EIS document were published for public review and comment through the State Clearinghouse, in addition to the public hearing and comment period held by the Commission for the draft EIS, as required in IBT statute N.C.G.S. §143- 215.22L (e).
26	IBT Certificate Incomplete Due to Lack of Participation from Montgomery County: The evidence that the Commission relied upon to draft the Certificate is incomplete and unreliable since it failed to gain participation from the	82	See response to comment #25.

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	people of Montgomery County in which Lake Tillery is located.		
27	EIS Alternatives Not Reasonable: Five of the EIS alternatives (Nos. 4, 5, 6, 7, and 10) are legally prohibited and should never have been studied as "reasonable" alternatives.	82	The fact that EMC action, such as a stream reclassification or other rule change, would be required before those alternatives could be implemented does not amount to legal prohibition. The length of time required for such EMC action may be a factor as to cost and feasibility. All 12 alternatives evaluated in the EIS were deemed by DEQ to be alternatives reasonable for consideration and as such were vetted through the state environmental policy act (SEPA) review process. The N.C. Department of Administration's rules governing Environmental Impact Statements at 01 NCAC 25 .0603(4) expressly provide that an agency explore and evaluate all reasonable alternatives, including those not within the jurisdiction of the State Project Agency and the alternative of no action. In this case, stream reclassification and water reuse rules are within the jurisdiction of the EMC.
28	Should Consider Combination of EIS Alternatives: Three of the EIS alternatives (groundwater withdrawal, water demand management, and water returns from Rocky River Basin) were dismissed because not one of them could singly meet 2050 needs. The EIS failed to consider the reasonable combination of these alternatives before concluding that taking 100% of the water from Montgomery County citizens was the best alternative.	82	Water demand management is a required part of any IBT certificate. The IBT certificate must include a condition requiring a water conservation plan providing for mandatory implementation by the applicant of water conservation measures meeting or exceeding the most stringent water conservation plan implemented by a public water system withdrawing from the source basin. As such, water demand management is necessarily combined with the alternative selected. The alternatives evaluation found that given the three existing ordinances and protocols applicable in the county, additional measures were not necessary, especially given the fact that current baseline water use restrictions are now some of the most stringent in North Carolina. The benefits and detriments of the other two alternatives cited in the comment (groundwater withdrawal and water returns from Rocky River Basin) were discussed in the EIS. The analyses in the EIS inform the decision maker's conclusions as to the reasonableness of the alternatives to the proposed transfer, whether as a stand-alone or in combination. Reasonableness includes consideration of environmental harms, reliability, and cost. Concerns with groundwater withdrawal included groundwater yield, groundwater quality and development logistics for a large scale well network, with the conclusion that it was not a viable alternative. These concerns would also severely limit the usefulness of groundwater withdrawal as a component of an alternative to transfer, as further described in the EIS.

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			An alternative incorporating water returns from the Rocky River Basin would require new transmission infrastructure to pump and deliver the wastewater that has been treated to a reuse level to Lake Tillery. DEQ estimates that the capital costs of such infrastructure are disproportional to the potential contribution of water to Lake Tillery and, therefore, impractical to pursue. As documented in Section 3.4 of the EIS, the alternative of incorporating wastewater returns from the Rocky River would add an additional cost of \$137.5 million to the projected cost of \$239.7 million for the preferred alternative. The impracticality of this alternative as a stand-alone applies similarly to its use in combination with other alternatives.
29	Non-Potable Water Conservation Not Considered: The EIS does not study or calculate the effects of any form of non-potable water conservation.	82	Nonpotable reuse is typically considered as mitigation of impacts of an IBT. Neither hydrologic modeling nor the EIS analysis suggest the need for mitigation due to the minimal impact to Lake Tillery. Construction of infrastructure for reuse of nonpotable water would significantly increase both the environmental impact and the cost of the proposed project. Union County does not plan to build a water treatment plant or transmission lines to provide for non-potable water reuse. effort.
30	EIS Alternatives Insubstantially Discounted: Some of the alternatives are discounted by providing general statements that are not supported by data or analysis.	82	The EIS included a full and complete analysis of all alternatives, as presented in section 3.0 of the EIS.
31	Union County Reservoir Not Considered: Union County did not study or consider a reservoir within its own basin.	1, 23, 27,38, 41, 70, 82	Union County lacks the water resources within its county boundaries that could establish and sustain a reservoir that would meet the demand projections and support the projected population growth of the county. The ridgeline between the Catawba River Basin and Yadkin River Basin divides Union County, with neither of these two major rivers flowing within the county boundaries. In addition, there are significant environmental impacts associated with the construction of a new reservoir, irrespective of the water resources available to sustain it.
32	Inaccurate Population Growth and Demand Projections Cited in IBT Certificate: The Draft Certificate uses EIS population growth projections for the entire system and compares it interchangeably with water demand data from the Yadkin Basin only, and apple/orange	45, 46, 82	The text has been revised to accurately reflect population growth and demand projections for the Yadkin Basin service area (Rocky River IBT Basin).

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	comparison that is misleading and, in itself,		
	impairs the findings.		
33	Union County Less Water Efficient in Future: When the demand numbers are corrected to match the system-wide population figures, the per capita usage will increase by 10.4% by 2050, to be absorbed by Montgomery County rather than addressed with conservation measures throughout the system, essentially concluding that while Union County seeks to take all of its excess needs from Montgomery County it is being 10.4% less efficient in its use of water.	82	Water demand growth rates are based on both Union County population growth projections and projected service area expansion of Union County's water system within its Yadkin River Basin Service Area (Rocky River IBT Basin). Union County is a county-wide system, but its Yadkin River Basin Service Area covers a limited portion of the county. Over the last 15 years, Union County has been one of the fastest growing counties in North Carolina. With the extent of growth having previously occurred in the Catawba River Basin Service Area, growth is now being experienced within the Yadkin River Basin Service Area. Growth in this area is projected to intensify, resulting in the need for system expansion to serve both current and future residents. Per capita usage is projected to increase because Union County's service area will expand to serve new communities and include commercial, institutional, industrial water use sectors as well as residential. These other water use sectors have higher per capita usage rates.
			If granted an IBT certificate, Union County will be required to meet or exceed the highest water conservation standard of any water system in the Yadkin-Pee Dee River basin. An IBT certificate must contain a condition requiring a water conservation plan specifying the water conservation measures that will be implemented in the receiving river basin (the Rocky River IBT Basin) to ensure the efficient use of the transferred water. N.C. Gen. Stat. § 143.215.22L(n). Additionally, Union County would also be required to follow the low inflow protocol (LIP) requirements for reductions in water use during periods of low inflow to help conserve the limited water supply. The LIP procedures were established through the 2007 Relicensing Settlement Agreement for the Yadkin Hydroelectric Project.
34	Demographic Shift and Land Use Change Effects on Water Use: The argument that the unit water demand is largely driven by a demographic shift in the county from predominantly rural to suburban residential land use is not supported by data in the EIS. Furthermore, neither the EIS nor	82	Population growth over a limited service area will, in the long-term, result in more concentrated residential areas. The agricultural sector does not report projected future water use to the Department of Environmental Quality. The CHEOPSTM model keeps agricultural water use constant. The proposed IBT from Lake Tillery would not be used to provide water for agricultural uses;

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	the Draft Certificate appear to account for		water transferred under the requested IBT certificate is intended for municipal,		
	reduced agricultural water use.		not agricultural, use.		
35	EIS Does Not Study Detrimental Effects on	82	The hydrologic modeling conducted to evaluate alternatives and their impacts		
	Montgomery County from IBT: Lake Tillery forms a substantial part of the Montgomery County economy, and half of the lake lies within the county. Nonetheless, the EIS does not attempt to study all the reasonably foreseeable future detrimental effects to industrial, economic, agricultural, private, recreational, and other productive and beneficial uses of the environment within Montgomery County that borders the water source where the withdrawal will occur. Accordingly, it is apparent that lack of notice actually resulted in lack of consideration of impacts.		for the EIS indicated there will be minimal impact to lake levels due to the proposed IBT. Only one detectable modeled impact to future lake levels occurred under projected future year (year 2050) basin-wide water demands, with the requested IBT included at the maximum transfer amount allowed, and during conditions for the most intense part of the drought of record (August 2002). Lake Tillery never dropped below the operating rules required in the FERC license in any modeled scenario. As such, impacts to uses dependent on lake levels, including industrial, economic, agricultural, private, recreational, or other uses of the environment in Montgomery County would also be negligible.		
36	Hydrologic Model Unavailable for Review: Notice and Comment on the Draft Certificate is short- circuited by a failure to provide means to view the model that was used to evaluate the direct impacts on the source basin including Montgomery County.	82	CHEOPS [™] is a privately maintained model, not one developed by the State, so the Department is not able to distribute the model. However, DWR staff reviewed and approved the methodology of the model, including validation results. The modeling results and reference files are made available in an appendix to the EIS.		
37	Computer Modeling Predicts There Will Be Little Change to Water Level of Lake Tillery.	8, 12, 55, 56	Comment noted. See response to comment #3.		
38	Proposed Project Will Bring Benefits to Norwood.	8, 12, 33	The State has no involvement in any agreement between Union County and the Town of Norwood regarding water sales from Lake Tillery. This arrangement and any real or perceived benefits to the Town of Norwood were not part of the findings of fact or consideration regarding the IBT certificate request.		
39	<u>Need to Share Water Resources:</u> Water belongs to everyone who lives in NC, not just those who live along the river/lake, need to share common resources.	55, 78	Comment noted. As stated in N.C.G.S. § 143-211 (a), "Recognizing that the water and air resources of the State belong to the people, the General Assembly affirms the State's ultimate responsibility for the preservation and development of these resources in the best interest of all its citizens and declares the prudent utilization of these resources to be essential to the general welfare."		
40	Union County Responsibly Planning for Growth	3, 12, 28, 33, 59,	Comment noted.		
	and Water Needs: Union County is responsibly	63, 77, 91			

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	managing their growth and proactively planning and collaborating with neighbors to ensure adequate water resources for their citizens and to support economic growth in the region.		
41	<u>Proposed IBT Avoids Additional Demands on</u> <u>Catawba River:</u> Demands on the already strained Catawba River will be reduced if the proposed transfer from the Yadkin River is allowed.	12, 28, 33, 56, 77, 91	Any potential impacts to the Yadkin River were evaluated independent of impact considerations to the Catawba River.
42	<u>EIS Document Was Completed:</u> Comprehensive Environmental Impact Statement was completed, including evaluation of alternatives and robust water quantity modeling of Yadkin River basin.	12, 56, 59	Comment noted. See response to comment #2 above regarding the completion of the Environmental Impact Statement for the proposed Union County IBT, which resulted in the Department of Environmental Quality issuing a Record of Decision on April 12, 2016.
43	Union County Emphasis on Environmental Stewardship and Community Outreach: Going beyond the minimum notification requirements established in state statute, Union County participated in community outreach events, published newsletters and press releases, and held an additional public hearing and community meeting to inform and solicit input from residents.	12, 77	Comment noted.
44	Proposed Certificate Conditions: IBT certificate should include conditions requiring water use reduction measures during times of drought. Should seek regional input when developing water conservation plan and drought management plan.	45	The Department and EMC agree that both a water conservation plan and a drought management plan are very important to help ensure the most efficient use of any water transferred and to protect the Yadkin River basin during drought conditions or other emergencies. Additionally, the IBT statute requires that conditions be included in the IBT certificate that address the development and implementation, as needed, of both a water conservation plan and drought management plan as stated in N.C.G.S. § 143-215.22L (n) (1) and (2), respectively.
45	Clarify Water Purchase Arrangement Between Union County and City of Monroe: Throughout the Draft IBT Certificate, whenever the City of Monroe water purchase agreement with Union County is mentioned, it indicates Union County will be providing Monroe with water from its grandfathered Catawba IBT allowance. However,	46	Text has been revised to reflect this arrangement.

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	this is not accurate, as Union County's		
	interconnection point with Monroe is physically		
	located within the Catawba Basin. Water is		
	supplied to this point from Union County's		
	Catawba River Water Treatment Plant. Since		
	Monroe owns the water transmission		
	infrastructure from the interconnection point to		
	its distribution system in the Rocky River Basin,		
	Monroe technically owns this basin transfer,		
	which is below the IBT statutory threshold. The		
	Final IBT Certificate should be corrected to clarify		
	this, indicating that Union County will be		
	providing Monroe with water from its Catawba		
	River Water Treatment Plant source to an		
	interconnection point located within the Catawba		
	River Basin.		

Union County Proposed Interbasin Transfer Certificate April 26, 2017

PART 3 – PROPOSED INTERBASIN TRANSFER CERTIFICATE

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Following is a Proposed Interbasin Transfer Certificate Prepared by the Hearing Officer and DWR staff for consideration by the EMC. Pursuant to N.C.G.S. §143-215.22L(n), the Commission may grant the certificate in whole or in part, or deny the certificate.

PROPOSED CERTIFICATE AUTHORIZING UNION COUNTY TO TRANSFER WATER FROM THE YADKIN RIVER IBT BASIN TO THE ROCKY RIVER IBT BASIN UNDER THE PROVISIONS OF N.C.G.S. §143-215.22L

On August 12, 2013, Union County filed a notice of intent with the Environmental Management Commission (EMC or Commission) to request an interbasin transfer (IBT) certificate.

On August 31, 2015, Union County's draft Environmental Impact Statement (EIS) was submitted to the State Clearinghouse for review and comment. A public hearing was held regarding the draft EIS on September 16, 2015 in the Town of Norwood (Yadkin River IBT basin). The final EIS was submitted to the State Clearinghouse for review and comment on January 13, 2016. The Secretary of the Department of Environmental Quality (DEQ or Department), to whom the EMC delegated their approval authority in this instance, found the environmental document to be adequate. A Record of Decision was signed by the Secretary on April 12, 2016.

On April 29, 2016, Union County and the Town of Wingate (applicants or Union County) submitted the petition for an IBT certificate to the EMC. The requested IBT certificate is for a transfer of up to 23.0 million gallons per day (mgd), calculated as a daily average of a calendar month, from the Yadkin River IBT Basin to the Rocky River IBT Basin. This transfer amount is based on water use projections to 2050.

The EMC considered Union County's request and made a draft determination to grant the interbasin transfer certificate at its meeting on July 14, 2016. Three public hearings were held concerning the draft determination. The first public hearing was held on August 23, 2016 in the Town of Norwood (Yadkin River IBT basin); the second public hearing was held on August 24, 2016 in the Town of Wadesboro (Yadkin River IBT basin); the final public hearing was held on September 1, 2016 in the City of Monroe (Rocky River IBT basin). A total of 21 oral comments were received. The three most commonly received comments related to (1) concerns that the proposed transfer would lead to lower water levels for Lake Tillery, (2) the perceived negative economic impact on future growth in the Yadkin River basin if water is sent away to support the growth of Union County in the Rocky River basin, and (3) concerns that public hearings and the proposed water transfer project were not properly noticed. There were 87 individuals who submitted written comments. A record of all public comments received and responses from the hearing officer are provided in Part 2.

Having reviewed and considered the entire record, including the applicants' notice of intent to request an interbasin transfer certificate, the petition, the environmental impact statement (EIS), the draft certificate, and all other sources of information required by N.C.G.S. §143-215.22L in making its decision, the Environmental Management Commission is provided these factors to be considered in making its findings of fact.

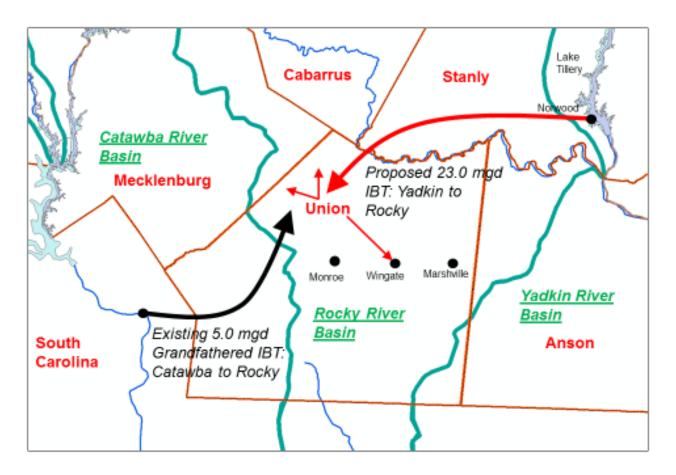
Factors Considered

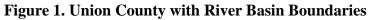
(1) The Necessity, Reasonableness, and Uses of the Proposed Transfer.

Based on the record and in accordance with requirements of G.S. § 143-215.22L(k)(1), the Commission finds that Union County's current water supply sources are insufficient to supply Union County's service area and wholesale customers over a 30-year planning horizon beginning in the year 2020 through the year 2050. Providing water for the anticipated population growth that is expected to occur based on past and projected future growth is necessary to support the anticipated continued growth and development of the county. Thus, the Commission concludes that the requested IBT certificate for the transfer of 23.0 mgd daily average for a calendar month is a necessary and reasonable amount to support the growing residential, commercial, and industrial needs of this area.

Analysis:

Union County currently serves unincorporated portions of the county, along with the following jurisdictions: The Town of Waxhaw, the Town of Mineral Springs, the Town of Weddington, the Town of Indian Trail, the Town of Stallings, the Town of Hemby Bridge, the Town of Fairview, the Town of Unionville, the Town of Mineral Springs, the Village of Wesley Chapel, and the Village of Lake Park. The Town of Wingate currently purchases water wholesale from the county, and is a co-applicant to the IBT Petition. The Union County water system does not currently serve the City of Monroe or the Town of Marshville; however, since 2014, Union County has a contract agreement to supply the City of Monroe up to 1.99 mgd of treated water on an as-needed wholesale basis. Union County provides the City of Monroe with water from its Catawba River Water Treatment Plant source to an interconnection point located within the Catawba River Basin. The City of Monroe owns the water transmission infrastructure from the interconnection point to its distribution system in the Rocky River Basin. Because the amount transferred is not greater than 2.0 mgd, it is below the statutory threshold requiring an IBT certificate, for which Monroe would be the applicant since it owns the transmission infrastructure which crosses the basin boundary. The water provided to the City of Monroe is not part of the proposed transfer from the Yadkin River IBT basin. To be eligible to receive water transferred from the Yadkin River IBT basin, the City of Monroe would have to be a co-applicant on the IBT certificate. Figure 1 outlines the county and river basin boundaries, and illustrates the proposed transfer of water from Lake Tillery in the Yadkin River IBT basin (Stanly County) to the Rocky River IBT basin in Union County.





The projected increase in the county's water demand is attributed to anticipated county population growth and Union County water system service area growth in the Rocky River IBT Basin, extending to the northeastern and eastern portions of the county not currently served. In 2013, the population served in the Rocky River IBT Basin by the Union County Water System was 52,550 with an average day maximum month demand (MMD) of 7.7 mgd; by 2050 the population is projected to grow to 179,450 with a MMD of 28.9 mgd. An increase in per capita water consumption is expected, and is largely driven by the demographic shift in the county from predominantly rural to a greater percentage of suburban residential customers. Along with this shift, Union County's service area will expand to serve new communities (residential) including other water use sectors such as commercial, institutional, industrial, etc., which will inherently increase total per capita use across the service area.

Union County recently updated its water use ordinance, which the Union County Board of Commissioners officially adopted in May 2015. The Water Use Ordinance and associated Water Shortage Response Plan limits customer use of spray irrigation systems to a maximum of 3 days per week at all times, not just during times of drought or water shortage. Additionally, customers are encouraged to adhere to a list of recommended voluntary water conservation measures at all times. Since 2009, Union County has remained in a Stage 2 Water Shortage Condition, as defined by the previous Water Conservation Ordinance. During this time, Union County has imposed mandatory water use restrictions, which among other things limits lawn irrigation to no more than two days per week per customer. Such restrictions have been effective in reducing the County's peak day water demands.

In addition to its own local ordinance, Union County is a party to the 2006 Comprehensive Relicensing Agreement with Duke Energy Progress and the Federal Energy Regulatory Commission (FERC) which requires adherence to the Low Inflow Protocol (LIP) for the Catawba-Wateree Hydroelectric Project by owners of large public water supply intakes located in the reservoirs and main stem of the Catawba River. Upon granting of this IBT certificate, Union County will also be required to follow the low inflow protocol (LIP) requirements established through the 2007 Relicensing Settlement Agreement for the Yadkin Hydroelectric Project. The LIP establishes procedures for reductions in water use during periods of low inflow to help conserve the limited water supply, and includes five different stages with associated water use reduction goals and water use restrictions for customers. The LIP is activated when conditions go below specified triggers, including surface water levels (gage and lake elevations), nearby groundwater levels, and designation by the Drought Management Advisory Council (DMAC). More specifically, those criteria for activating or changing stage designations for the LIP include: reservoir storage as percent of target, percent of six-month long-term average stream flow, three-month average of U.S. Drought Monitor, and groundwater levels. Reaching the specified trigger points for each of these four criteria warrants usage reductions to help ensure that the projects are able to meet required minimum instream flows while also maintaining reservoir water elevations within normal operating ranges.

Table 1 presents the projected population and water demand growth through 2050 for the Rocky River IBT Basin service area of Union County. The current water supply for Union County is provided by a 5 mgd grandfathered surface water transfer from the Catawba River IBT Basin to the Rocky River IBT Basin, as well as a 4 mgd water purchase agreement with Anson County, which will be up for renewal in 2017.

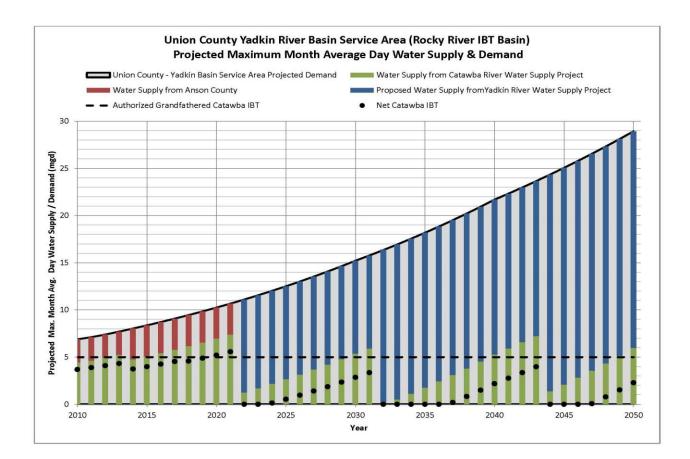
Year	Service Population	Water Demand (MGD, max. month avg.)	
	Rocky River IBT Basin	for Rocky River IBT Basin	
2013	52,550	7.7	
2020	67,767	10.2	
2030	97,456	15.2	
2040	136,149	21.7	
2050	179,450	28.9	

Table 1. Rocky River IBT Basin Service Area Population and Water Demand Growth

In accordance with the requirements of G.S. § 143-215.22L(k)(1) the necessity and reasonableness of the amount of the proposed transfer and its proposed uses were considered, and the county's existing water supply was found to be insufficient to meet projected near term and long term future water demands; needs are projected to exceed supply limits by the year 2020.

Figure 2 illustrates the county's recent, current, and projected future water use, including grandfathered and the current requested IBT amounts within the Rocky River IBT Basin.





More information about the future population growth and water demand projections may be found in Section 2.3 of the Environmental Impact Statement (EIS).

The proposed certificate will allow for the transfer of up to 23.0 mgd daily average for a calendar month, for the month in which IBT is expected to be the highest. This increase is needed in order to support the projected population growth and expanded area serviced by Union County through the year 2050.

(2) Present and Reasonably Foreseeable Future Detrimental Effects on the Source River Basin.

Based on the record, the Commission finds and concludes that the detrimental effects on the source basin described in N.C.G.S. § 143-215.22L(k)(2) will be minimal. Additionally, the Commission finds that it is advisable to minimize the impacts of secondary effects caused by growth in Union County through the continued implementation of Union County's Development Ordinance, as well as continued implementation of other local ordinances for jurisdictions within Union County.

Analysis:

To evaluate the direct impacts on the source basin resulting from the proposed IBT, the primary tool used was the CHEOPSTM (Computerized Hydro Electric Operations Planning Software) model. CHEOPSTM is designed to evaluate the effects of operational changes and physical modifications at multi-development hydroelectric projects. The model was originally developed to support the Federal Energy Regulatory Commission (FERC) relicensing process for the Yadkin–Pee Dee Hydroelectric Project. CHEOPSTM incorporates the Duke Energy Progress-owned Yadkin-Pee Dee Hydroelectric Project (FERC No. 2206), which includes the Tillery and Blewett Falls Developments. The model also incorporates the upstream Yadkin Hydroelectric Project (FERC No. 2197) owned by Alcoa Power Generating, Inc., which includes the High Rock, Tuckertown, Narrows, and Falls Developments. The model was updated as part of the Union County IBT Environmental Impact Statement to include the most-upstream reservoir, W. Kerr Scott, owned by the U.S. Army Corps of Engineers (USACE).

The CHEOPSTM model evaluates water quantity distribution between reservoirs in the Yadkin-Pee Dee River system due to changes in model inputs, including possible interbasin transfers. The model was updated in 2013 to include the most recent drought during 2006-2009, basinwide water withdrawals and return flow projections for all users through 2060, and to include the Low Inflow Protocol (LIP) for the Yadkin and Yadkin-Pee Dee River Hydroelectric Projects. The LIP provides the procedures for how the system will be operated when inflow into the reservoirs is not enough to meet normal water demands, while still maintaining lake levels within their normal ranges. Current and projected water use and water transfer data were used in developing the model and forecasting future water demands.

In accordance with the requirements of N.C.G.S. § 143-215.22L(k)(2), four different model scenarios were run in order to evaluate any detrimental effects of the proposed IBT on the source river basin under both current (2012) and future (2050) conditions. The modeling was performed by a reputable, global engineering firm, HDR Engineering, Inc. of the Carolinas, under the direction of a North Carolina licensed professional engineer, Mr. Kevin Mosteller. The model scenarios were:

- Baseline Conditions-Year 2012: No IBT, and current (2012) basin-wide water demands (withdrawals/returns)
- Baseline Conditions-Year 2050: No IBT, future (2050) basin-wide water demands, and includes potential future impact of an increased temperature of 2.3 degrees Fahrenheit and lake surface evaporation increases of 7.8%

- Alternative 1-Year 2012: 23.0 mgd IBT, and current (2012) basin-wide water demands (withdrawals/returns)
- Alternative 1-Year 2050: 23.0 mgd IBT, future (2050) basin-wide water demands, and includes potential future impact of an increased temperature of 2.3 degrees Fahrenheit and lake surface evaporation increases of 7.8%

Additionally, three distinct hydrologic periods were analyzed for each of the model scenarios described above:

- Full Period of Record (59-year hydrology, 1955-2013)
- Drought 1 (5-year low inflow period (Drought of Record), 1999-2003)
- Drought 2 (4-year low inflow period (most recent significant drought), 2006-2009)

Under these parameters, the results of the modeling are summarized in a set of Performance Measure Sheets (Appendix C of the Petition document) for comparison purposes to assess the impacts of an IBT on the system and its reservoirs, as compared to "baseline" conditions under both current and future water demands throughout the Yadkin River Basin. Complete results of the modeling are presented in Appendix E of the Environmental Impact Statement.

The effect of the proposed IBT on the water level of Lake Tillery was evaluated by HDR using the CHEOPSTM model. The specific criteria evaluated include the percent of time the end of day reservoir level was within a given range of the full pond (278.2 ft. mean sea level), normal winter minimum (273.2 ft. msl), and normal summer minimum elevations (275.7 ft. msl), for the Period of Record (POR), Drought 1 and Drought 2 time periods, as defined above.

During normal hydrologic (non-drought) conditions, the summer or winter minimum elevations are the lowest Duke Energy Progress is allowed by their operating license to take the lake elevation. The lake operates within a normal summer operating range and a normal winter operating range, which is between the minimum elevation for either summer or winter and the full pond elevation. The summer and winter minimum elevations are required by FERC as part of the permit and operating rules for the lake. Those elevations were established through the relicensing process and included stakeholder input regarding a number of criteria such as usability of boat ramps, docks, and water supply intakes. The period during which the normal winter minimum is applicable is December 16th through February 28th. The period during which the normal summer minimum is applicable is March 1st through December 15th.

Modeling results indicated no impact from the proposed Union County IBT to meeting modeled reservoir levels under current (2012) basin-wide water demands for the POR, Drought 1 or Drought 2 periods. Model results further indicated that under projected future (2050) water demand conditions with the proposed IBT, the three modeled reservoir levels for Lake Tillery (full pond, normal winter minimum, and normal summer minimum) were all met for both the POR and Drought 2 periods.

The only scenario where modeled reservoir levels were not met was under projected future (2050) demands with the proposed IBT during the Drought 1 period, where the full pond and normal summer minimum elevations could not be maintained (though winter minimum elevations were maintained for these criteria). More specifically, under Drought 1 conditions and future basin-wide water demands with the proposed IBT, the modeled level of Lake Tillery was up to 1 foot lower (277.2 ft. msl) than full pond elevation for 2% of the time over the Drought 1 period (or 36 days over 5 years), and up to 1 foot higher (276.7 ft. msl) than the minimum summer elevation for 1% of the time during the Drought 1 period (or 15 days over the five-year, summer period drought conditions), when compared to the future baseline scenario with no IBT.

In addition to looking at the percent of time during which target lake elevations were achieved, monthly average elevations for Lake Tillery were also modeled for current (2012) and future (2050) water demands, including the proposed IBT, under the three defined hydrologic periods (POR, Drought 1, and Drought 2). When the proposed IBT was added to current basin-wide water demands, there was no detectable impact to average monthly lake elevations throughout the POR, Drought 1, or Drought 2 when compared to current conditions without the IBT. Likewise, throughout the modeled Drought 2 conditions under projected future basin-wide water demands, there were no detectable impacts to average monthly lake elevations due to the proposed Union County IBT. However, under projected future basin-wide water demands with the proposed IBT included, there was a single detectable impact to average monthly lake elevations for the POR and Drought 1, when compared to future baseline conditions without the IBT. This event occurred in August 2002, where a maximum impact of 9 inches was modeled. This modeled 9-inch drop in elevation for Lake Tillery occurred during the most intense part of the drought when the system was most stressed and under future basin-wide water demands. This impact also factors in the potential future power generating facilities. It should be noted that even with the 9-inch drop, the modeled lake elevation remained 1 foot 3 inches above the average minimum summer elevation, and well within the summer operating rules for Lake Tillery.

The public boat ramp access area on Lake Tillery for which there is current survey data from Duke Energy Progress becomes unusable 3 feet 5 inches below full pond elevation, which is nearly 11 inches below the normal summer minimum lake operating level. Since the lowest modeled lake elevation was 1 foot 3 inches above the average minimum summer elevation, and over 2 feet above the usable level for boat ramp access, no impacts to public boat access areas on Lake Tillery are expected as a result of the proposed Union County IBT.

Blewett Falls Lake, the impoundment downstream from Lake Tillery, was modeled to determine the impacts from the proposed IBT to its surface elevation, following the same criteria and scenarios described above for Lake Tillery. There was no detectable impact due to the proposed IBT to average monthly lake elevations throughout the POR, Drought 1, or Drought 2 conditions with current (2012) basin-wide water demands, when compared to baseline conditions without the IBT. There were several small, but detectable, impacts to monthly elevations for Blewett Falls Lake throughout the POR, Drought 1, and Drought 2 conditions due to the proposed IBT

when added to projected future (2050) basin-wide water demands. At the lowest modeled lake elevation for Drought 1 (172.1 ft. msl), which occurred in August 2002, impacts from the proposed IBT were approximately 3 inches during the POR and Drought 1 conditions, as compared to baseline future conditions without the IBT. Despite this impact, the minimum modeled elevation during drought conditions of August 2002 was equal to the Blewett Falls normal minimum elevation, and within normal operating rules for the lake. For the Drought 2 conditions modeled under future water demands with the proposed IBT included, two small but detectable impacts were noted. There was an approximate 4-inch drop in elevation which occurred from August to October 2007 and an approximate 2-inch drop in elevation which occurred in August 2008. It is important to note that for the lowest modeled lake elevation (174.1 ft. msl) during this Drought 2 period, which occurred in March 2009, there was no difference between the baseline and proposed IBT scenarios, and the lake remained 2 feet above its normal minimum level (172.1 ft. msl).

There are two public boat ramp access areas on Blewett Falls Lake, and while there are not specific usable elevations available for these facilities, Duke Energy Progress indicates all boat ramps remain accessible down to the normal minimum lake operating level of 172.1 ft. msl or below during the recreation season. As indicated in the modeling results discussed above, the lowest modeled lake elevation was 172.1 ft. msl, which is equal to the Blewett Falls Lake normal minimum elevation, and within the normal operating rules for the lake. Since all ramps are accessible down to the normal minimum lake elevation or below, no impacts to public boat access areas on Blewett Falls Lake are expected as a result of the proposed Union County IBT.

Potential lake level impacts were evaluated for all upstream reservoirs in the Yadkin River basin (High Rock Lake, Tuckertown Reservoir, Badin Lake, and Falls Reservoir). Modeling results indicated negligible impacts to lake elevations for all upstream reservoirs as a result of the proposed IBT over the POR, Drought 1, and Drought 2 conditions, even with future (year 2050) basin-wide water demands taken into account. Lake levels throughout the Yadkin River basin were also evaluated to determine whether surface water intakes in any of the reservoirs would be in jeopardy as a result of the proposed IBT. Modeling results indicated there were no impacts to water supply intakes for Yadkin River basin reservoirs due to Union County's proposed IBT, as compared to the baseline scenarios for both current and future projected basin-wide water use. There were not any days in which modeled lake elevations were low enough to restrict water supply intake operation on any reservoir; minimum modeled lake elevations remained well above all existing lake intakes.

Reservoir releases were modeled and evaluated for Lake Tillery and Blewett Falls Lake for the POR, Drought 1, and Drought 2 periods. Table 2 summarizes the modeled impacts to flow releases from Lake Tillery as a result of the proposed IBT. Under both current (Year 2012) and projected future (year 2050) basin-wide water demands, some impacts on downstream releases from Lake Tillery were observed under the proposed Union County IBT during the POR, Drought 1 and Drought 2 periods, as more days were spent below the water elevation needed to supply the flow releases required for spring spawning and continuous minimum flow release targets, compared to the baseline. However, in no case does the lowest modeled daily average

		Scenario Result Comparison ³				
Criterion ¹	Modeled Period ²	Baseline 2012	2012 with Union IBT	Baseline 2050	2050 with Union IBT	
# days ≤ 725 cfs continuous min.flow	POR	2,141	2,156	2,164	2,161	
(8 consecutive weeks) for fish spawning	D1	218	218	220	221	
(Mar. 15 to May 15)	D2	205	207	210	210	
	POR	14,000	14,023	14,122	14,133	
# days ≤ 330 cfs continuous min.flow (Jan.1 to Dec. 31)	D1	1,326	1,327	1,326	1,326	
	D2	1,072	1,073	1,074	1,076	
	POR	708	679	380	330	
Lowest daily average flow (cfs) <i>(Jan. 1 to Dec. 31)</i>	D1	751	725	380	330	
	D2	927	906	866	845	

Notes:

¹ For criterion that measure on an hourly or daily basis, unless stated otherwise: a) If hourly criteria occur during the average of four contiguous 15-minute periods, then it counts as 1 hour; b) If a daily criterion occurs for 5 contiguous 1-hour periods, then it counts as 1 day. To the extent possible, each criterion is defined in terms of percentages and averages/yr so that the same criterion is useful regardless of the length of the hydrology period (i.e., 1-yr, 3-yr, full period of record, etc.)

² POR = Period of Record (1955-2013); D1 = Drought 1 (1999-2003); D2 = Drought 2 (2006-2009)

³ For scenario results comparison, black values indicate no modeled change/impact for Union County IBT as compared to baseline scenario; red values indicate modeled negative impact for Union County IBT as compared to the baseline scenario; green values indicate modeled positive impact for Union County IBT as compared to the baseline scenario.

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flow drop below the 330 cubic feet per second (cfs) minimum flow level for the reservoir. As reflected in Table 2, impacts to modeled reservoir releases were generally found to be several days more for the continuous minimum flows and several cfs less for the lowest daily average flow with a proposed Union County IBT, when compared to 2050 baseline conditions.

Impacts from the proposed IBT on hydropower generation were also modeled and evaluated. Impacts to APGI's Yadkin Hydroelectric Project, consisting of hydroelectric generating stations on High Rock Lake, Tuckertown Reservoir, Narrows Reservoir and Falls Reservoir, and Duke Energy Progress' Yadkin-Pee Dee Hydroelectric Project, consisting of hydroelectric generating stations on Lake Tillery and Blewett Falls Lake were evaluated through the CHEOPSTM model. Impacts to average hydropower megawatts produced per year and the average equivalent number of homes per year that could be powered by each hydro project were evaluated. Increases in system water withdrawals can reduce the available water storage which APGI and Duke Energy Progress are able to access from the reservoirs they operate, in order to produce hydropower. Such reductions to hydropower production would result in slight increases in fossil-based power generation to continue meeting energy demands.

Under both current (Year 2012) and projected future (Year 2050) basin-wide water demands, some impacts on hydropower generation in Duke Energy Progress's Yadkin-Pee Dee Hydroelectric Project were noted in the model analysis, for a proposed Union County IBT withdrawal from Lake Tillery. Modeling indicated that the proposed IBT results in decreased hydropower generation for the Yadkin-Pee Dee Hydroelectric Project, as compared to baseline conditions, by approximately 0.5% under both the current and future basin-wide water demands for the Period of Record and slightly higher, but still under 1% during Drought 1 and Drought 2 periods.

(3) Cumulative Effects on the Source Major River Basin of Any Current or Projected Water Transfer or Consumptive Water Use.

Based on the record, the Commission finds and concludes that the proposed IBT represents a small water transfer within a large river system. The cumulative effects of this proposed water transfer and consumptive water uses as described in N.C.G.S. § 143-215.22L(k)(3) will not have a noticeable effect on the source basin. The provisions for drought management, water conservation, and monitoring and compliance reporting required by N.C.G.S. § 143-215.22L(n) will provide additional protection to the source basin and, therefore, those conditions are incorporated into this certificate.

Analysis:

Current and projected water use and water transfer data were used to develop the input data sets for the CHEOPSTM (Computerized Hydro Electric Operations Planning Software) model. The model was used to evaluate both current and future scenarios of basin water use, including the

proposed interbasin transfer. Complete results of the modeling are presented in Appendix E of the Environmental Impact Statement.

Modeling results indicated that under projected future basin-wide water demands with the proposed IBT included, there was a single detectable impact to average monthly lake elevations for Lake Tillery for the period of record (POR) and Drought 1, when compared to future baseline conditions without the IBT. This event occurred in August 2002, where a maximum impact of 9 inches was modeled. Even with the 9-inch drop, the modeled lake elevation remained 1 foot 3 inches above the average minimum summer elevation, and well within the summer operating rules for Lake Tillery. Throughout the modeled Drought 2 conditions, there were no detectable impacts to average monthly lake elevations due to the proposed Union County IBT, when added to projected future basin-wide water demands. No modeled impacts to public boat access areas on Lake Tillery are expected as a result of the proposed Union County IBT because the lowest modeled lake elevation was 1 foot 3 inches above the average minimum summer elevation, and over 2 feet above the usable level for boat ramp access.

The total amount of water leaving the Yadkin River basin is considered as part of the cumulative impacts analysis for the proposed interbasin transfer. Currently, there is one existing IBT certificate issued by North Carolina to regulate water transfers from the Yadkin River IBT Basin. The Cities of Concord and Kannapolis have an IBT certificate allowing the transfer of up to 10 mgd from the Yadkin River IBT basin to the Rocky River IBT basin. Additional water uses from the Yadkin River IBT basin include many public water systems and registered water withdrawals (industrial, thermal electric power, etc.) along with other uses such as agriculture. The registered North Carolina municipal public water systems and registered water withdrawals are listed in Section 7.0 of the Petition document. In accordance with the requirements of G.S. § 143-215.22L(k)(3), registered North Carolina municipal public water resource impacts.

Within the Yadkin-Pee Dee River basin, the potential secondary effects associated with the proposed transfer would primarily be attributed to withdrawals from Lake Tillery, potentially reducing flows in the Pee Dee River downstream. However, hydrologic modeling has shown that any downstream flow impacts would be minimal due to the management of the lake and inputs from the Rocky River, which empties into the Pee Dee River approximately 5.0 miles downstream of the Lake Tillery Dam. Of the 23.0 mgd maximum month daily average transfer proposed by the year 2050, approximately 40% is projected to be discharged into the Rocky River IBT basin through treated wastewater returns, thereby further reducing any potential downstream impacts to water users and aquatic wildlife and habitat in the Pee Dee River. The other 60% will remain in the Rocky River IBT basin through consumptive loss, primarily through on-site septic and outdoor water users.

(4) Present and Reasonably Foreseeable Future Beneficial and Detrimental Effects on the Receiving Basin.

Based on the record, the Commission finds and concludes that present and reasonably foreseeable future detrimental effects on the receiving basin will be mitigated or avoided with existing federal, state, and local regulations and protection programs which require implementation of mitigation measures throughout the process. The transfer will support continued population growth and thus will result in reasonably foreseeable future indirect and cumulative impacts from that growth. These impacts include effects on wastewater assimilation, fish and wildlife habitat, and water quality similar to the secondary growth effects described in factor (k)(2). However, these secondary impacts are also projected to be mitigated as a result of federal, state, and local protection programs.

The Commission further finds and concludes that present and reasonably foreseeable future beneficial effects on the receiving basin will include supporting the projected population growth and associated development. The transfer will also enable Union County's water system service area to extend to the northeastern and eastern portions of the county not currently served.

Analysis:

The Rocky River IBT basin is the receiving basin to which water is proposed to be transferred from the Yadkin River IBT basin via both consumptive use and wastewater discharge. In accordance with the requirements of N.C.G.S. § 143-215.22L(k)(4), the present and reasonably foreseeable future beneficial and detrimental effects on the receiving basin were considered. See factor (k)(1) for reasonably foreseeable future beneficial effects on the Rocky River IBT basin, which includes supporting the projected population growth and associated development, as well as anticipated expansion of the area serviced by Union County through the year 2050.

There would be no detrimental effects to public water supply in the Rocky River IBT basin because the Rocky River is currently not classified for water supply by the state of North Carolina. The Rocky River is currently a Class C water resource and would need to be reclassified to Water Supply (WS) status before being utilized as a municipal water source.

The primary detrimental effects to water quality from the IBT would originate from the operation of wastewater treatment plants (WWTPs). Any new WWTP or expansion of existing wastewater treatment facilities discharging into the Rocky River IBT basin resulting from this proposed transfer will be permitted through the National Pollutant Discharge Elimination System (NPDES) and therefore will mitigate any detrimental impacts on the receiving basin.

Future infrastructure and facility construction needed in order to facilitate the proposed transfer of water to meet projected 2050 water demands will undergo a separate environmental permitting process and assessment of potential environmental impacts which will also address specific measures necessary to mitigate or avoid detrimental impacts on the receiving basin.

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Potential Secondary and Cumulative Impacts

Within the receiving basin, the potential secondary and cumulative impacts associated with the proposed IBT would primarily be attributed to Union County's projected urban growth and land use changes associated with population increases in the service area, entirely within the receiving basin. Due to the current growth patterns observed in Union County it is anticipated that population increases and the associated secondary and cumulative impacts will occur. Mitigation for secondary and cumulative impacts related to stormwater, floodplains, riparian buffers, surface waters, wetlands, open spaces and parks, water usage, land management, historic preservation, tree preservation, endangered species protection, wastewater treatment, and regional transportation planning measures will be provided, as directed by the state and federal programs and local ordinances for each community impacted by the proposed project, where applicable.

According to the United States Fish and Wildlife Service, an existing population of the federally endangered freshwater mussel Carolina heelsplitter (Lasmigona decorata) is known to exist in three watersheds of Union County's Rocky River IBT basin: Goose Creek, Duck Creek, and Waxhaw Creek. Concerns over indirect and cumulative impacts to this protected species have led Union County to enact stringent stormwater controls, buffer rules, and other mitigation measures to reduce sediment pollution into these waters. Additionally, a rule-making process was undertaken by the Department of Environmental Quality and adopted by the Environmental Management Commission in 2009 in order to develop a site-specific management strategy for the maintenance and recovery of the water quality conditions required to sustain and recover the Carolina heelsplitter species. The rules 15A NCAC 2B .0600-.0609, also known as the Site Specific Water Quality Management Plan for the Goose Creek Watershed, were created and implemented to reduce surface water impacts within the Goose Creek watershed from development pressures. Though there are long-term concerns over continued development throughout the service area, these mitigation measures have been deemed sufficient protection measures by the Department of Environmental Quality to allow for continued development activities within the watersheds.

(5) Reasonable Alternatives to the Proposed Transfer.

Based on the record and in accordance with the requirements of N.C.G.S. § 143-215.22L(k)(5), the Commission finds and concludes that reasonable alternatives to the proposed IBT were considered. Based on a review of the project information, the Commission finds and concludes the recommended alternative (Alternative 1A) to be the most feasible for meeting Union County's water supply needs while minimizing detrimental environmental impacts. The Commission further finds and concludes that the other alternatives considered either did not meet the projected water supply needs for Union County through 2050, had greater environmental impacts, and/or were costlier than the recommended alternative.

Analysis:

In accordance with the requirements of G.S. § 143-215.22L(k)(5), the availability of reasonable

alternatives to the proposed transfer was considered. The following 12 water supply alternatives were defined and evaluated for their ability to meet Union County's water supply needs through 2050. The following information regarding water supply alternatives is from Section 3.2 of the Environmental Impact Statement (EIS) document. The EIS provides a full discussion; a brief summary of the alternatives is provided below:

<u>Alternative 1</u>: Pee Dee River raw water supply from Lake Tillery (IBT from Yadkin River IBT Basin to Rocky River IBT Basin) with a new water treatment plant in Union County. A new raw water intake and pump station is proposed as part of an agreement between Union County and the Town of Norwood. This alternative also includes the construction of a new water treatment plant; three potential site areas have been identified within the northeastern portion of Union County.

<u>Alternative 1A (preferred alternative)</u>: Raw water transmission line placement from Lake Tillery, near the existing Norwood intake, to new water treatment plant in northern Union County primarily following existing roadway right-of-way corridors through Stanly County into Union County.

<u>Alternative 1B</u>: Raw water transmission line placement from Lake Tillery near the existing Norwood intake, to new water treatment plant in northern Union County primarily following existing power utility easements.

<u>Alternative 2A</u>: Yadkin River raw water supply from Narrows Reservoir (Badin Lake) (IBT from Yadkin River IBT Basin to Rocky River IBT Basin) with a new water treatment plant in northern Union County. A new intake and pumping station would need to be constructed, adjacent to the City of Albemarle's existing raw water intake facility on Narrows Reservoir (Badin Lake).

<u>Alternative 2B</u>: Yadkin River raw water supply from Tuckertown Reservoir (IBT from Yadkin River IBT Basin to Rocky River IBT Basin) with a new water treatment plant in northern Union County. A new intake and pumping station would need to be constructed, adjacent to the City of Albemarle's existing raw water intake facility on Tuckertown Reservoir.

<u>Alternative 3</u>: Pee Dee River raw water supply from Blewett Falls Lake (IBT from Yadkin River IBT Basin to Rocky River IBT Basin) with a new water treatment plant in Union County. Major improvements to the existing water supply infrastructure between Anson and Union Counties would be required to meet projected future water demands for Union County.

<u>Alternative 3A</u>: Raw water transmission line placement from Blewett Falls Lake to a new water treatment plant in northern Union County primarily following power and natural gas utility easements.

<u>Alternative 3B</u>: Raw water transmission line placement from Blewett Falls Lake to a new water treatment plant in eastern Union County primarily following US-74 right-of-way.

<u>Alternative 4</u>: Raw water supply from the main stem of the Pee Dee River (IBT from Yadkin River IBT Basin to Rocky River IBT Basin) with a new water treatment plant in Union County. This alternative proposes the installation of a new raw water intake located just downstream of the confluence of the Rocky River with the Pee Dee River, south of Lake Tillery. Reclassification of this section of the Pee Dee River would be required for the proposed intake location for this alternative, in order for it to be used for public water supply.

<u>Alternative 5</u>: Raw water supply from the Rocky River within Union County (non-IBT alternative) with a new water treatment plant in Union County. The Rocky River is currently not classified for water supply by the State of North Carolina and would therefore need to be re-classified before being utilized as a municipal water source.

<u>Alternative 6</u>: Expansion of the Catawba River Water Supply Project (new IBT certificate to replace the existing grandfathered transfer to allow for a greater transfer from the Catawba River IBT Basin to the Rocky River IBT Basin). Increasing the transfer of water from the Catawba River IBT Basin to meet Union County's 2050 demands would exceed the combined IBT limit of 20 mgd, shared between Union County, NC and Lancaster County, SC, as imposed by South Carolina through the surface water withdrawal permit for the Catawba River Supply Project.

<u>Alternative 7</u>: Interconnection with Charlotte Water (IBT from Catawba River IBT Basin to the Rocky River IBT Basin). This water sale would require an IBT certificate. The additional water demand from sales to Union County would increase Charlotte Water's projected demand as a percent of water supply to 97% by 2050. This could require expansion of Charlotte Water's intake(s), water treatment facilities and distribution system in order to meet the increased system demand by adding Union County as a wholesale customer.

<u>Alternative 8</u>: Raw water supply through groundwater withdrawal within Union County with a new water treatment plant in Union County. Concerns with groundwater yield, groundwater quality, and development costs and logistics for a large-scale well network within the county severely limit the potential viability of this water supply alternative.

<u>Alternative 9</u>: Water demand management/conservation. There are three existing water conservation and demand management ordinances and protocols that are applicable to Union County, including a new Water Use Ordinance adopted in May 2015. Conservation achieved through these measures is not expected to significantly reduce the overall future water demand for Union County, but it is expected to reduce maximum day and maximum month peaking factors that may be experienced during future droughts.

<u>Alternative 10</u>: Direct potable reuse. Currently, direct potable reuse as would be implemented by Union County, is not permitted for potable water supply in North Carolina. Therefore, direct potable reuse is not a viable alternative water source at this time for Union County to serve its current existing and future customers.

<u>Alternative 11</u>: Evaluation of water returns (wastewater) from the Rocky River IBT Basin back to the Yadkin River IBT Basin. Consideration of this alternative would serve as an IBT minimization strategy for Alternative 1. Alternative 11 is based on an assumed new NPDES (National Pollution Discharge Elimination System) discharge into the Pee Dee River at Lake Tillery. It is estimated that the IBT under Alternative 1 could be reduced by approximately 29% to 35% depending on projection year and actual future wastewater flows generated. However, any benefits gained from increased water quantity in Lake Tillery may be outweighed by water quality and environmental impacts associated with a new wastewater discharge and the associated sanitary sewer transmission infrastructure.

<u>Alternative 12</u>: No Action Alternative. This alternative would not involve additional water supply service by Union County to new development in the Rocky River IBT Basin, even though the county's population within the service area is projected to increase. Without a reliable water supply source, future water supply within this area would have to be supplied either from the existing Catawba River Water Supply Project (will not be possible to meet future demand since the county is currently approaching the existing IBT limit), through groundwater wells (would require a large number of wells and low yields would not provide a reliable or sustainable water supply source, and some parts of Union County have elevated concentrations of groundwater contaminants), or service inter-connections to other water systems within the Rocky River IBT Basin (current and potential connections have not demonstrated the ability to meet Union County's projected future demand).

(6) Applicants' Use of Impoundment Storage Capacity.

In accordance with the requirements of N.C.G.S. § 143-215.22L(k)(6) and based on the record, the Commission finds and concludes that the water proposed to be transferred would be withdrawn from Lake Tillery, part of the Duke Energy Progress-owned Yadkin-Pee Dee Hydroelectric Project, FERC No. 2206. The proposed withdrawal of water for this IBT, for purposes other than hydropower generation, as well as the construction of a new water intake and pump station, will require additional authorization by FERC and Duke Energy Progress.

Analysis:

The proposed transfer involves withdrawal of water from Lake Tillery, part of the Duke Energy Progress-owned Yadkin-Pee Dee Hydroelectric Project. Lake Tillery is operated under FERC license No. 2206. When this interbasin transfer certificate is issued, it will have no effect on Duke Energy Progress' obligation to comply with FERC operating rules and requirements for Lake Tillery. Additionally, Union County will be required to request authorization from Duke Energy Progress for a new water intake and pump station, as well as approval to withdraw water for purposes other than hydropower generation. As the license holder, Duke Energy Progress is expected to seek, on behalf of Union County, authorization from FERC for these activities provided the appropriate water intake owner submits a complete and acceptable Lake Use Permit application to Duke Energy Progress.

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(7) Purposes of Any US Army Corps of Engineers Multipurpose Reservoir Relevant to the Petition.

In accordance with the requirements of G.S. § 143-215.22L(k)(7) and based on the record, the Commission finds and concludes that this item is not applicable.

(8) Whether Union County's Service Area is Located in Both the Source and Receiving River Basins.

In accordance with the requirements of G.S. § 143-215.22L(k)(8), the Commission finds and concludes that Union County's service area population is located within both the source and receiving basins, thereby avoiding the removal or receipt of water in a basin not contained within the existing service area.

Analysis:

The Union County Water System currently serves customers in both the Catawba River IBT Basin and the Rocky River IBT Basin. One intent of Union County's proposed interbasin transfer is to more closely align the county's Catawba/Rocky River IBT Basin service boundary with the geographic boundary separating the two river basins. The 5 mgd supply from the existing Catawba River IBT Basin surface water transfer will focus on serving the western portion of Union County within the Catawba River IBT Basin. The water transferred to the county via the proposed IBT would serve the eastern two-thirds of the county, with most of the service area in the Rocky River IBT Basin (receiving basin) and the southeastern tip of the county in the Yadkin River IBT Basin (source basin). Therefore, Union County's service area was found to be located in both the source river basin and the receiving river basin.

(9) Any Other Facts or Circumstances Reasonably Necessary to Carry Out the Purposes of the Statute.

In accordance with the requirements of G.S. § 143-215.22L(k)(9), the Commission finds and concludes that to protect the source basin during drought conditions, and to mitigate the future need for allocations of the limited resources of this basin, a drought management plan is appropriate. The plan shall describe the actions that Union County's Water System will take to protect the Yadkin River IBT Basin during drought conditions. The provisions for drought management, water conservation, and monitoring and compliance reporting as required in N.C.G.S. §143-215.22L(n) and specifically incorporated into this certificate will provide additional protection to the source basin.

Union County Proposed Interbasin Transfer Certificate April 26, 2017

Proposed Decision

Having specifically considered each of the factors set forth in subsection (k), the petition, the EIS, all oral and written comments and all accompanying materials or evidence submitted during the relevant comment periods, the Commission finds that the applicants, Union County and the Town of Wingate, have established by a preponderance of the evidence all of the following: (1) the benefits of the proposed transfer outweigh the detriments of the proposed transfer; (2) the detriments have been or will be mitigated to the maximum degree practicable; (3) after taking into account all other sources of water available to the applicants, the amount of the transfer does not exceed the amount of the projected shortfall under the applicants' water supply plan; and (4) that there are no reasonable alternatives to the proposed transfer.

Therefore, and by duly made motion, the Commission grants the applicants' request to transfer water from the Yadkin River IBT Basin to the Rocky River IBT Basin. The permitted transfer amount shall not exceed a maximum of 23.0 million gallons per day, calculated as a daily average of a calendar month basis.

The certificate is subject to the conditions below, which are imposed pursuant to N.C.G.S. § 143-215.22L. The Union County Water System shall comply with any plan that is approved pursuant to this Certificate and any approved amendments to such plan. A violation of any plan approved pursuant to this Certificate will be considered a violation of the terms and conditions of this Certificate.

1. Within 90 days of receipt of the Interbasin Transfer Certificate, Union County shall prepare and submit a water conservation plan subject to approval by the Division of Water Resources (Division) that specifies the water conservation measures, including a rate pricing structure, that will be implemented by Union County in the receiving river basin to ensure the efficient use of the transferred water. Union County is encouraged to consult with reservoir operators and other water users in the Yadkin-Pee Dee River basin and incorporate appropriate input during development of the water conservation plan prior to submittal to the Division. Except in circumstances of technical or economic infeasibility or adverse environmental impact, the water conservation plan shall provide for the mandatory implementation of water conservation measures by Union County that equal or exceed the most stringent water conservation plan implemented by a public water system that withdraws water from the source river basin. The single bulk water customer of Union County, the Town of Wingate and identified as a co-applicant in this Interbasin Transfer Certificate, shall implement a water conservation plan at least as stringent as the requirements imposed on Union County. The Certificate Holder shall not transfer any water to any other unit of local government beyond those listed in the Certificate, unless approved by the EMC. All units of local government receiving any transferred water originating from the Yadkin IBT basin by Union County are bound by this condition in full.

- 2. Within 90 days of receipt of the Interbasin Transfer Certificate, Union County shall prepare and submit a drought management plan subject to approval by the Division that specifies how the transfer shall be managed to protect the source river basin (Yadkin River IBT basin) during drought conditions or other emergencies that occur within the source river basin. Union County is encouraged to consult with reservoir operators and other water users in the Yadkin-Pee Dee River basin and incorporate appropriate input during development of the drought management plan prior to submittal to the Division. Except in circumstances of technical or economic infeasibility or adverse environmental impact, this drought management plan shall include mandatory reductions in the permitted amount of the transfer based on the severity and duration of a drought occurring within the source river basin and shall provide for the mandatory implementation of a drought management plan by Union County that equals or exceeds the most stringent drought management plan implemented by a public water system that withdraws water from the source river basin. All bulk water customers of Union County, as identified in this Interbasin Transfer Certificate, shall implement a drought management plan at least as stringent as the requirements imposed on Union County. The Certificate Holder shall not transfer any water to any other unit of local government unless that unit of local government agrees to be bound by this condition in full. As stated in the first Finding of Fact, any water provided by Union County to the City of Monroe will be transferred as part of an existing contract agreement to provide water from Union County's Catawba River Water Treatment Plant to an interconnection point located within the Catawba River Basin. The City of Monroe owns the water transmission infrastructure from the interconnection point to its distribution system in the Rocky River Basin. Because the amount transferred is not greater than 2.0 mgd, it is below the statutory threshold requiring an IBT certificate, for which the City of Monroe would be the applicant since it owns the transmission infrastructure which crosses the basin boundary. The City of Monroe is not eligible to receive any water from the Yadkin River IBT basin since the city is not identified as a co-applicant on the IBT certificate.
- 3. Within 90 days of receipt of the Interbasin Transfer Certificate, Union County shall submit a quarterly compliance and monitoring plan subject to approval by the Division. The plan shall include methodologies and reporting schedules for reporting the following information: daily transfer amount calculated as the average daily over the maximum month, compliance with certificate conditions, progress on mitigation measures, drought management, and reporting. A copy of the approved plan shall be kept on file with the Division for public inspection. The Division shall have the authority to make modifications to the compliance and monitoring plan as necessary to assess compliance with the certificate. The Division will monitor the transfer from the Yadkin River IBT basin to the Rocky River IBT basin, as regulated by the IBT certificate, as well as the transfer from the Catawba River IBT basin to the Rocky River IBT basin, as allowed by the existing grandfathered transfer of 5.0 mgd on a maximum day basis. The quarterly compliance and monitoring report shall be submitted to the Commission no later than 30 days after the end of the quarter. Union County shall employ any methods or install and operate any devices needed to measure the amount of water that is transferred during each

Page 44 4/26/2017 calendar quarter, calculated as a daily average of a calendar month.

- 4. The Commission may amend the certificate to reduce the maximum amount of water authorized to be transferred whenever it appears that an alternative source of water is available to the certificate holder from within the receiving river basin, including, but not limited to, the purchase of water from another water supplier within the receiving basin or to the transfer of water from another sub-basin within the receiving major river basin.
- 5. The Commission shall amend the certificate to reduce the maximum amount of water authorized to be transferred if the Commission finds that Union County's current projected water needs are significantly less than Union County's projected water needs at the time the certificate was granted.
- 6. Union County will not resell the water that would be transferred pursuant to the certificate to another public water system. This limitation shall not apply in the case of a proposed resale or transfer among public water systems within the receiving river basin as part of an inter-local agreement or other regional water supply arrangement, provided that each participant in the inter-local agreement or regional water supply arrangement is a co-applicant for the certificate and will be subject to all the terms, conditions, and limitations made applicable to any lead or primary applicant. The Town of Wingate is a co-applicant to this IBT certificate.
- The Commission may reopen and modify or revoke this Certificate to ensure continued compliance with N.C.G.S. Chapter 143, Article 21, Part 2A if the Commission determines that information in the record material to its Findings of Fact, pursuant to N.C.G.S. § 143-215.22L(k), was erroneous, incomplete, or otherwise contained material misrepresentations, misstatements, or misinterpretations.

NOTICE: The holders of this certificate are jointly and severally responsible for compliance with the terms, conditions and requirements stated herein, and are therefore jointly and severally liable for all penalties assessed to enforce such terms, conditions and requirements as provided in N.C.G.S. §143-215.6A.

This is the ______, 2017.

J.D. Solomon, Chairman Page 45 4/26/2017 Appendix A

Public Comments Regarding

Draft Determination

Union County Proposed Interbasin Transfer Certificate Public Comments Received Hearing Officer's Report - Appendix A

#	unique #	Name	Affiliation	Date submitted Format
1		Adams, Melissa	Citizen	9/27/2016 Email
2		Auman, Rhae	Citizen	9/7/2016 Email
3	3	Brody, Mark	NC Representative (District 55)	9/1/2016 Hearing Transcript
4		Bryant, Ron	Yadkin Riverkeeper Assoc.	8/23/2016 Hearing Transcript
5		Burkhart, Penny	Citizen	8/24/2016 Email
6	6	Burrage, Robert	Citizen	10/2/2016 Email
7		Burris, Jean	Citizen	10/2/2016 Email
8		Cohen, Robbie	Councilman, Town of Norwood	8/23/2016 Hearing Transcript
9	9	Colby, Chad	Citizen	9/28/2016 Letter
10		Coma, Karen	Citizen	9/30/2016 Email
11	11	Connelly, Roland	President, Fairway Shores HOA	8/23/2016 Hearing Transcript
12		Coto, Cindy	County Manager, Union	9/1/2016 Hearing Transcript
13	13	Cox, David	Citizen	9/19/2016 Email
14		Crain, John	Citizen	9/2/2016 Email
15		Daley, Rebecca	Chair, Davidson County Board of Health	9/13/2016 Resolution
16		Deen, Bob	Citizen	9/16/2016 Email
17		Erdin, Alex	Citizen	9/30/2016 Email
18		Erdin, Chase	Citizen	9/30/2016 Email
19		Erdin, Jennifer	Citizen	9/30/2016 Email
20		Erdin, Mary Kay	Citizen	9/30/2016 Email
21		Foutz. John	Citizen	9/28/2016 Email
22		Frye III, Charles	Davidson County Attorney	8/24/2016 Hearing Transcript
23		Gibbs, Lynne	Citizen	9/30/2016 Email
24		Gladden, Steve	Chairman, Woodrun HOA Board of Directors	9/8/2016 Letter
25		Gresham, Carolyn	Citizen	9/20/2016 Email
26		Griffin, Andrew	City Manager, Florence, SC	8/8/2016 Letter
27		Guerriero, Laura	Citizen	9/28/2016 Email
28		Gullet, Barry	Chair, Catawba Wateree Management Group	9/1/2016 Hearing Transcript
29		Hallisey, Joyce	Citizen	9/15/2016 Email
30		Hambright, Janet	Citizen	9/16/2016 Email
31	31	Helms, Joyce	Citizen	10/2/2016 Email
32	32	Helms, Tony	Citizen	9/28/2016 Letter
33		Holman, Bill	Director, The Conservation Fund	10/3/2016 Letter
34		Huneycutt, Wayne	Citizen	9/1/2016 Hearing Transcript
35		James, Adam	Citizen	8/23/2016 Hearing Transcript
36		Jarvis, Steve	Chairman, Davidson County Board of Commissioners	8/23/2016 Resolution
37		Johnson, Albert	Citizen	8/23/2016 Hearing Transcript
38		Johnson, Brad	Citizen	9/27/2016 Email
39		Jones, Philip	Citizen	9/25/2016 Email
40		King, Mike	President, Swift Island Plantation HOA	9/22/2016 Letter
40		Kraus, Raymond	Citizen	9/27/2016 Email
41		Lamb, Laurie	Citizen	9/30/2016 Email
42		Large, David	Citizen	9/19/2016 Letter
43		Lemons, Gina	Citizen	8/25/2016 Email
44		Lineberger, Jeffrey	Water Strategy & Hydro Licensing Director, Duke Energy	10/3/2016 Letter
45		Lineberger, Jenrey	Planning & Resource Management Division Director, Union County Public Works	10/3/2016 Letter
40		Lucas, Andrew	County Manager, Stanly County	9/7/2016 Letter
47		Mason, Sharon	County Manager, Stanly County	9/27/2016 Email
48		Mason, Sharon Matheny, James	Chairman, Montgomery County Board of Commissioners	8/16/2016 Resolution
49 50		Matheny, James	Chairman, Montgomery County Board of Commissioners	8/16/2016 Resolution 8/25/2016 Email
50		Morehead, Debbie	Citizen	9/13/2016 Email
51		Morehead, Debble	Citizen	9/8/2016 Email
52		Morehead, Kevin Morehead, Kevin	Citizen	
				8/23/2016 Hearing Transcript
54		Morrison, Rachel	Citizen	10/3/2016 Email
55		Mullis, John	Councilman, Town of Norwood	9/1/2016 Hearing Transcript
56		Mullis, John	Councilman, Town of Norwood	9/30/2016 Letter
57	55	Myrick, Jim	Citizen	9/14/2016 Email

Union County Proposed Interbasin Transfer Certificate Public Comments Received Hearing Officer's Report - Appendix A

58	56	Nicholls, Mark	President, Uwharrie Point Community Assoc.	8/19/2016	Letter		
59		Niland, Patrick	Town Manager, Wingate		Hearing Transcript		
60		Nowakowski, David	Citizen	9/26/2016			
61		Nowakowski, David	Citizen		Hearing Transcript		
62	59	Peurifoy, Edward	Citizen	9/22/2016			
63		Plate, Chris	Executive Director, Monroe-Union County Economic Development	9/1/2016	Hearing Transcript		
64	61	Poole, Deborah	Citizen	9/25/2016	Email		
65	62	Powers, Sherri	Citizen	8/26/2016	Email		
66	63	Reich, Craig	Citizen	9/13/2016	Email		
67	64	Ritchie, DW	Citizen	8/25/2016	Email		
68	65	Roberson, Michelle	Citizen	9/4/2016	Email		
69	66	Robertson, Kim	Citizen	9/28/2016	Email		
70	67	Rogers, Rebecca	Citizen	9/27/2016	Email		
71	68	Russell, Gay	Citizen	9/16/2016	Email		
72	69	Sago, Richard	County Manager, Richmond County Board of Commissioners	9/20/2016	Resolution		
73	70	Samples, Dan	Citizen	8/24/2016	Hearing Transcript		
74		Samples, Danny	Citizen	9/29/2016	Letter		
75	71	Samples, Sharon	Citizen	9/29/2016	Letter		
76	72	Scott, Will	Yadkin Riverkeeper	10/3/2016	Letter		
77	73	Simpson, Jerry	Union County Board of Commissioners	9/1/2016	Hearing Transcript		
78	74	Smith, Dwight	Citizen	8/24/2016	Hearing Transcript		
79	75	Snuggs, Hilda	Citizen	9/20/2016	Email		
80		Studley, Gary	Citizen	9/1/2016	Hearing Transcript		
81	77	Swan, Lisa	Citizen	9/8/2016	Email		
82	78	Terrell, Thomas	Smith Moore Leatherwood Attorney, for Montgomery County	10/3/2016	Letter		
83	79	Thompson, Norma	Citizen	9/18/2016			
84		Timms, Judith	Citizen	9/6/2016			
85		Trulove, Patricia	Citizen	9/12/2016			
86		Trulove, Patricia	Citizen	9/12/2016			
87		Weidenhammer, Chris	Citizen	9/12/2016			
88		Whitaker, Amanda	Economic Development Director, Montgomery County		Hearing Transcript		
89		White, Joseph	Citizen	8/25/2016			
90		White, Joseph	Citizen	9/6/2016			
91		White, Stephen	Manager, Lancaster County Water & Sewer District, SC		Hearing Transcript		
92		Willard, Adele	Citizen	9/25/2016			
93	87	Wriker, Charles	Citizen	9/8/2016	Letter		
				Unique Commenters	87	(6 submitte	ed 2 forms of comments)
				Email	48		
				Letter	20		
				Resolution	4		
				Hearing	21		

From:	Melissa Adams <mdarn63@gmail.com></mdarn63@gmail.com>
Sent:	Tuesday, September 27, 2016 3:07 PM
То:	DWR.IBT
Subject:	Union County request for water from Lake Tillery

Union County hasn't invested any money into a water reservoir of their own and choose to take the cheapest approach.

- Has Union County submitted a serious plan for water preservation?

- Does the Impact Study include the impact of the recently finished Concord/Kannapilas water line into Tuckertown?

- Does the Impact Study account for the new contract that Duke Energy signed with the State to allow them to generate more Hydroelectricity through the lower dams.

- Even though this year has been a decent year for

rainfall on average Badin was down 3-4ft, High Rock was down

4ft and Tuckertown 2ft. At the same time Wylie, Mountain

Island and Norman has encountered less of an impact. Would

the EMC consider recommending Union County pull water from

the larger, less impacted lakes?

-Please understand that Montgomery County isn't blessed

with the Revenue and growth that Union County is

experiencing and one of the only assets we have is the

Lakes. As we start to over utilize it's capacity, people are

going to start migrating back to other lakes that are more

stable. This will affect property values and small business

which rely on the lake for income.

- The local community was blindsided by this and I feel Union County has purposely left Montgomery County in the dark as long as they could.

Thank you for your consideration, Melissa Adams

From:	Rhae Auman <aauman@windstream.net></aauman@windstream.net>
Sent:	Wednesday, September 07, 2016 7:15 PM
То:	Nimmer, Kim
Subject:	water transfer certificate

Ms Nimmer

As a resident of High Rock Lake (Yadkin River Basin) I find the news of the proposed withdrawal of 23 million gallons a day from my community absolutely ridiculous. To begin with, the Davidson County Commissioners knew nothing about this proposed withdrawal that concerns many in Davidson County. I find this very questionable and seems as if by accident the local newspaper found out about this. When you try to push something through without the citizens of the county/state knowledge of such a huge issue has corrupt politics written all over it. I am sure Union County would love the 23 million gallons a day, but they should have considered THEIR water usage before issuing permits for homes and buildings. Do not penalize the citizens of the Yadkin River Basin for Union County's inability to adequately supply water to THEIR customers. Many citizens live in this area for the recreational use of the lakes, by lowering the basin 23 millions gallons a day, what does that do for the lake levels? Furthermore, when High Rock Lake was drawn down several years ago, for unknown reasons, the environmental impact was huge. Many fish and other wildlife were killed due to this along with the huge mosquito problem that it created. Yadkin Inc was forced to spray by plane on several occasions to help control the mosquito. With the threat of the Zika virus, what does this mean for us? Also, what does this mean for all the wildlife affected by the lower lake levels... What, another fish and wildlife kill. Union County needs to use their own recourses to find a solution to their water problems, maybe, build their own lakes. Don't create a multitude of new problems for the rest of us. Thank you for your time and I am in hopes that the right thing will be done.

Sincerely Rhae Auman

Transcription for Monroe public hearing – Union County IBT (9/1/2016)

Representative Mark Brody – My name is Mark Brody. I serve as state representative for District 55, which is Union County and Anson County, so I have a connection all the way. Ultimately in this process, I do support Union County. I live in Union County and I believe we've got a great future. The people that we put in our management, they manage growth pretty well and I'm confident that when growth continues that they take all these factors in. I support the economic growth in Union County and I would recommend that, along with everybody else, that we do consider this. I'm sure there are other options that later on we're going to be doing because by mid-century, what did they say it will double? But guess what, then there's another half-century after that where it will double again, so we'll be back here. Of course, we won't, but others who take our place will. I certainly encourage allowing this to happen. Knowing that when you put the folks that we have in charge, they will do a good job of managing that growth and that opportunity. Thank you for allowing me to speak.

Transcription for Norwood public hearing – Union County IBT (8/23/2016)

Ron Bryant – Thank you, am not the Riverkeeper, but I am representing Will Scott, who is the Yadkin Riverkeeper who can't be here tonight. We agree with the request for a delay. The Yadkin Pee Dee Water Management Group has not yet been formed, but is in the forming stages and should be part of the process to make sure we don't fall over the edge, like we did when I owned property on the Catawba River, Lake Wylie, and sold it fortunately in the spring of 2006. I wasn't planning to sell my boat, but the guy really wanted to do some boating so he bought my boat too. I had 100 feet of track to put the boat in the water, never had a problem. That very summer he bought my property and boat, he couldn't use it because the water level was down. Now, the things we were told about water intake levels and public ramps are supposed to be covered in this plan, but of course this wasn't a public ramp, and the guy who used it was out of luck. He couldn't use the lake that summer. The second thing is that currently Lake Tillery is classified as WS IV, watershed 4 water quality. That's not good enough for recreation around here. It should be watershed 2, so we ask that that be included in this process. Thank you.

From:	penny burkhart <silver_fox_19642000@yahoo.com></silver_fox_19642000@yahoo.com>
Sent:	Wednesday, August 24, 2016 3:53 PM
То:	DWR.IBT
Subject:	Fw: Certificate to move Water

----- Forwarded Message -----From: penny burkhart <silver_fox_19642000@yahoo.com> To: "dwr.ibt@ncenr.gov" <dwr.ibt@ncenr.gov> Sent: Wednesday, August 24, 2016 2:51 PM Subject: Re: Certificate to move Water

We the people of Davidson County wish not to participate in moving 23 million gallons of water a day from the Yadkin River basin to the Rocky River basin. This would lower our lake levels on High Rock to a mere nothing as it was done in 2002 draw down of 24'. I Penny Burkhart

I Do OPPOSE this determination

.... August 24th 2016

,

From:	Robert Burrage <burragerobert@yahoo.com></burragerobert@yahoo.com>
Sent:	Sunday, October 02, 2016 5:21 PM
То:	DWR.IBT
Subject:	Lake Tillery Concerns

I would like to protest the sale of any amount of Lake Tillery water to Union Co or any other entity. Our family has owned a property on Lake Tillery since 1958. We have always enjoyed and appreciated that we didn't have to worry about low water.

Cabarrus Co is already set-up to get water from Tuckertown. Concord is growing and one good textile mill, dyer, or food processing plant would drastically affect their water needs. Union Co is set for unheard of growth.

Yes, we might could share the water today, but once you set it up there is no going back. If there is truly a need, let them draw it below our dam. No amount of money Norwood could make from the sale of water could repair the potential harm.

Robert E Burrage 303 Alberta Dr

PO Box 1797 Concord, NC 28026

burragerobert@yahoo.com

704 467-7304

From:	Jean Burris <jeanbob812@icloud.com></jeanbob812@icloud.com>
Sent:	Sunday, October 02, 2016 2:59 PM
То:	DWR.IBT
Subject:	Using water from Lake Tillery

To whom it my concern:

As property owner on Lake Tilley we are opposed to using 23 million gallons of water per day to supply growth in Union County.

Our property is near the current pump station in Norwood, NC if the water drops any we are unable to use our water craft. This does not look like a plan that would benefit taxpayers of Stanley County. We only found out about this accidentally which seems underhanded to me.

Thank you for considering NOT GOING FORWARD WITH THIS PLAN.

Sincerely, Bob & Jean Burris

Transcription for Norwood public hearing – Union County IBT (8/23/2016)

Councilman Robbie Cohen – A little bit about me. My name is Robbie Cohen. I've lived in Norwood my whole life, 47 years, and that whole time has been on the lake. My childhood it was at a lake house, but we lived in Norwood. I've made my living around this lake, every day of my work career. I've developed nine subdivisions around this lake. And if what y'all were saying, the people who have spoken tonight, were to be true, I'd be totally against what we are proposing to do. As a councilman of Norwood, I'm getting no benefits of standing up here and speaking for it. However, I'm told by all the engineers with HDR, the state, and even an engineer that's in one of our subdivisions that has nothing to do with this, that there will be no change, that is zero change to our levels at 23 million gallons per day. Please let me talk, then you can talk when you get your turn, that's just rude. Now, if what y'all are saying is correct, I don't' even want to go down 12 inches. There are plenty of people, including me, that have shallow water at their piers and I don't want to see if fluctuate that much. So, but with zero effect and only a win, I don't see why any of us are complaining. I did have a friend that brought up a legitimate complaint. Now that complaint was, if we give Union County that water then they keep getting industry, that that industry would possibly come here to get our water. Now, that's a reasonable thing, however, Anson County is jumping up and down to do exactly what we're doing. So if we don't do it, they're going to do it. They're mad they didn't get this deal. Norwood stands to benefit from this a whole lot. With the revenue generated from this, a new withdrawal system, ours now is, I saw that drawing was 10 feet, and I thought it was shallower than that. So, there have been times when Duke used to do the water withdrawals and we'd have to rent a pump. We bought a pump it didn't last long, so we rented one that would pump down at the edge when it was down 10 feet to our pump system. With this new withdrawal system there will be two suctions, one here at 7-8 feet and one much deeper so hopefully we'll never have that problem again. If what y'all are saying is correct and it's going to change our water levels, I'm with you. But I'm telling you, I'm going to read you this right here, this is from an engineer: based on the proposed 23 million gallons per day uses, that equates to 0.17 inches of water surface drop per day for the entire lake. That assumes there is no water coming into the lake, and we all know that assumption is incorrect. With the amount of water coming into the lake, it makes the amount of water taken out of the lake even more insignificant. Just going over the number, I know that 23 million gallons of water sounds like a lot, but the size of the lake and the amount of flow coming into the lake, it's really not much. I trust the state; I trust the engineers that tell us there is no change. And if there is no change, I have no problem with it. That's all l've got.

CHAD S COLBY



DIVISION OF MATER RESOURCES

KIM NIMMER

Division of Water Resources | 1611 Mail Service Center Raleigh, NC 27699-1611

September 28, 2016

Dear Kim Nimmer,

Some may think selling water from Lake Tillery is a winner.

A lower lake level decreases property values and our wallets get thinner.

While others profit from the resource and see their wallets get fatter.

A lower lake level leaves hulls and props in tatters.

When it comes to approving or denying this special request matter, my neighbors and myself are hoping that you choose the latter.

Sincerely,

Chad S Colby

aldy

CONTACT

10292 Sycamore Rd. Norwood, NC <u>chadscolby@yahoo.com</u> (704) 474-9401

From:	Karen Coma <kscoma@gmail.com></kscoma@gmail.com>
Sent:	Friday, September 30, 2016 7:25 PM
То:	DWR.IBT
Subject:	Union County Water transfer

I oppose allowing Union County to take water from the Yadkin River, increasing the probability of our lakes, Badin, Tillery and High Rock, to suffer. Our property, and surrounding properties rely on the lake level being at full pond or close, to maintain their values. Many people in the area rely on property owners and the recreation seekers on the lakes for their livelihoods. If the water is taken, many will suffer. Union County needs to find another source and a way to manage its usage.

Karen Coma 597 Shamrock Road New London, NC 28127

Transcription for Norwood public hearing – Union County IBT (8/23/2016)

Roland Connely – We, like the people who have just spoken, have concerns about the proposed IBT. I'm representing the homeowners, primarily the Fairway Shores Homeowners, but other homeowners. We are a residential community on Lake Tillery since the early 1960s. We have a number of concerns that we'd like to be addressed. Number one, and this comes under the other group, we still feel like there has been improper notification of public hearing. It may have met the legal requirements to notify various papers, but we found out that the two counties which border entirely the Lake Tillery area, as well as most of Baden Lake and Falls Reservoir, the Montgomery Herald and the Stanly News & Press, did not receive these notifications. So I feel this has been an inappropriate notification process to have these meetings to start with. Addressing findings of fact #2, which has already been read and I won't read it again, and item #3, which is essentially cumulative effects: number two I want to say the economic projections provided to us by the Department of Environmental Quality, based on their use of CHEOPS and LWSP, which is local water supply projections, does not indicate growth in any of the source counties and apparently uncontrolled growth in Union County. This seems to be based on systems that have a flawed set of assumptions built into them and do not appear to have been questioned by anyone at this point, until now. The information on the water levels during drought periods indicate that this additional withdrawal will not cause the lake to be, on average, below the normal minimum elevations. It may be news to many of you, obviously not everyone, but if the lake drops to its minimum allowed level which is 2 feet 6 inches during the summer, a very large proportion of the lake residents are not able to use their boats. Then their lakefront property becomes non-lakefront property. If this were to become an issue, and the levels lately have been slightly more variable than they used to be, then property values will start to decline. One of the big draws for home owners on Lake Tillery is the fact that water levels remain reasonably constant. If this changes, values will decrease, and therefore tax revenues will decrease for Montgomery County, which is already struggling economically. Lastly, if approved, we believe this is going to set a dangerous precedent where locals that do not appear to have had a plan to control growth to fit within their available resources are served to the detriment to more rural areas of the state. Tourism and the ability to enjoy the natural beauty of this state could be sacrificed to the greed of the developer. Thank you.

Yadkin Water Supply

Monroe Learing 9/1/16 p.1

Good evening, my name is Cindy Coto and I am the County Manager for Union County.

In my role as the Manager for the County I have been very involved for the past six years in identifying a water supply for eastern Union County. This involvement ranges from countless planning meetings, identification and outreach to potential water supply partners. Participation in contract negotiations. And receipt of project status updates to ensure I have a general working knowledge as it relates to the program.

I have three key points I would like address this evening. First this project represents sound long-term regional planning for our community; secondly, the environmental impact statement includes extensive review of numerous alternatives and includes the most robust water quantity modeling effort ever completed in the Yadkin Rivers basin; and thirdly, Union County has gone above and beyond to ensure environmental stewardship and community outreach. I would like to briefly talk about each of these points in greater detail.

- 1. As it relates to sound long-term planning for our community.
 - a. Union County has been working for nearly two decades on a water supply solution for our Yadkin River Basin service area.
 - b. The proposed Yadkin River Water Supply Project was not our least costly alternative, but rather the best alternative that meets the future needs of our region, has the least environmental impact and is financially feasible.
 - c. The Project has benefits both for Union County and the Town of Norwood as it includes the construction of a

Monroe hearing 9/1/1/2 p.2

new water intake and pump station that will benefit the Town and Lake Tillery residents.

- d. The project reduces our dependency on the Catawba River to meet the needs of our community.
- e. Our Interbasin transfer request meets the intent and spirit of the IBT legislation with regards to using Yadkin water for Yadkin needs.
- 2. As it relates to the Environmental Impact Statement and the robust water quantity modeling effort
 - a. The water model developed for the EIS was coordinated with state regulatory officials, Duke Energy, and our consultant team.
 - b. The modeling effort concludes that even with the proposed transfer, lake levels will remain virtually unchanged the vast majority of time and even with all future water demands considered and during the worst drought on record, lake levels will remain above Duke Energy's normal minimum elevations.
 - c. The water modeling effort includes consideration for the water needs associated with this IBT request, as well as:
 - i. Future needs for all other water users in the Yadkin River Basin
 - ii. Future industrial water demands
 - iii. Future power plant needs
 - iv. The impacts of climate change over time
 - v. The impacts of evaporation
- 3. As it relates to Union County's environmental stewardship and community outreach on this project:
 - a. To apply for the IBT Certificate we had a choice to complete an Environmental Assessment versus the more complex, time consuming and expensive Environmental Impact Statements and we selected the

Monroe hearing 9/1/1/2

EIS to ensure that our decision making process was thoroughly vetted and that environmental impacts were understood and mitigated.

- b. We are holding three public hearings as part of this round of public input in lieu of only the two that are required.
- c. We have created a project website, developed project videos, and published several newsletters and press releases in an effort to communicate to the public.
- d. We held a community meeting in Norwood this past Spring to address questions from the residents and local stakeholders
- e. We participated in Norwood's Arbor Day festival passing out information and answering questions about the



- project to the local community
 - We have been committed to open dialogue with stakeholders and extensive community engagement , throughout this process.

Thank you for the opportunity to speak on this very important topic for my community Union County this evening. $Om \otimes O$

appreciate you attention.

From:	David & Karen, Cox Realty <david.karen.cox@gmail.com></david.karen.cox@gmail.com>
Sent:	Monday, September 19, 2016 8:03 PM
То:	Nimmer, Kim
Subject:	Comments on IBT from Lake Tillery to Union County

N. C. Environmental Management Commission

Please do not allow the water to be removed from Lake Tillery. I have read several of the documents including the Record of Decision and the Draft Union County IBT Certificate. It was, of course, written completely from the Union County perspective. They projected Union County's population growth and their water system service area growth.

- 1. Where did they project ANY growth for anyone currently relying on water from this source or upriver? Apparently there is NO expectation that Stanly County, Montgomery County or any other entity relying on this water either for recreation or for drinking water will have ANY growth. I would certainly hope that we are going to experience growth. The cities of Concord and Kannapolis already have an IBT certificate to withdraw water. Won't they require more?
- 2. On page 6, they state that Alternative 1 is the lowest cost. Good for them. The impact on our water will last forever.
- 3. Alternatives 1 through 3 all appear to me to affect the water in Badin Lake and Lake Tillery. These are both recreational lakes with over 100 miles of shoreline on each lake. The real estate property taxes and the money generated by the people who live on these lakes has an incredible effect on the counties surrounding these waters. Please see below.
- 4. Alternative 4. They don't seem to give much explanation as to why this alternative is not viable when it seems closer and doesn't appear to need all the things required in Alternatives 1 thru 3. This alternative would seem to merit more investigation than they seem to have given it.
- 5. Alternative 5 would seem to be the closest alternative to Union County and it is a non-IBT alternative.
- 6. Alternative 6 is what I foresee happening here in the next several years. Once they start pumping, they will want more.
- 7. Alternative 7 also seems closer and would be in conjunction with another large city so that they could probably reduce costs due to efficiency of the scale of the project.
- 8. Alternative 8 seems to have very little documentation and appears to be mainly based on cost. They merely state that they have "concerns".
- 9. Alternative 9 should have already been in place. I understand that although their income levels are much higher than ours that their water rates are significantly lower. People will conserve if it costs them money.
- 10. Alternative 10 is a joke, How does that count as an alternative if it is not permitted?

11. Alternative 11 is certainly NOT A JOKE. They want to take our water and then discharge their wastewater into our lake?????????

12. Alternative 12....no comment.

On page 6 under Environmental Impacts it states that No direct impacts, EXCEPT for the potential WATER QUANTITY/Quality issues are expected.... Then, under the heading, <u>Water Quality and Quantity</u>: No field studies were conducted for the EIS; therefore, impacts to resources are estimated. WHAT!!!!!

On page 8, last paragraph: Within the source basin, the potential secondary and cumulative impacts associated with the preferred alternative would primarily be attributed to WITHDRAWALS FROM LAKE TILLERY,...

Regarding the CERTIFICATE AUTHORIZING UNION COUNTY TO TRANSFER WATER FROM THE YADKIN RIVER IBT BASIN

On Page 6 of this document, it states that full pond of Lake Tillery is 278.2 ft. mean sea level. On Page 7 it states that: The public boat ramp access area on Lake Tillery for which there is current survey data from Duke Energy Progress becomes unusable 3 feet 5 inches below full pond elevation.

It appears from everything that I have seen published that the primary concerns are in extreme conditions. The typical and analytical concerns brought up are under drought conditions when, honestly, one more foot down during a drought is important, but understandable.

The real issue in my mind is the fact that Badin Lake and Lake Tillery are EXTREMELY important to the counties and cities that they border. Many people say that the people who own lake properties can afford issues, but the impact of these lake property owners on their surroundings cannot possibly be measured.

If the lake level is down one foot, it does not impact land much where the water is deep; however. Lake Tillery has 117 miles of shoreline but the lake is only 12 or 14 miles long. That means the somewhere around 90 miles of shoreline is in coves. When the water goes down 1 foot in a cove that is 3 or 4 feet deep, that means that people cannot get their boats out. The shoreline is muddy and ugly and it would appear that property values would suffer.

If these recreational lakes are not attractive to people the unintended consequences can become very real very quickly. These consequences could occur whether we were in drought conditions or not. One to three feet down would be critical to MANY lake properties.

- 1. Property values and then property taxes would be extremely important to the bordering towns and counties.
- 2. The multitude of small businesses who support lake activities can include gas stations, restaurants, marinas, boat sales, retail sales of clothing and water sports at both the big box stores and the small businesses. These business in turn will not be able to support their employees who support many of the same business and it dominoes. The lumber and materials used in development of the lake as well as the county and state employees involved is something I cannot measure but am extremely concerned about.

It also seems that one town should not be able to be the financial beneficiary of something that impacts miles and miles of the Yadkin and Pee Dee River water supply.

It is my understanding that many of the required public notices to the counties bordering these waters were not performed properly. How can this possibly be considered if the parties involved (i.e., Montgomery and Stanly County) were not informed of such a far reaching and important governmental decision and given the opportunity for input?

These documents have been presented by Union County and are measured in terms of how much money Union County will save.

Please give your utmost consideration to the counties and towns and people that will be severely impacted by this decision now and in the future. Montgomery and Stanly County need growth in order to survive. The Montgomery County resolution said it best: controlled growth takes the development and the people to the places where the resources reside and not the resources to the people.

We are homeowners on Lake Tillery and are concerned for our home, our investment, and the future of our county.

David & Karen Cox



Cox Realty 46347 Chase Point Drive Norwood, NC 28128 <u>www.CoxRealty.net</u> Phone: 704.794.3232

From:	John Crain <jcrainjr@gmail.com></jcrainjr@gmail.com>
Sent:	Friday, September 02, 2016 2:23 PM
То:	Nimmer, Kim; DWR.IBT
Cc:	rrcollins@waterpowerlaw.com; Julie Gantenbein
Subject:	IBT from Yadkin River Basin to Rocky River Basin

Memo To: Kim Nimmer, NCDENR

Subject: IBT from Lake Tillery (Yadkin River Basin) to Union County (Rocky River Basin)

Date: September 2, 2016

Please note that the residents of Montgomery County NC, which borders Lake Tillery, Badin Lake, and Tuckerton Reservoir which are all part of the Yadkin River Basin have not been included in the required public notices detailed in 143-215.22L section C, 2a. Nothing has been published in Montgomery County's newspaper detailing public meetings regarding the proposed IBT from our county to Union County.

In the Record of Decision on your website concerning this IBT request, Donald R. van der Vaart stated "Extensive public input has been considered.....", this is not the case and, as such, the process needs to be restarted per NC law regulations governing notifications of IBTs. The notices that were sent out in regard to this IBT are posted on your website and if you will look at them you will see nothing was posted in Montgomery County. The regulations (143-215.22L section C, 2a) clearly indicate that counties affected must have public input prior to proceeding to the point this request has now reached.

The necessity of the proposed water transfer is based upon future projected needs of Union County while ignoring future needs along the Yadkin River Basin, which is projected to increase by 74% by 2020, just 4 years from now. This presents a reasonably foreseeable detrimental effect on the source basin.

Duke Power, which operates Lake Tillery, is currently in a legal skirmish with Rockingham, NC over water released from Tillery – Rockingham wants more. The proposed 22,000,000 gallons per day Union County wants will even further exacerbate Rockingham's claim. This will have a detrimental effect on downstream releases from Tillery.

There are several reasonable alternatives listed in the IBT request from Union County, many of which are more reasonable than the Tillery request. These others should be entertained before the Tillery request.

I do not know if FERC has been contacted on this request yet but I plan to make contact with them asking that they involve themselves in this process and provide input regarding the situation which deals with energy producing from Lake Tillery's waters.

Again, I say that the procedures lined out in your documents were not followed by the requesting parties and that this process should be thrown out and restarted following the guidelines in your mandate.

Sincerely,

John Crain 212 Tillery Park Dr. Mount Gilead, NC 27306 jcrainjr@gmail.com



Davidson County Health Department



Lillian Koontz, MPA, REHS Health Director

Michael Garrison, MD Medical Director Rebecca Daley, RN, MHA Chair, Board of Health

RESOLUTION BY THE DAVIDSON COUNTY BOARD OF HEALTH IN OPPOSITION TO THE UNION COUNTY'S INTERBASIN TRANSFER OF TWENTY-THREE MILLION GALLONS OF WATER A DAY FROM LAKE TILLERY IN THE YADKIN PEE DEE BASIN

WHEREAS, the purpose of the Davidson County Board of Health is to promote health, prevent disease and protect the health of the public's environment, including public and recreational water supplies; and,

WHEREAS, the Yadkin River is the drinking water resource for the residents of Davidson County and serves as a source for electric power, recreational activities, and an economic catalyst for the County; and,

WHEREAS, Union County has a pending application before the Environmental Management Commission to withdraw an amount of water from the Yadkin River which is more than double the amount that is currently being consumed by Union County residents; and,

WHEREAS, almost a significant portion of the tax base in Davidson County is on the two lakes formed from the Yadkin River and whereas the upper lake, as part of the FERC licensing agreement, must suffer significant lake level drops in order to maintain stable levels in High Rock Lake. When Union County will make its withdrawal from Lake Tillery, the proposed transfer will only exacerbate the impact on the northern lakes and depress property values in the County, possibly disturb existing ecology and could increase the fire risk; and,

WHEREAS, it has been expressed to officials of Davidson County that State officials and employees have admitted to Montgomery County that essential partnerships and studies have not been completed in order to ensure the interest of the Yadkin region is best served prior to making a ruling on the Union County request-including a "safe yield" evaluation to determine the maximum amounts of water which can be safely withdrawn from the Yadkin; State hydrological modeling of the Yadkin which is not scheduled until 2017 or beyond; the formation of a comprehensive Yadkin stakeholders organization to confirm the validity of local water supply plans and growth projections; and for the Union County produced CHEOPS modeling to be confirmed by independent analysis; and,

WHEREAS, Interbasin Transfer proposals should be thoroughly and carefully researched so to limit detrimental impacts to surrounding ecosystems, resources and communities; and,

WHEREAS, the Davidson County Board of Health supports the Resolution submitted by the Davidson County Board of County Commissioners.

BE IT THEREFORE RESOLVED, The Davidson County Board of Health is opposed to the granting of an interbasin transfer certification to Union County until the necessary stakeholder coalition is formed, the most up-to-date hydrological models are established by the State; and a safe yield study is performed to determine maximum amounts of water which can safely be pulled from the Yadkin.

This the 13th day of September, 2016.

Rebecca Daley, RN, Chair Davidson County Board of Health

Attest: lillian Koontz, MPA Health Director

From:Bob Deen <bobdeen@embarqmail.com>Sent:Friday, September 16, 2016 1:29 PMTo:Nimmer, KimSubject:RE: Lake Tillery Water levels

Kim.....I am a property owner at Woodrun on Lake Tillery. As you know there is a proposal for the City of Norwood to sell as much as 23 million gallons of water each day to a neighboring county.

I can only imagine the damage this would cause to the property values on both the Montgomery County and the Stanly County sides of the lake as the water levels drop to a point where lake access is no longer available. I ask for your consideration to prevent this from happening.

Thanks.

Bob Deen 5158 Woodrun on Tillery Mt. Gilead, NC 27306

From:	Erdin, Alex <aerdin@cannonschool.org></aerdin@cannonschool.org>
Sent:	Friday, September 30, 2016 7:11 PM
То:	DWR.IBT
Subject:	Union County needs to find another solution

Dear Ms. Nimmer,

I am writing explain why I strongly disagree with the water removal proposal to remove water from Badin Lake, Lake Tillery, and High Rock Lake As a resident on Badin Lake for many years now, I strongly disagree with this proposal! Every year, my family and I spend countless hours at Badin playing and having fun on the lake. Please protect our lakes, our lake property values, and the public's enjoyment of these natural resources. Union County must find another solution.

Thank you so much for your time and for taking my views into consideration.

Sincerely,

Alex Erdin

Thank you for your time!! Alex Erdin

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From:	Erdin, Chase <cerdin@cannonschool.org></cerdin@cannonschool.org>
Sent:	Friday, September 30, 2016 7:07 PM
То:	DWR.IBT
Subject:	Badin Lake needs it's water

Dear Ms. Nimmer,

I would like to say that I disagree with the removal of water from Badin Lake. I have lived on Badin for several years now, and I understand how important it is for the people who live there.

Thank you so much for your time and for taking my views into consideration.

Sincerely, Chase Erdin

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From:	Jennifer Erdin <jennifer@erdin.us></jennifer@erdin.us>
Sent:	Friday, September 30, 2016 6:48 PM
То:	DWR.IBT
Subject:	Union County needs to find another solution

Dear Ms. Nimmer,

I am writing to protest the proposed removal of water from the High Rock Lake, Lake Tillery, and Badin Lake system to supply Union County. As a proper owner on Badin Lake for many years now, I strongly disagree with this proposal! Please protect our lakes, our lake property values, and the public's enjoyment of these natural resources. Union County must find another solution.

Thank you so much for your time and for taking my views into consideration.

Sincerely, Jennifer Erdin 123 Overbrook Drive Concord, NC 28028 704-787-3816 jennifer@erdin.us

684 Shoreline Road New London, NC 28127

From:	Mary Kay Erdin <mkerdin@northstate.net></mkerdin@northstate.net>
Sent:	Friday, September 30, 2016 8:48 PM
То:	DWR.IBT
Subject:	Protecting NC Lakes, Say No to Union County

Environmental Management Commission

We have been part of the Badin Lake Community since 1986 and are concerned to learn a few months ago that EMC is considering taking water from Badin and other surrounding lakes to enhance Union County which has become overpopulated!

Concerns include

first the lake and the damage the drawing down water would do to the fish, muskrats, turtles, snakes, herons, osprey, eagles, kingfishers and the other wet land creatures' homes.

Second the lake properties would lose their beauty as water is drawn and removed from the natural shore lines. Of course, this would distract from the fishing and summer boating and swimming recreation. Boats would be left high and dry in their slips. Certainly this would be a minus for the tourism in the entire lake area. Individual property values would be lowered causing problems for Davidson and Montgomery Counties.

Third, yes the lake is already a resource of electricity for cities that are downstream. This need to produce electricity already takes its toll on the lake water at the expense of the families that live on the lake. Extracting more water for Union County is not an option.

Davidson County and Montgomery County have already registered their concerns and said for Union County to find water elsewhere. Union County needs to go back to the drawing board and stop overpopulating it communities when there is no water available for them. No Union County you may not steal our lake water. Find another solution to your water needs.

Thank you for listening to our concerns and for protecting the lakes.

Mary Kay & Bob Erdin 543 Shamrock Road Baden Lake,NC

From:	Jack Foutz <jackfoutz@gmail.com></jackfoutz@gmail.com>
Sent:	Wednesday, September 28, 2016 1:50 PM
То:	DWR.IBT
Subject:	interbasin transfer from Lake Tillery to Monroe

To: Kim Nimmer, Division of Water Resources, 1611 Mail Service Center, Raleigh, N.C. 27699-1611 From: John Foutz, Lot 1311, 5072 Woodrun on Tillery, Mount Gilead, NC 27306

I am totally opposed to the interbasin transfer from Lake Tillery to Monroe by Norwood. I have owned a house in Woodrun on Tillery since 1988 and located in a cove. Over the years, when repair work has been done on the Norwood dam, we do not have enough water to launch our 18' I/O boat. I remember when we had droughts, High Rock and Badin Lakes water levels were extremely low and non-usable for boaters.

Before a final decision is made for Norwood to sell water to Monroe, all possibilities should be considered, such as potential climate conditions and future population growth upstream.

Thanks for listening to my concerns.

Transcription for Wadesboro public hearing – Union County IBT (8/24/2016)

Charles Fry – In response to the statement made by Mr. Samples about how much the public knows what is going on, I suspect that a great deal of the people who would be affected by this know absolutely nothing about it in as much as an appointed official in a county that would be affected by this, I knew nothing about it and our Board of Commissioners knew nothing about it until the later part of last week. Forgive me, that was not within my written statement but I think it's relevant for your consideration. We very much appreciate the opportunity to speak here tonight. My name is Charles Fry and I am the county attorney for Davidson County. The county seat, of Davidson County of course is Lexington. We are further up the Yadkin from the area being shown by Ms. Nimmer a little bit earlier. I am here with Casey Smith. Casey is the assistant county manager for Davidson County. We will tender to the Commission tonight a resolution which was adopted last night by the Davidson County Board of Commissioners. This was an add-on to our agenda before the board meeting last night. It is based in total upon a resolution that adopted by the Montgomery County Board of Commissioners earlier. I suspect you may have already received that. As I indicated, Davidson County was not aware of this proposed transfer until our county manager was advised of the issue by a neighboring county last week. Davidson County has gone on record as being opposed to the proposed transfer from Lake Tillery for the reasons set out in that resolution which has been adopted by the Davidson County Board of Commissioners entitled, "Resolution of Opposition to Union County's Interbasin Transfer of 23 million gallons of water per day from Lake Tillery in the Yadkin Pee Dee Basin." Simply put, it is the county's position that the commission's consideration – with all respect Ms. Nimmer, I appreciate the timeframe which you have shown to us, but from our position, not having been aware of this consideration, and I am shocked that this has been going on for three years without the courtesy of that notice having been provided, that consideration by the commission is premature. The commission is, I suspect aware, of those requests that have been made in the Montgomery County resolution and I will tender that resolution to the Board. Some of those requests may not be appropriate in light of information that I suspect you will share with us tonight. We are very anxious to learn more about this project. All this occurs in light of the historical experience of Davidson County and the great fluctuation of water levels in High Rock Lake. With all respect, when you were looking at water levels in Lake Tillery, that is not consistent with the historical experience of citizens in Davidson County with High Rock. In periods of drought in Davidson County, it has been our experience that the lake ceases to exist. Mr. Solomon, I very much appreciate you letting me deviate from my prepared statements I have. I will not read those any further because I'm not sure if they would all be appropriate, but we appreciate the opportunity to be heard and to gather more information from you.

From:	Lynne Gibbs <lynnegibbs5309@gmail.com></lynnegibbs5309@gmail.com>
Sent:	Friday, September 30, 2016 2:29 PM
То:	Nimmer, Kim
Subject:	Lake Tillery

Dear Kim,

Our hearts sank when we read about Union County's impending deal to use water from Lake Tillery, thus lowering lake levels by as much as 9 inches. If this plan comes to fruition, our dream retirement community (Woodrun) could become a ghost town. Obviously our home values will plummet and we might as well sell our boats.

In addition, this future mass exodus will adversely affect Montgomery County whose median household income is ranked 93 out of 100. Very, very sad indeed.

I see that Union County's median household income ranking is 2. Although the County is growing by leaps and bounds, I was surprised to learn on-line that Union County had 201,655 acres of farmland (as of 2012). Couldn't some of this farmland be bought up to create your own reservoir?

An alternative would be to look to your neighbor to the east, Anson County. Their ranking for median household income is 90. As of 2014, Anson had 340,216 acres of farmland.

On a personal note, my husband and I are not wealthy and we endured hardship to move here. We left family and higher paying jobs in High Point to work for the local Lowe's and Walmart. Retired now, we were so looking forward to years ahead of the tranquility we enjoy while fishing and boating on our beautiful lake!

I am proud to say that my husband and I personally cleared our densely wooded lot prior to our modest new home being constructed. How many people can say that?

Please do the right thing and leave Lake Tillery alone.

I thank you in advance for taking the time to read our e-mail.

Sincerely, Roy and Lynne Gibbs

From:	Carolyn Gresham <mimicgresham@gmail.com></mimicgresham@gmail.com>
Sent:	Tuesday, September 20, 2016 7:13 AM
То:	Nimmer, Kim
Subject:	Sending Tillery water to another basin

I do not think sending water to another county is a good idea. I fear major problems when we have a drought.

CITY ADMINISTRATION

Tel: (843) 665-3113 Fax: (843) 665-3110



August 8, 2016

Ms. Kim Nimmer NC Environmental Quality / Water Resources 1611 Mail Service Center Raleigh, NC 27699-1611

Re: Proposed Yadkin – Rocky River Interbasin Transfer (IBT) Union County Public Works Water System

DIVISION OF WATER RESOL

Dear Ms. Nimmer:

Thank you for the opportunity to comment on the proposed IBT. Pee Dee River receives flow from the Yadkin and Rocky River drainages and forms the eastern boundary of the City of Florence 401-square mile water and sewer service area. The Pee Dee is the source for approximately 40% of our City's water supply capacity and is ultimately the stream which receives 100% of our treated wastewater effluent. In addition, the waters of the river support agricultural and industrial enterprises which are of critical economic importance to the Pee Dee Region. The river and its floodplain, as well as those of its tributaries, provide outdoor recreational opportunities for many area residents and add an important quality-of-life dimension for those who call the Pee Dee their home. Indeed, it would be difficult to overstate the value of this water resource to the City and the Pee Dee Region.

A number of emerging water demands and trends are of concern as we look to the future. Our State Ports Authority, aiming to capitalize on industrial growth along the I-95 corridor, has announced plans to build an inland port facility near Dillon where Harbor Freight Tools operates a large distribution center. This port will, of course, generate additional commercial and industrial expansion along the interstate. Increased water use can also be foreseen as non-irrigated agriculture is replaced by irrigated production systems. The population growth attendant to these trends will increase pressure on flow in the river system.

For these reasons, the City of Florence remains cautious and attentive regarding upstream consumptive uses and diversions of flow that would reduce actual instream flow rates in the river. While we are not particularly concerned about this specific withdrawal, we do have a continued interest in the effects of future transfers and withdrawals from the Yadkin / Pee Dee system to another basin.

As a housekeeping matter, please note that our physical and mailing address has changed. Our current address, City Center, 324 West Evans Street, Florence, SC 29501-3430, should replace the old address in your files.

Again, we appreciate the opportunity to comment on this proposal. Please feel free to contact me or my staff if we can provide additional information at any time.

Sincerely Andrew H. Griffir

Andrew H. Griff City Manager

From:	Laura Guerriero <laurangreg@ctc.net></laurangreg@ctc.net>
Sent:	Wednesday, September 28, 2016 9:31 PM
То:	DWR.IBT
Subject:	Attn: Kim Nimmer Lake Tillery water proposal

Dear Ms. Nimmer,

We have several concerns regarding the Lake Tillery water proposal to have water transferred to Union County. As you know, this has the potential to affect three lakes and the property values of land and homes on the three lakes and towns surrounding. Once an agreement is made, even in a drought year, water would be promised and it cannot be undone. It is permanent and will forever change the water levels in High Rock Lake, Badin Lake and Lake Tillery. That is a dangerous precedent.

Union County is a fast growing area. It seems they have set aside money for transferring water. Why not purchase some land in Union County and build a reservoir to provide water for themselves? This has worked in Cabarrus County, which is another fast growing area near Charlotte. This would eliminate diminishing property values and a great resource—our water. Landowners on Lake Tillery should not be responsible for the poor urban development of another county. There are new homes being built on Lake Tillery every year. Who is to say in ten years this agreement with Union County would not affect lake levels? It's not a risk worth taking.

During Labor Day weekend this year, the water levels were the lowest we have seen them. Due to a storm, they anticipated much more water, so they opened the dam and lowered the lake in preparation. The storm never came, and there was not enough water entering the river up the chain, so the lake levels remained very low. Several neighbors could not get their boats in the water. This strengthened our resolve that transferring water out of the lake is not a good option.

We understand the proposal would supposedly not lower the levels drastically. But there are no guarantees and no promises that more water won't be asked for in the future. Why even start down the slippery path. Union County should not be permitted to drain natural resources when there are other options available.

Thank you very much for your time.

Greg and Laura Guerriero

Transcription for Monroe public hearing – Union County IBT (9/1/2016)

Barry Gullet – My name is Barry Gullet and I'm here tonight representing the Catawba Wateree Water Management Group, which I chair. The water management group was created in 2007 as a 501(c)3 nonprofit. It's made up of 18 public water supply utilities along with Duke Energy. These are the water utilities that share in the use of the Catawba River. Union County is a part of that group. Union County relies on the Catawba for its water supply source for the most part, as we've already heard, but much of their service area is in the Yadkin River Basin and the Rocky River Basin, as we've also already heard. The water management group on the Catawba side has done an extensive amount of river basin planning. We learned in 2006 that if growth continued and people continued to use water consistent with the way they have in the past, the region would reach the capacity for the Catawba River to support any additional growth by the middle of this century. And so we've gone through an extensive planning process since that time to find ways to extend that useful capacity and make it last longer and make it serve the region in a more reliable and a more useful way, while we also preserve the ecological aspects of it. Union County has been part of that, and the IBT that they have proposed from the Yadkin to the Rocky River and the development of a regional water supply source on the Yadkin River is very consistent with the planning that has been done on the Catawba side. The reduction in their IBT amount from the Catawba that will result from allowing the development of a source on the Yadkin is very consistent with that planning and supports the concepts and the ideas that were put forth to extend the usefulness of the Catawba. Union County's regional collaboration in both the Catawba and the Yadkin River Basins really demonstrates their leadership, their environmental stewardship, and sound preparation to provide water supply for their customers for many years to come.

From:	Joyce Hallisey <joycehallisey@yahoo.com></joycehallisey@yahoo.com>
Sent:	Thursday, September 15, 2016 11:43 AM
То:	DWR.IBT
Subject:	Lake Tillery - Montgomery County

I am writing with reference to the proposed water withdrawal that Union County wants to take from Lake Tillery. My husband, Charles and myself own lake property at 722 Fairway Shores Rd., Mt. Gilead, NC 27306 that became our permanent home in 1992. Property taxes in Montgomery County are higher for lake properties due to a higher evaluation. We believe the withdrawal that Union County wants to take each day will absolutely have an impact on our lake water levels and this seriously disturbs us. We're senior citizens and planned to live out our lives right here on Lake Tillery, but with this proposal going forward, what good is our present valuable lake property without lake water?

We feel other alternatives need to be exhausted before ruining our natural resource in Lake Tillery.

Regards,

Charles & Joyce Hallisey 910-439-5725

From:Janet Hambright <janethambright@gmail.com>Sent:Friday, September 16, 2016 6:47 PMTo:DWR.IBTSubject:Lake Tillery

Kim Nimmer,

I am concerned about Union County obtaining a license to pull so much water from Lake Tillery. This may be beneficial to Norwood but it would damage the property value to all Lake Tillery waterfront homeowners. I live in a shallow cove and am already having problems getting my boat out as they are dropping lake levels more often since Duke Energy has taken over the management of our lake.

Sent from my iPhone

From:	Joyce Helms <gojoyhelms@gmail.com></gojoyhelms@gmail.com>
Sent:	Sunday, October 02, 2016 3:47 PM
То:	DWR.IBT
Subject:	Water transfer

Kim Nimmer Division of Water Resources

I am writing as a concerned citizen about the proposed water transfer from Lake Tillery to Union County. I am a life long resident of Union County but have a waterfront vacation cottage in Stanly county. My husband attended the public meeting in Norwood and we both attended the meeting in Union County. We came away with more questions than answers and think this proposal is a terrible idea! There has a be a better option. Please, please do not let this happen. Thank you,

Joyce Helms gojoyhelms@gmail.com 704.254.7241

Sent from my iPad

KIM NIMMER, DIVISION OF WATER RESOURCES 1611 MAIL SERVICE CENTEN RALEIGH, N.C. 27699-1611 SEP 28 2016 **DIVISION OF WATER RESOURCES** AS A FAMILY THAT LIVES ON LAKE TILLERY, WE ARE NOF HAPPY ABOUT PROVIDENCE WATER TO UNION COUNTY WHY SHOOLD WE PROVIDE THE RESOURCES WE HAVE TO UNION COUNTY SO THAT THEY MAY GROW AND LEAVE STANLY COUNTY WITH NO GROWTH. I KNOW THEY SAID IT WOULD NOT AFFECT DUN WAFEN LEVEL BUT TO MAKE IT SAFE, INSTALL THE INTAKE LINE AT 2'-O" BELOW THE EXISTING WATE- LEVEL. I AM SUNS THEY WOULD NOT DO THIS BECAUSE THEY PON'T CANE IF THE LEVEL DROPS 10'-0" COUNT ME, MY WIFE, MY FOUNKIDSE SIX GRAND KIDS AS A"GREAT BIG NO FON THIS PROJECT. TONY M. HELMS 455 BAYSHONE DRIVE NORWOOD, N.C. 28128

Conservation Fund

PO Box 271 Chapel Hill, NC 27514

Phone: 919-967-2223 Fax: 919-967-9702 www.conservationfund.org

October 3, 2016

Ms. Kim Nimmer Interbasin Transfer Program Coordinator NC Division of Water Resources 1611 Mail Service Center Raleigh, North Carolina 27699-1611

Re: Draft Determination to Grant Interbasin Transfer Certificate to Union County Public Works Water System

Dear Ms. Nimmer:

I am writing on behalf of The Conservation Fund (The Fund) to comment on the Environmental Management Commission's (EMC) July, 2016 draft determination to grant an interbasin transfer certificate to Union County Public Works Water System to permit the transfer of up to 23,000,000 gallons of water per day from Lake Tillery in the Yadkin River Basin to the Rocky River Basin.

On behalf of The Fund I previously spoke at the September 16, 2015 public hearing in Norwood on the draft environmental impact statement (DEIS) in support of Union County Public Works Water System's Request for a certificate from the EMC, and I also submitted written comments to the Division of Water Resources (DWR) and the EMC on November 16, 2015.

Recommended Alternative

The Fund commends Union County for planning for its water supply needs for 2050 and beyond and for collaborating with the Town of Norwood on a solution with mutual benefits.

The Fund agrees with the EMC's draft determination that the recommended alternative (1A) is the most feasible for meeting Union County's water supply needs and minimizing detrimental environmental impacts.

The Fund has reviewed the EIS and draft determination and agrees with many of its conclusions. The environmental and economic costs and benefits of many alternatives were carefully considered.

The recommended alternative takes advantage of Lake Tillery, an existing reservoir, and avoids building a new reservoir and the environmental damage associated with building new impoundments. The preferred alternative also avoids increasing water withdrawals and interbasin transfers from the stressed Catawba-Wateree River Basin. The preferred alternative requires collaboration between Union County and The Town of Norwood and will provide benefits to both local governments.

Under the recommended alternative Union County will make substantial investments in a new intake on Lake Tillery and in a new water distribution and treatment system. Neither the EIS nor the draft determination adequately addresses policies and measures to protect the source water, Lake Tillery, or other reservoirs in the Yadkin/Pee Dee River Basin. Neither the EIS nor the draft determination adequately address policies and measures to reduce and mitigate the cumulative and secondary environmental impacts that will be the result of the new growth in Union County enabled by new water capacity and infrastructure.

Union County is one of the fastest growing counties in North Carolina. The NC Office of State Budget & Management projects that Union County's population will increase to 243,620 in 2020 from 201,307 in 2010 and will increase to 289,766 in 2030 from 243,620 in 2020.

Conservation Planning & Investment Needed in Yadkin/Pee Dee River Basin

The Fund has and will continue to urge Union County and the Town of Norwood to build upon their regional water supply planning collaboration to work with land conservation organizations and other local governments: 1) to develop a plan to increase protection and restoration of Lake Tillery and other important reservoirs in the Yadkin/Pee Dee River Basin, and 2) to begin to reserve and invest funds in land conservation and restoration in the Lake Tillery watershed and Yadkin/Pee Dee River Basin. Their investments in land conservation and restoration will increase source water protection, would leverage other public and private funds, and would offset secondary and cumulative effects in the source river basin.

The Fund respectfully asks the DWR and the EMC also urge Union County and Norwood to work with land conservation organizations, such as The Fund, the Land Trust for Central North Carolina, and the Catawba Lands Conservancy to develop a plan to increase protection of water quality and water quantity in Lake Tillery and the Yadkin/Pee Dee River Basin and to invest in protecting Lake Tillery and the Yadkin/Pee Dee River Basin. Pursuant to GS 143-215.22L(m) the EMC could condition its approval of the IBT Certificate to Union County on the development of a conservation or source water protection plan to mitigate detriments of the proposed transfer.

The Fund also recommends that Union County, Norwood, other water utilities, Duke Energy, and Cube Hydro (which is acquiring Alcoa's dams) consider creating an organization similar to the Catawba-Wateree Water Management Group (CWWMG) to facilitate long term planning and collaboration on water supply and water quality problems. CWWMG updated its 50-year Water Supply Master Plan in June, 2015. It's a great model for river basin wide planning and collaboration by water utilities, electric utilities and key stakeholders.

The Fund notes that CWWMG plans to study and model the benefits of land conservation in reducing sedimentation/preserving reservoir capacity and in maintaining stream flows in 2016 as it begins to implement the options identified in its Water Supply Master Plan. The Fund recommends that Union County, Norwood and other utilities consider a similar study and model in the Yadkin/Pee Dee River Basin.

Alcoa Lands For Sale in the Basin

In the February, 2007 Relicensing Settlement Agreement (RSA) for the Yadkin Hydroelectric Project (FERC # 2197) Alcoa agreed to sell and the State agreed to purchase 2420 acres or 31 miles of shoreline on Tuckertown Reservoir in Davidson and Montgomery Counties for \$8,500,000 (Section 2.6.2 of the RSA). Alcoa also agreed to sell and the State agreed to purchase 2310 acres or 45 miles of shoreline on High Rock Reservoir in Davidson, Rowan and Davie Counties for \$7,700,000 (Section 2.6.3 of the RSA). The RSA gives the State three years to purchase the properties from Alcoa after FERC issues Alcoa a new license. FERC issued a 40-year tcflicense to Alcoa in September, 2016; the clock is ticking.

State environmental and resource agencies have already identified these properties as high priorities for water quality and wildlife protection and for recreation. A Yadkin/Pee Dee Water Fund supported by Union County and other utilities could assist the State in protecting these properties and in mitigating detrimental impacts to the IBT.

A conservation plan developed collaboratively by Union County, Norwood, conservation organizations and others could identify other properties important for water quality and quantity in Lake Tillery and the Yadkin/Pee Dee River Basin.

Source Water Protection

A variety of preventable disasters threatened drinking water supplies across the United States in 2014. In response to these threats Representative Rick Catlin from New Hanover County and others sponsored HB 894, An Act to Improve Source Water Protection Planning, in the 2014 General Assembly. The General Assembly enacted and Governor McCrory signed SL 2014-41. GS 130A-320 strengthens the State's existing source water protection program and *requires* public water suppliers to develop source water protection plans. Investments in land conservation and restoration will help Union County, Norwood and other local governments comply with GS 130A-320. DWR may propose rules to implement SL 2014-41 later this year.

North Carolina's Source Water Assessment Program in the Division of Water Resources considers Lake Tillery to have a *moderate* inherent vulnerability rating, a *moderate* contaminant rating and a *moderate* susceptibility rating. Land conservation will reduce the risk of potential contamination.

The Environmental Management Commission has classified Lake Tillery as WS-IV, which provides minimal protection from stormwater pollution and land use change. Local initiatives and investments will be required to enhance source water protection in Lake Tillery.

FERC Review

The Fund notes that Union County and Norwood will have to file an amendment with Duke Energy Progress and the Federal Energy Regulatory Commission (FERC) to increase water withdrawals from Lake Tillery. The Fund believes that an effective and collaborative watershed protection plan will be positively considered by FERC.

Thank you for your consideration.

Sincerely,

Ju Itolma

Bill Holman North Carolina Director

C: Mr. Edward Goscicki, Union County Mr. John Mullis, Town of Norwood Mr. Travis Morehead, Land Trust for Central NC Mr. Tom Okel, Catawba Lands Conservancy

Transcription for Monroe public hearing – Union County IBT (9/1/2016)

Wayne Huneycutt – I'm Wayne Huneycutt. I live down on New Salem at the Rocky River. I have land on the Rocky River. Union County is one of the fastest growing counties in the state. As the man before pointed out, there is no water source in Union County. Rocky River is about waist deep or less. If you go over there today, you can see that you can just wade across it right now. There's not much water in there. The presentations here had very little to say about the impacts on the Rocky River or our end of the county, the northern end. There is a lot of information about the source, and I understand their concern. Our needs are, where is this water going to be used and where is this water going to end up at? I know that the water is needed, there is no problem with that. But where is the water going to end up at? The wastewater treatment plants now, I believe most of them go to the Catawba River Basin. I've got the information that you had on the website, but it's not very clear where the water's going to go. It says it's going into the Rocky River, but there's not a waste treatment plant there. I don't know if that was a Freudian slip that Kim had with the wastewater treatment or not, or just a treatment plant. It says a water treatment plant, but a wastewater treatment plant would most certainly end up in the Rocky River. And I worked on some committees on that some ten years ago, and came to the conclusion that that was a very poor solution to the problem, because there is no water flow in the Rocky River. That's the whole problem. So I'd like you to take that into account when you do that. I was also able to visit the lake that Atlanta gets their water out of. If I remember correctly, I think it was down about 20 or 30 feet and all the boat landings were high and dry. I'm sure they thought that their computer models took care of that and there was nothing wrong with that. The five million gallons we get from the Catawba and the four we get from Anson add up to nine now, and y'all are wanting to add another 23 in the next 30 years. That sounds like an awful lot of growth to me. I'm a little bit familiar with geography. I know somewhere this side of Mecklenburg, gravity goes to the Catawba River. On this side it goes to the Rocky River. So any kind of wastewater treatment this side, sewage has to follow gravity pretty much or it gets really really expensive. So I'm just concerned about that part of it. I'd like you to consider that in your decision.

Transcription for Norwood public hearing – Union County IBT (8/23/2016)

Adam James – A lot of people here have talked about Tillery. I owned a house on Lake Tillery from 2002 until last year. And I would love to have the water level where I am now on High Rock. We feed Lake Tillery. All the water that comes down the Yadkin River comes in High Rock Lake. Then we feed Badin and we feed Tuckertown and we feed Tillery. This water level that they're speaking of, nobody's addressed us. We're being left out of this totally. We need to have some say-so as to what is going on. We need to know, is the Yadkin River 10 years from now going to have enough flow to have the water to do this 23 million gallons. You're talking about 23 million gallons a day, that's 100 million gallons per week. Figure that 52 times. Where is this water coming from? Are you expecting more rain 10 years from now that's going to cover all this? I don't think so. But it needs to be addressed. Montgomery County and Davidson County needs to be included in this because this is where your water comes from. I know the Uwharrie doesn't, but the majority of the water comes down the Yadkin. Thank you for your time.



RESOLUTION BY THE DAVIDSON COUNTY BOARD OF COMMISSIONERS IN OPPOSITION TO UNION COUNTY'S INTERBASIN TRANSFER OF TWENTY-THREE MILLION GALLONS OF WATER A DAY FROM LAKE TILLERY IN THE YADKIN PEE DEE BASIN

WHEREAS, the Yadkin is the drinking water resource for the residents of Davidson County and serves as a source for electric power, recreational activities, and an economic Catalyst for the County; and,

WHEREAS, Union County has a pending application before the Environmental Management Commission to withdraw an amount of water from the Yadkin which is more than double the amount that is currently being consumed by Union County residents and which would extend their maximum capacity by four times their current consumption in order to meet the projected quadrupling of Union County's population by 2050; and,

WHEREAS, rapid urbanization of counties and communities around Charlotte and Wake County is detrimental to rural counties outside of the suburban arc and to remove resources from counties like Davidson to feed uncontrolled growth in counties like Union is not in the best interest of any resident of North Carolina; and,

WHEREAS, controlled growth takes the development and the people to the places where the resources reside and not the resources to the people; and,

WHEREAS, almost a significant portion of the tax base in Davidson County is on the two lakes formed from the Yadkin River and whereas the upper lake, as part of the FERC licensing agreement, must suffer significant lake level drops in order to maintain stable levels in High Rock Lake. When Union County will make its withdrawal from Lake Tillery, the proposed transfer will only exacerbate the impact on the northern lakes and depress property values in the County; and,

WHEREAS, it has been expressed to officials of Davidson County that State officials and employees have admitted to Montgomery County that essential partnerships and studies have not been completed in order to ensure the interest of the Yadkin region is best served prior to making a ruling on the Union 1ST request-including a "safe yield" evaluation to determine the maximum amounts of water which can be safely withdrawn from the Yadkin; State hydrological modeling of the Yadkin which is not scheduled until 2017 or beyond; the formation of a comprehensive Yadkin stakeholders organization to confirm the validity of local water supply plans and growth projections; and for the Union County produced CHEOPS modeling to be confirmed by independent analysis; and,

WHEREAS, Union County water rates for 5000 gallons per month are a little over 20% less than what Davidson Water charges its customers, and such rate inequities only illustrate the "haves and the have-nots" impact on rural counties not realizing rapid urbanization and the lack

of prudent stewardship *over* an area that supposedly is without adequate water supply and should be encouraging conservation through higher rates;

WHEREAS, Davidson County is not intolerant, supports controlled growth, and believes that the resources of the State belong to all of the people in the State.

BE IT THEREFORE RESOLVED, the Davidson County Board of Commissioners is opposed to the granting of an interbasin transfer certification to Union County until the necessary stakeholder coalition is formed, the most up-to-date hydrological models are established by the State; a safe yield study is performed to determine maximum amounts of water which can safely be pulled from the Yadkin, and that with these actions performed, that no certification be granted in an amount exceeding the *five* million gallon per day **IBT** which was grandfathered to Union County from the Catawba Basin. A reasonable **IBT** from the Yadkin not to exceed *five* million gallons per day will allow for controlled growth in Union County, bringing their maximum capacity to more than two and one half times their current consumption. Davidson County encourages all counties and municipalities bordering the Yadkin to join in this opposition and for all rural counties across the State to *voice* their concerns against over-urbanization which depletes the vitality of rural areas.

This the 23rd day of August, 2016.

Steve Jarvis, Chairman Davidson County Board of Commissioners

Attest:

Deborah J. Harris Clerk to the Board



Transcription for Norwood public hearing – Union County IBT (8/23/2016)

Albert Johnson – First of all, I have written comments, but I'd like to say that the notification process that has taken place particularly affecting Montgomery County has been nonexistent. The newspapers there were not notified, we have not had public meetings. A meeting like this should have been held in Montgomery County, if anywhere, because in Montgomery County we are being asked to sacrifice more water resources than anyone else in the process. We have several, there are other some counties such as Stanly County that have considerable shoreline on the lake, but we have a lot and we are being asked to sacrifice all this. And yet there has been apparently a conscious effort to avoid letting Montgomery County even know that the process is going on. And it's been going on about three years or four, without County Commissioners of Montgomery County knowing that the process is underway. I think you need to schedule another meeting in Montgomery County and publicize it this time and meet the requirements of what the lady said on the board here. Our citizens don't know this is going on, they don't know that their water is being taken. It seems to me it just has to be done. The number one comment that I had is that I support the proposed resolution of Montgomery County Board of Commissioners in opposition to the intended interbasin transfer of 23 million gallons of water daily from Lake Tillery in the Yadkin Pee Dee Basin. I believe that this proposition has been conceived and developed for more than three years in a secretive manner in an effort to avoid public opposition in the county most heavily affected by the transfer. I have more comments, but I'd just like to say that when the water is lost to the future of our county, growth and economic development is lost to the future of our county. Now, I'm happy for the people in Union County and Mecklenburg County, to grow as long as they produce their resources, but to take our resources is an unfair practice. Thank you.

From:	Brad Johnson <brad@bejohnson.com></brad@bejohnson.com>
Sent:	Tuesday, September 27, 2016 4:54 PM
То:	DWR.IBT
Subject:	Interbasin transfer certificate requested by Union County

Hello,

Regarding the Interbasin transfer certificate requested by Union County.

I am a home owner on lake Tillery in Montgomery county. As such, I would like to express my strong opposition to the transfer certificate for the following reasons:

1) Union County hasn't invested any money into a water reservoir of their own and choose to take an approach that puts the burden on other counties.

2) Even though this year has been a decent year for rainfall, on average Badin was down 3-4ft, High Rock was down 4ft and Tuckertown 2ft. At the same time Wylie, Mountain Island and Norman have encountered less of an impact. Shouldn't the EMC consider recommending Union County pull water from the larger, less impacted lakes?

3) Please understand that Montgomery County isn't blessed with the Revenue and growth that Union County is experiencing and one of the only assets we have is the Lakes. As we start to over utilize it's capacity, people are going to start migrating back to other lakes that are more stable. This will significantly affect property values and small business which rely on the lake for income.

4) Our local community was blindsided by this and it seems as though Union County has purposely left Montgomery County in the dark as long as they could.

Other Questions:

1) Has Union County submitted a serious plan for water preservation?

2) Does the Impact Study include the impact of the recently finished Concord/Kannapilas water line into Tuckertown?

3) Does the Impact Study account for the new contract that Duke Energy signed with the State to allow them to generate more Hydroelectricity through the lower dams.

I urge you to take these concerns seriously as they have a significant impact - even more so for us as we live in one of the shallower bays on the lake.

Sincerely, Brad

Brad Johnson 128 Shelby Ct. Troy, NC 27371 919-942-9393 brad@bejohnson.com www.bejohnson.com

From:	Philip Jones <philipbjones@hotmail.com></philipbjones@hotmail.com>
Sent:	Sunday, September 25, 2016 5:02 PM
То:	Nimmer, Kim
Cc:	mking12@aol.com
Subject:	Interbasin Water Transfer between the town of Norwood and Union County, North Carolina

Dear Ms. Nimmer,

We are residents of Montgomery County, North Carolina and have a waterfront home on Lake Tillery in the Swift Island Plantation neighborhood. We are writing in opposition to the Interbasin water transfer that has been proposed.

Mr. Mike King, President of our Homeowner's Association, in a letter to you dated September 22, 2016, has already outlined our concerns in a far more eloquent way than we could.

Likewise, the Montgomery County Board of Commissioners sent a resolution in opposition.

We totally agree with both Mr. King and the Board of Commissioner's reasons for opposition to this water transfer, as currently proposed.

Respectfully,

Phil and Quindolyn Jones 162 Timberlake Court Mt. Gilead, NC 27306

704-574-7841 philipbjones@hotmail.com Ms. Kim Nimmer

Interbasin Program Manager Division of Water Resources NC Department of Environmental Quality 1617 Mail Service Center Raleigh, NC 27699-1617

Thank you for the information provided about the proposed Union County (NC) Interbasin Transfer agreement between the Town of Norwood, NC and Union County, NC. I appreciate this opportunity to comment to the Environment Management Commission (EMC). As background, I am a resident of a waterfront home in Swift Island Plantation (SIP), located in Montgomery County, NC and the current President of the Swift Island Plantation Home Owners' Association (HOA). On September 14, 2016, the SIP HOA approved these comments to be submitted on behalf of all 85 property and homeowners in the Swift Island Plantation community.

As the Department of Water Quality has stated, an essential element of this public process is to understand the environmental impact of releasing up to 23 million gallons of water a day from Lake Tillery to Union County. The comments and questions raised in this letter are provided in order to assure a complete and full perspective of the Findings of Fact (FOF) in Union County's request before a final decision is made by the EMC. Specifically, these comments are directed toward FOF #2: "Present any reasonably foreseeable detrimental effects on the source basin," FOF #3: "Cumulative effects on the source major river basin of any water transfer or consumptive water use currently authorized or projected in a Local Water Supply Plan," and FOF #9: "Any other facts or circumstances reasonably necessary."

The concerns and observations outlined in this letter are presented in two categories that relate to all three standards listed above(FOP #2,#3, and #9): 1. the impact of withdrawing 23 million gallons on an all ready declining water level and the property values of Swift Island Plantation and 2. the potential adverse impact of the City of Rockingham and American Rivers attempt to force

Page 2 Kim Nimmer 9/26/2016 Duke Energy to more than double the minimum 24 hour continuous daily water release.

Comments: Affects Declining Water Level

During several days in the months of July, August, and September 2016, the SIP HOA received concerns from a few residents within Swift Island about the low water levels observed this summer by the residents living on the Lake. The core of their concern was that the water level had declined to a level so low that they could not retrieve their recreational boats off their docks. In response to these concerns, I

investigated how much the water level at Lake Tillery fluctuated over the last five years. This was done by analyzing Duke Energy Lake Level reports, found on their website. Because the website does not allow "run charts" to be constructed, I sampled 193 days from June, July, and August of 2011 – 2015, June and July 2016, and every day from August 1 to September 21, 2016.

I've attached a data table that shows the result of this sample, including the August and September 2016 data. These months represent the most active months from a recreational perspective and thus the largest impact on the property values of shoreline homes on the lake. I've also attached graphs that represent this data. Graph 1 represents the daily change in feet between the low and high levels of the water levels, Graph 2 represents the daily fluctuation in inches between the low and high water levels, and Graph 3 represents the annualized average daily change in feet of the low and high levels for the Lake.

This data and corresponding graphs suggest the following:

- 1. Over the last five years, Lake Tillery's average daily high level has declined by 4.8 inches from the average highest high water level recorded in the sample (years 2011, 2012, and 2015).
- 2. Over the last five years, Lake Tillery's average daily low level has declined by 6 inches from the highest low water level recorded in the sample (2011) and tied with the lowest low at 277.2 feet in 2013.
- 3. Lake Tillery's low water level has been lower than the "lowest modeled monthly average (in the Union County study) 12 times, 7 of those occurred in the 2016 sample (June September 20, 2016).

Page 3 Kim Nimmer 9/26/2016

- 4. Lake Tillery fluctuates up to 14.5 inches in a day. Years that represent the most dynamic years of fluctuation are 2013 and 2016.
- **5.** In 2013 and 2016, the average annual water level reached within 3 and 4.2 inches respectively of the lowest modeled monthly average (LMMA). In the last 5 years, distance from LMMA averaged 6.5 inches with a range from **5.4 inches below LMMA to 13.8 inches above LMMA**.
- 6. By direct conversation, three residents of SIP mentioned above were unable to retrieve their watercraft when the lake declined to an elevation of less than 277 feet (99 on the new Duke scale). One neighbor cannot retrieve his boat at less than 277.5 feet (99.5 on the new Duke scale). There may be others that I'm unaware as having this issue.

In September 2016, I had an opportunity to inquire of a Duke Energy employee at the Lake Tillery dam, as to why the water levels at the lake were fluctuating so much in 2016. The employee advised me that Lake Tillery dam is no longer being used to generate electricity during peak demand periods only, but as a regular contributor to the overall Duke energy hydroelectric production because of Duke's interest in showing more reliance on renewable natural resources and less on fossil fuels. The

conversation suggested to me that Lake Tillery would fluctuate more widely on a daily basis than in the past. There was no comment as to what residents could expect from Duke on consistent highs and lows of the water level.

Swift Island Plantation is a community of 35 homes, 33 of those located on waterfront lots. These homes were purchased, in part if not all, because of access to water. Water and boat access have added value to the property and Montgomery County has benefited with higher property tax values. These tax revenues are an important source of income to the County. If water and boat access becomes a problem, then property values will decline and significantly affect the County budget.

Questions:

The Union County project will add to the instability of water levels on Lake Tillery.

1. What historical water levels were used to calculate the lowest modeled monthly average?

Page 4 Kim Nimmer 9/26/2016

> 2. Since it appears that the lake currently achieves times when the low level is below the lowest modeled monthly average, what impact will this new emphasis by Duke place on the declining water levels. And thus, what will the impact be on waterfront homes across the lake and their respective property values?

Summary of comments regarding low lake levels: The current environmental impact does not consider the recent increased demand by Duke Energy for hydroelectric production on Lake Tillery. Water levels have become increasingly less stable during 2016. Union County's request will further exacerbate this instability causing a hindrance for homeowner's to have ample water for egress and ingress into their docks and property. The State of North Carolina should create an environmental impact on the Lake's residences as well as the tax implications for both Stanly and Montgomery Counties.

Comments: City of Rockingham and American Rivers

In April 1, 2015, the Federal Energy Regulatory Commission (FERC) issued a new license to Duke Energy Progress, Inc. for the continued operation and maintenance of the 108.6 megawatt (MW) Yadin-Pee Dee Hydroelectric Project. During the licensing process, the City of Rockingham (City) and American Rivers (AR) objected to the 24-hour continuous flow from Lake Tillery. Their position was rejected and

the license issued. On May 1, 2015, the City and AR requested a rehearing on the license. From the petition, the City and AR state: "The flow release schedule from the Tillery Development is a central issue in this Rehearing Request, as it has been a disputed issue since 2003...Duke Energy proposed to release a continuous year-round minimum flow of 330 cubic feet per second (cfs), except for an 8-week shad spawning period when it would release a minimum flow of 725 cfs. By way of comparison, the natural flow in this reach is 7,978 cfs on a mean annual basis, ranging from monthly means of 5,301 cfs in July to 13, 518 cfs in March...We presented an alternative flow release schedule for the Tillery Development. To enhance fish and wildlife in the Tillery Reach, we proposed a minimum flow schedule between 800 and 1,000 cfs, increasing to 1,500 to 1,800

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cfs from March 1 to May 15...Further, to enhance recreation in the Tillery Reach, we proposed a constant flow schedule of 1,200 cfs during daylight hours on weekends and holidays each year from May 16 to September 15, subject to refinement based on a recreation flow study." On October 15, FERC denied the request for rehearing from the City and AR.

A cubic foot of water per second equals 7.48 gallons or 448.8 gallons per minute. The requested minimum continuous flow, as sought by the City and AR, is 395 cfs (725 – 330). This 395 cfs *represents* 255,277,440 gallons of water daily (448.8 x 60 minutes x 24 hours x 395 cfs). At the City and AR's peak request (vs. the 330 cfs minimum), the release of water reaches a difference of 1,470 cfs or 950,019,840 gallons of water daily from the minimum Duke continuous 24-hour flow. This is a staggering amount of water and should cause all on the Lake great concern.

The rehearing request noted that this has been a disputed issue since 2003. Thre is a belief that the intervention by the City of Rockingham or American Rivers is not going to go away. While I am unaware of any other appeal to FERC or to Federal Circuit Court by these parties, it is my belief that the State of North Carolina needs to model the affect of the minimum impact on Lake Tillery should these parties be fully or partially successful. The EMC needs to understand the environmental impact in the long term context of increasingly larger demands on Lake Tillery. If Rockingham/American Rivers is successful in whole or in part, the impact would be far reaching, including High Rock and Badin Lakes.

Summary of comments related to the City of Rockingham and American Rivers: The environmental impact does not recognize or consider the recent efforts by the City of Rockingham and American Rivers to force Duke Energy to significantly increase the 24 hour continuous flow of water from the Lake into the Tillery reach. If successful, wholly or in part, the environmental impact on the Lake would make the impact of the Union County request pale in comparison. The State of North Carolina should create a forecast of the

environmental impact on the lake and develop a long term context for the present and all future requests for water from the lake.

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Once again, I appreciate the opportunity to present these facts and offer my opinion. The EMC has a responsibility to all parties to understand the current and future impact on existing river basins. As demands grow on the Yadkin River Basin, the EMC must understand the impact on local governments as well as individual homeowners that have invested millions of dollars in development of Lake Tillery.

Please let me know should you have any questions or need clarification on these comments. You may reach me at the following: 128 Timber Lake Ct., Mount Gilead, NC. ph. – (910)439-4531; cell – (304)482-1402; email – <u>mking12@aol.com</u>.

Respectfully,

Mike King President – Lake Tillery President Swift Island Plantation Homeowners' Association

cc: SIP HOA members
 Jim Matheny, Chair – Montgomery County Commission
 Matthew Woodard, County Manager, Montgomery County
 Amanda Whitaker, Montgomery County Economic Development Corp.

	Lake Tillery New scale	New scale	Low	New Scale	High	change	change	Lowest	Normal	Days in Distance to
	Levels	Low		High			Inches	Modeled Mo.	Summer	SampleLowest Mod. Avg
								Avg.	min.	Inches
H	6/1/11		277.7		278.1	0.4	4.8	276.95	275.7	9
2	6/5/11		277.7		278	0.3	3.6	276.95	275.7	9
ω	6/7/11		277.7		277.9	0.2	2.4	276.95	275.7	9
4	6/10/11		277.9		278.1	0.2	2.4	276.95	275.7	11.4
ъ			277.8		278	0.2	2.4	276.95	275.7	10.2
6	6/18/11		278		278	0	0	276.95	275.7	12.6
7	6/20/11		277.9		278.1	0.2	2.4	276.95	275.7	11.4
00	6/22/11		277.8		277.9	0.1	1.2	276.95	275.7	10.2
9	6/25/11		277.8		278.1	0.3	3.6	276.95	275.7	10.2
10	6/30/11		277.7		278.1	0.4	4.8	276.95	275.7	9
11	7/5/11		277.8		278	0.2	2.4	276.95	275.7	10.2
12	7/7/11		277.6		278.1	0.5	6	276.95	275.7	7.8
13	7/10/11		277.6		278.1	0.5	6	276.95	275.7	7.8
14	7/15/11		277.9		278	0.1	1.2	276.95	275.7	11.4
15	7/16/11		278		278	0	0	276.95	275.7	12.6
16	7/20/11		277.8		278	0.2	2.4	276.95	275.7	10.2
17	7/22/11		277.7		278	0.3	3.6	276.95	275.7	9
18	7/25/11		277.8		278	0.2	2.4	276.95	275.7	10.2
19	7/30/11		277.2		277.7	0.5	6	276.95	275.7	3
20	8/5/11		277.3		277.9	0.6	7.2	276.95	275.7	4.2
21	8/7/11		277.9		278.1	0.2	2.4	276.95	275.7	11.4
22	8/10/11		277.9		278.1	0.2	2.4	276.95	275.7	11.4
23	8/15/11		278		278.1	0.1	1.2	276.95	275.7	12.6
24	8/20/11		277.9		278	0.1	1.2	276.95	275.7	11.4
25	8/22/11		277.7		277.9	0.2	2.4	276.95	275.7	9
26	8/25/11		277.7		278	0.3	3.6	276.95	275.7	9
27	8/30/11		278.1		278.1	0	0	276.95	275.7	13.8

57	56	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28
6/5/13	6/1/13	8/30/12	8/25/12	8/22/12	8/20/12	8/18/12	8/15/12	8/10/12	8/7/12	8/5/12	7/30/12	7/25/12	7/22/12	7/20/12	7/15/12	7/14/12	7/10/12	7/7/12	7/5/12	6/30/12	6/25/12	6/22/12	6/20/12	6/16/12	6/15/12	6/10/12	6/7/12	6/5/12	6/1/12
277.2	277.5	277.7	277.9	277.2	277.7	277.8	277.8	277.8	277.7	277.8	277.7	277.5	277.8	277.7	277.8	277.8	277.7	277.9	277.9	277.7	277.7	277.6	277.4	277.6	277.3	277.7	277.8	277.6	277.5
277.7	278	278.1	278.1	278	278.1	278	278	278.1	278.1	278	278	278	278	278.1	277.9	277.9	278	278.1	278.1	277.9	278	278	278.1	277.8	278	278.1	278	278	278
0.5	0.5	0.4	0.2	0.8	0.4	0.2	0.2	0.3	0.4	0.2	0.3	0.5	0.2	0.4	0.1	0.1	0.3	0.2	0.2	0.2	0.3	0.4	0.7	0.2	0.7	0.4	0.2	0.4	0.5
6	6	4.8	2.4	9.6	4.8	2.4	2.4	3.6	4.8	2.4	3.6	6	2.4	4.8	1.2	1.2	3.6	2.4	2.4	2.4	3.6	4.8	8.4	2.4	8.4	4.8	2.4	4.8	6
276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95
275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7
ω	6.6	6	11.4	З	6	10.2	10.2	10.2	9	10.2	6	6.6	10.2	6	10.2	10.2	9	11.4	11.4	6	6	7.8	5.4	7.8	4.2	9	10.2	7.8	6.6

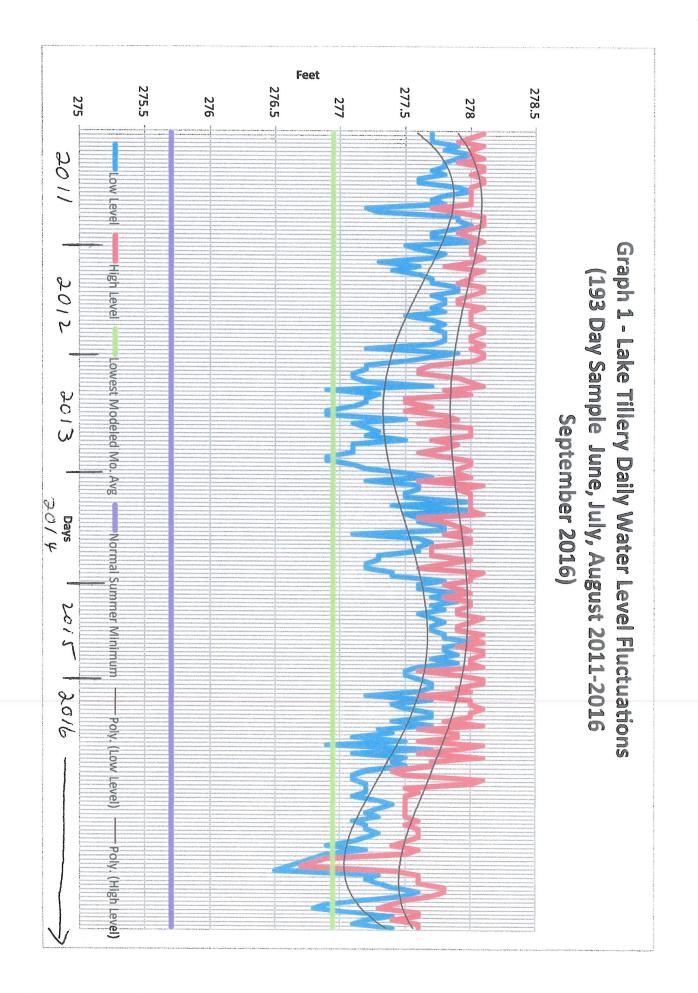
7.8	7.8	З	6	6.6	з	1.8	-0.6	-0.6	1.8	1.8	1.8	6.6	ω	4.2	З	1.8	6.6	-0.6	-0.6	1.8	ω	ω	4.2	-0.6	9	ω	1.8	1.8	ω
275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7
276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95
3.6	6	4.8	3.6	4.8	8.4	10.8	13.2	10.8	6	8.4	9.6	2.4	9.6	8.4	9.6	6	4.8	10.8	7.2	7.2	3.6	3.6	8.4	10.8	4.8	9.6	9.6	6	4.8
0.3	0.5	0.4	0.3	0.4	0.7	0.9	1.1	0.9	0.5	0.7	0.8	0.2	0.8	0.7	0.8	0.5	0.4	0.9	0.6	0.6	0.3	0.3	0.7	0.9	0.4	0.8	0.8	0.5	0.4
277.9	278.1	277.6	278	277.9	277.9	278	278	277.8	277.6	277.8	277.9	277.7	278	278	278	277.6	277.9	277.8	277.5	277.7	277.5	277.5	278	277.8	278.1	278	277.9	277.6	277.6
277.6	277.6	277.2	277.7	277.5	277.2	277.1	276.9	276.9	277.1	277.1	277.1	277.5	277.2	277.3	277.2	277.1	277.5	276.9	276.9	277.1	277.2	277.2	277.3	276.9	277.7	277.2	277.1	277.1	277.2
6/14/14	6/10/14	6/5/14	6/7/14	6/1/14	8/30/13	8/25/13	8/22/13	8/20/13	8/17/13	8/15/13	8/10/13	8/7/13	8/5/13	7/30/13	7/25/13	7/22/13	7/20/13	7/15/13	7/13/13	7/10/13	7/7/13	7/5/13	6/30/13	6/25/13	6/22/13	6/20/13	6/15/13	6/10/13	6/7/13
87	98	85	84	83	82	81	08	79	78	77	76	75	74	73	72	71	70	69	89	67	66	65	64	63	62	61	60	59	58

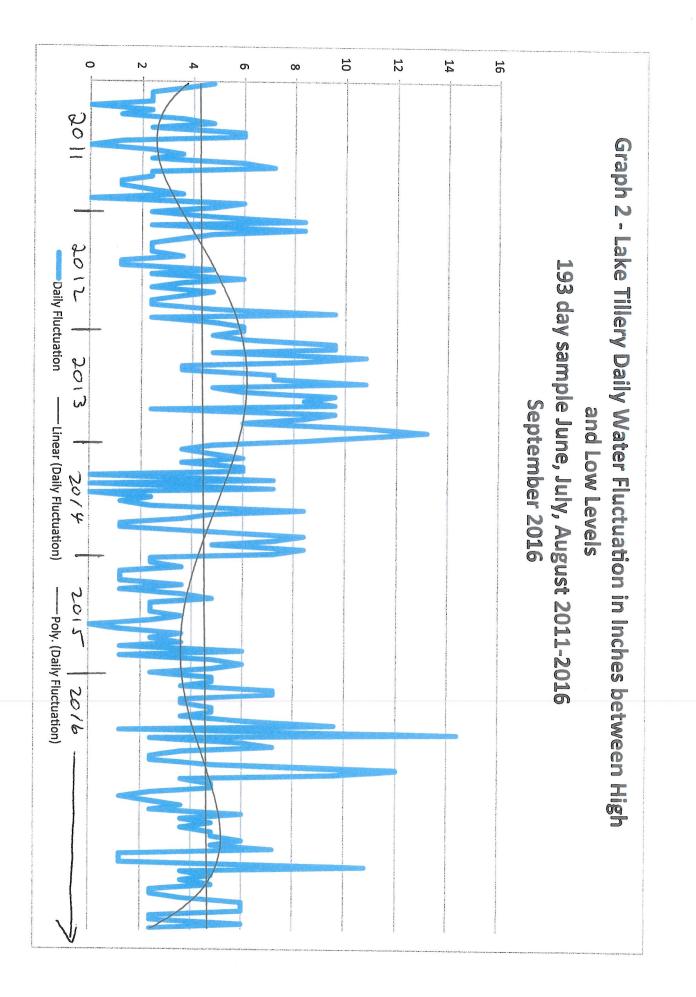
117	116	115	114	113	112	111	110	109	108	107	106	105	104	103	102	101	100	66	86	97	96	95	94	93	92	91	06	68	00
6/22/15	6/20/15	6/15/15	6/13/15	6/10/15	6/7/15	6/5/15	6/1/15	8/30/14	8/25/14	8/22/14	8/20/14	8/16/14	8/15/14	8/10/14	8/7/14	8/5/14	7/30/14	7/25/14	7/22/14	7/20/14	7/19/14	7/15/14	7/10/14	7/7/14	7/5/14	6/30/14	6/22/14	6/20/14	
277.6	277.8	277.7	277.9	277.7	277.9	277.6	277.6	277.8	277.4	277.4	277.2	277.2	277.3	277.3	277.6	277.6	277.7	277.6	277.1	277.8	277.8	277.6	277.6	277.5	278	277.4	278	277.5	
277.9	277.9	278	278	277.8	278	277.9	277.8	278	278	278.1	277.6	277.8	278	277.7	277.7	277.7	278	278	277_8	278	277_9	277.8	277.6	278.1	278	278	278	278	
0.3	0.1	0.3	0.1	0.1	0.1	0.3	0.2	0.2	0.6	0.7	0.4	0.6	0.7	0.4	0.1	0.1	0.3	0.4	0.7	0.2	0.1	0.2	0	0.6	0	0.6	0	0.5	
3.6	1.2	3.6	1.2	1.2	1.2	3.6	2.4	2.4	7.2	8.4	4.8	7.2	8.4	4.8	1.2	1.2	3.6	4.8	8.4	2.4	1.2	2.4	0	7.2	0	7.2	0	6	
276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	
275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	
7.8	10.2	9	11.4	9	11.4	7.8	7.8	10.2	5.4	5.4	ω	ω	4.2	4.2	7.8	7.8	9	7.8	1.8	10.2	10.2	7.8	7.8	6.6	12.6	5.4	12.6	6.6	

6		276.95
3.6		276.95
4.8		276.95
4.8		276.95
3.6		276.95
3.6		276.95
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7.2		276.95
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4.8		276.95
2.4		276.95
4.8		276.95
6		276.95
4.8		276.95
1.2		276.95
6		276.95
1.2		276.95
3.6	- 1	276.95
2.4		276.95
3.6	1	276.95
1.2	1	276.95
0		276.95
2.4		276.95
3.6		276.95
2.4		276.95
2.4		276.95
2.4		276.95
4.8		276.95

ώ	275.7	276.95	1.2	0.1	276.8	98.8	276.7	98.7	9/4/16	177
-1.8	275.7	276.95	1.2	0.1	276.9	98.9	276.8	98.8	9/3/16	176
-0.6	275.7	276.95	7.2	0.6	277.5	99.5	276.9	98.9	9/2/16	175
ω	275.7	276.95	4.8	0.4	277.6	99.6	277.2	99.2	9/1/16	174
-0.6	275.7	276.95	6	0.5	277.4	99.4	276.9	98.9	8/31/16	173
1.8	275.7	276.95	4.8	0.4	277.5	99.5	277.1	99.1	8/30/16	172
ω	275.7	276.95	4.8	0.4	277.6	99.6	277.2	99.2	8/29/16	171
4.2	275.7	276.95	3.6	0.3	277.6	99.6	277.3	99.3	8/28/16	170
з	275.7	276.95	4.8	0.4	277.6	99.6	277.2	99.2	8/27/16	169
З	275.7	276.95	3.6	0.3	277.5	99.5	277.2	99.2	8/26/16	168
1.8	275.7	276.95	6	0.5	277.6	99.6	277.1	99.1	8/25/16	167
4.2	275.7	276.95	2.4	0.2	277.5	99.5	277.3	99.3	8/24/16	166
З	275.7	276.95	3.6	0.3	277.5	99.5	277.2	99.2	8/23/16	165
4.2	275.7	276.95	2.4	0.2	277.5	99.5	277.3	99.3	8/22/16	164
5.4	275.7	276.95	1.2	0.1	277.5	99.5	277.4	99.4	8/21/16	163
4.2	275.7	276.95	2.4	0.2	277.5	99.5	277.3	99.3	8/20/16	162
1.8	275.7	276.95	4.8	0.4	277.5	99.5	277.1	99.1	8/19/16	161
З	275.7	276.95	4.8	0.4	277.6	99.6	277.2	99.2	8/18/16	160
З	275.7	276.95	3.6	0.3	277.5		277.2		8/16/16	159
З	275.7	276.95	9.6	0.8	278		277.2		8/15/16	158
1.8	275.7	276.95	12	1	278-1		277.1		8/10/16	157
1.8	275.7	276.95	4.8	0.4	277-5		277.1		8/7/16	156
З	275.7	276.95	2.4	0.2	277_4		277.2		8/5/16	155
6.6	275.7	276.95	2.4	0.2	277_7		277.5		7/30/16	154
5.4	275.7	276.95	3.6	0.3	277_7		277.4		7/25/16	153
6.6	275.7	276.95	7.2	0.6	278-1		277.5		7/22/16	152
1.8	275.7	276.95	6	0.5	277_6		277.1		7/20/16	151
9	275.7	276.95	2.4	0.2	277_9		277.7		7/16/16	150
-0.6	275.7	276.95	14.4	1.2	278_1		276.9		7/15/16	149
6.6	275.7	276.95	1.2	0.1	277_6		277.5		7/10/16	148

2015 277.7		2013 277.2	2012 277.7	2011 277.8	Average	9/21/16	9/20/16 99.4	9/19/16 99.1	9/18/16 99.2	9/17/16 99.4	9/16/16 99.1		9/14/16	9/13/16	9/12/16	9/11/16	9/10/16	9/9/16	9/8/16	9/7/16 9	9/6/16 9	9/5/16 9
	277.5	277.2	277.7	277.8			99.4	99.1	99.2	99.	90	9									50	10
	277.5	277.2	277.7	277.8						4).1	98.8	98.9	99.2	99.5	99.6	99.4	99.3	99.2	99.3	98.5	98.6
2							277.4	277.1	277.2	277.4	277.1	276.8	276.9	277.2	277.5	277.6	277.4	277.3	277.2	277.3	276.5	276.6
							99.6	99.6	99.4	99.6	99.6	99.3	99.4	99.5	99.7	99.8	99.8	99.6	99.6	99.6	99.4	98.7
278.0	277.9	277.8	278.0	278.0			277.6	277.6	277.4	277.6	277.6	277.3	277.4	277.5	277.7	277.8	277.8	277.6	277.6	277.6	277.4	276.7
0.2	0.4	0.6	0.3	0.2			0.2	0.5	0.2	0.2	0.5	0.5	0.5	0.3	0.2	0.2	0.4	0.3	0.4	0.3	0.9	0.1
2.8	4.4	7.6	4.0	2.9			2.4	6	2.4	2.4	6	6	6	3.6	2.4	2.4	4.8	3.6	4.8	3.6	10.8	1.2
276.95	276.95	276.95	276.95	276.95		276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95	276.95
275.7	275.7	275.7	275.7	275.7		275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7	275.7
26	27	27	28	27																		
200							5.4	1.8	ω	5.4	1.8	-1.8	-0.6	ω	6.6	7.8	5.4	4.2	ω	4.2	-5.4	-4.2
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<td>0.3$3.6$$276.95$$275.7$$1$$0.5$$6$$276.95$$275.7$$1$$0.5$$6$$276.95$$275.7$$1$$0.2$$2.4$$276.95$$275.7$$1$$0.2$$2.4$$276.95$$275.7$$1$$0.2$$2.4$$276.95$$275.7$$1$$0.2$$2.4$$276.95$$275.7$$1$$0.2$$2.4$$276.95$$275.7$$1$$0.2$$2.4$$276.95$$275.7$$1$$0.2$$2.4$$276.95$$275.7$$27$$0.2$$2.9$$276.95$$275.7$$27$$0.3$$4.0$$276.95$$275.7$$27$$0.4$$4.4$$276.95$$275.7$$27$$0.2$$2.8$$276.95$$275.7$$27$$0.4$$4.4$$276.95$$275.7$$27$$0.2$$2.8$$276.95$$275.7$$27$</td> <td>0.2$2.4$$276.95$$275.7$$<$$0.3$$3.6$$276.95$$275.7$$<$$0.5$$6$$276.95$$275.7$$<$$0.5$$6$$276.95$$275.7$$<$$0.2$$2.4$$276.95$$275.7$$<$$0.2$$2.4$$276.95$$275.7$$<$$0.2$$2.4$$276.95$$275.7$$<$$0.2$$2.4$$276.95$$275.7$$<$$0.2$$2.4$$276.95$$275.7$$<$$0.2$$2.4$$276.95$$275.7$$<$$0.2$$2.9$$276.95$$275.7$$<$$0.3$$4.0$$276.95$$275.7$$27$$0.4$$4.4$$276.95$$275.7$$27$$0.2$$2.8$$276.95$$275.7$$27$</td> 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	Normal Summer Min.	Lowest Modeled Mo.Avg	High	Low			ቀወ ሰ	ככ הי	©⇔₪<(т—Ф			
	⁻ Min.	Mo.Avg	demonstrative control of the control		275.0	275.5	276.0	276.5	277.0	277.5	278.0	278.5	
	275.7	276.95	278.0	277.8	2011								Graph 3
	275.7	276.95	278.0	277.7	2012							August	- Lake Tillery Average Daily Wate (193 day sample of June, July, August 2011-2015
Year	275.7	276.95	277.8	277.2	2013							August & septemper zoto)	y Average Day
ar	275.7	276.95	277.9	277.5	2014							oj	Graph 3 - Lake Tillery Average Daily Water Levels (193 day sample of June, July, August 2011-2015
	275.7	276.95	278.0	277.7	2015								evels
	275.7	276.95	277.6	277.2	2016								

From:	Raymond Kraus <kraymond123@gmx.com></kraymond123@gmx.com>
Sent:	Tuesday, September 27, 2016 2:37 PM
То:	DWR.IBT
Subject:	Yakin River/Union County

Environmental Management Commission,

Please consider having Union County weight other options in their future needs for water. I feel they have purposely avoided informing surrounding County's until they legally had to (only a few months before a decision will be made), haven't invested any money in a water reserve of their own or haven't done anything for water preservation. The people of Montgomery County have very poor water and are paying double what Union County does but yet only one small town is going to benefit from this when the rest of us have the possibility of losing much more. I feel everyone has the right to a good water source but 23M gallons from an already stressed River is not fare to the locals. Please consider limiting their request or having them weight other options.

Sincerely, Mrs Kraus Carolina Forest

From:	Laurie Lamb <laurieblamb@me.com></laurieblamb@me.com>
Sent:	Friday, September 30, 2016 6:50 PM
То:	DWR.IBT
Subject:	Badin Lake

Badin Lake is one of the few remaining beautiful lakes in North Carolina. Unlike its counterparts run by Duke, Badin is uncrowded and not overdeveloped. The Uhwarrie forest brings a natural resource unlike any other lake in NC. Please do not allow Union county to rob us of this beautiful lake. There are much better solutions. Our lakes are the jewels of the Carolina kingdom. Don't steal our treasure to compensate for bad planning on the outskirts of Charlotte.

Thank you, John and Laurie Lamb

Sent from my iPhone

1063 9/19/16 Division of Water Resources ATTN: Kim Mimmer 1611 Mail Service Center SED 23 2016 DIVISION OF WATER RESOURC Roleigh, NC 27699-16/1 Vear Kim & Montgomery Co. Officials, We have had property on Jake Lillery for over sitteen years and currently own two properties on this lake. We are writing in regard to the linion County request to take 23 million gallons of water per day from Jake Tillery, which will go from the Yadhin - Pee Dee River Basin to the Kochy Kwer Basen. Our comments are directly tied to the findings of present and reasonably foreseeable detrimental effects on the source basin and cumulative effects on the source major river basin of any water transfer or consumptive water use currently authorized or projected in a focal Water Supply Plan. One of our properties is on a small cove on take filling and we are very concerned about the impact this decision could make not only to

2013 Jake Lilley but also the surrounding water resources of Montgomery County and Stanly County. We are amaned that no research, impact or simulation studies have been conducted by our counties or the state, including no Safe yield studies for Jake Tillery. This year alone we have had frequent drastic drops in water levels which tend to impact not only our properties but all properties bordening Jake fillery, including recreational areas. In addition to These concerns we understand that if lake levels drop, our tax base in the future well significantly be affected. Rural NC counties like Montgomery County mest be included in our states present and future prosperity. Economic development is crucial to our growth and the well-being of all of our citizens. Therefore, any decisions concerning Union County's request to take 23 million gallons of water ber day from Jake I alery should be deloyed until proper studies can be conducted and reported on to all citizens who would be impacted by any decisions. Our representatives should note to allocate funds as needed for

306 these studies. All properties that adjoin the identified lakes should be alerted to the progress of these studies and any information that regards future water management. Towood should not be making these major decisions alone nor should Howood benefit or solely propit from any approval of the Union County request. This decision impacts many of us who are not residents of Norwood. Thank you in advance for making the right decisions, David L. Large Desire Large 347 Lakewood Circl Log NC 27371

From:	Gina Lemons <ginalemons@ddrinc.org></ginalemons@ddrinc.org>
Sent:	Thursday, August 25, 2016 11:10 AM
То:	DWR.IBT
Subject:	Lake Tillery Yadkin Regional Water Supply Project

Good morning,

I would like to express my extreme concern with the EMC moving forward with the Yadkin Regional Water Supply project without further studies into the environmental, property values and most importantly economical impact that this will have on the entire lake area. The entire land area should be studied and people from surrounding areas should have input, not just the town of Norwood. As a home owner in Carolina Forrest, it angers me that Union County and the town of Norwood have gone forward with this with minimal public information or input from the surrounding area. The benefits to these two areas (Union County and Norwood) will have negative consequences on the entire river basin region. While I appreciate the need for water in Union County and economic development needs in Norwood, this deal seams to have been done without appropriate citizen input.

Thank you for your time.

Sincerely, Gina Lemons, RN-BC Duke trained Integrative Health Coach Executive Director



Developmental Disabilities Resources, Inc. 6824 Wilgrove-Mint Hill Road Charlotte, NC 28227 T: 704-573-9777 D: 704-916-6668 F: 704-545-2219 <u>www.ddrinc.org</u>



Duke Energy 526 S. Church Street / EC12Y Charlotte, NC 28202

October 3, 2016

Kim Nimmer Division of Water Resources 1611 Mail Service Center Raleigh, NC 27699-1611

Re: Comments on Draft Union County Interbasin Transfer (IBT) Certificate

Dear Ms. Nimmer:

Duke Energy is providing comments on the Draft Union County IBT Certificate dated June 15, 2016, issued by the North Carolina Environmental Management Commission (EMC) for a water transfer of up to 23 million gallons per day (mgd), calculated as a daily average of a calendar month, from the Yadkin River IBT Basin to the Rocky River IBT Basin. Duke Energy is not taking a position for or against this proposed IBT at this time. Our comments are aimed at correcting errors and improving clarity of the document as well as encouraging stakeholder collaboration.

Duke Energy shares a commitment with communities and other water users to collectively manage, conserve, and protect shared water resources. Reservoirs Duke Energy manages were built to provide our customers a source of reliable and affordable electricity and our company also supports the reasonable and responsible use of these important water resources for other regional needs.

Duke Energy would prefer water remains in the river basin where it originates; however, we recognize that due to the location of growing population centers and the difficulties associated with construction of new reservoirs and other water supply options, some level of growth in IBTs is expected. In cases where it is determined that, after careful consideration of all reasonable alternatives, an IBT is needed, IBT certificates should include conditions requiring aggressive water use reduction measures by certificate holders during drought. These drought-related water use reduction measures should be as or more aggressive than measures pursued by other water users in the source basin.

Duke Energy commends the EMC and the applicant on selection of CHEOPS[™] as the modeling platform for comparing water quantity-related impacts of the various scenarios. Like the Catawba-Wateree River Basin, the Yadkin-Pee Dee River Basin is very much affected by the operation of relatively large hydroelectric reservoirs. This is precisely the kind of river system for which the CHEOPS[™] model was designed and from our experience, CHEOPS[™] provides more realistic results than other models since it takes into account the intricacies of hydro station operation. Also, since both the Catawba-Wateree and Yadkin-Pee Dee models are using CHEOPS[™], it should be less difficult to connect the two models in the future.

Kim Nimmer Page 2 October 3, 2016

This Draft IBT Certificate would authorize Union County to transfer water from the Yadkin-Pee Dee River Basin to be used in the Rocky River Basin under Alternative 1A (identified as the "Preferred Alternative" in the Draft IBT Certificate). Alternative 1A would include construction of a new water intake in Lake Tillery (source reservoir managed by Duke Energy) near the Town of Norwood's existing water intake, to provide water to a new water treatment plant in northern Union County. Duke Energy's comments are based on Alternative 1A and are as follows:

Comment 1, Page 3:

The increase in per capita water consumption from 2013 to 2050 implied in the document appears based on incorrect water demand for the 2013 population. The numbers stated would imply four times the 2013 water demand would be needed by 2050 to serve three times the 2013 population. This paragraph needs to be more specific as to which part of Union County would be served by the water demand numbers stated and also more specifically state the assumptions on which water demand estimates are based. Further, once corrected per capita demand estimates are determined, as a basis for evaluating whether the estimates are reasonable, they should be compared to the June 2015 revision of the Catawba-Wateree Water Management Group's Water Supply Master Plan analysis and goals for per capita water use.

Comment 2, Page 7:

There are multiple references to the term "target reservoir levels," apparently referring to full pond, normal winter minimum and normal summer minimum reservoir levels. Duke Energy believes it would be more accurate to use the term "modeled reservoir levels" when referring to these levels. The CHEOPS[™] model (used in the Environmental Impact Statement modeling analysis) does include a model input called Target Elevation for Lake Tillery (based on historical average elevations used in the model for increased accuracy), but it appears references in the Draft IBT Certificate are not to that particular model input. The New License for the Yadkin-Pee Dee Hydro Project issued by the Federal Energy Regulatory Commission (FERC) on April 1, 2015 has a requirement for a minimum elevation for Lake Tillery. Duke Energy recommends changing all references to "modeled reservoir levels" instead of "target reservoir levels".

Comment 3, Page 7:

The second paragraph describing the model results related to staying above certain reservoir elevations under certain model scenarios is confusing. Duke Energy recommends rewording this paragraph to clarify differences between model scenarios.

Comment 4, Page 9 (Table 2):

The table shows a majority of days for each of the modeled periods with modeled flow releases from Lake Tillery being equal to <u>or</u> below the seasonal continuous minimum flow requirements of 330 cubic feet per second (cfs) or 725 cfs. To highlight the impact of the IBT, the table should be revised to show only the number of days when the modeled flow release from Lake Tillery does <u>not</u> meet the minimum flow requirements since that is the most relevant factor. Including modeled flow releases when the exact minimum flow requirement is met represents periods of FERC license compliance and fails to distinguish between the days when flow requirements are being met and when they are not being met by the model.

Also, in the footnotes for Table 2, there does not appear to be any reason for designating daytime flows as being between 7:00 am and 7:00 pm.

Kim Nimmer Page 3 October 3, 2016

Comment 5, Page 16:

Please add "provided the appropriate water intake owner submits a complete and acceptable Lake Use Permit application to Duke Energy" to the end of the first partial sentence on the page.

Comment 6, Page 17 (Conditions 1 and 2):

Duke Energy recommends the EMC encourage Union County to consult with reservoir operators and other water users in the Yadkin-Pee Dee River Basin and incorporate appropriate input during development of its water conservation plan and drought management plan prior to submitting the plans to the Division of Water Resources. Such consultation could include opportunities to review and comment on the draft plans and should result in more effective and more broadly supported final plans. In fact, the newly formed Yadkin-Pee Dee Water Management Group may provide a very good setting for initiating those collaborative discussions.

Comment 7, Page 18 (Condition 6):

There is a reference to one or more "co-applicants" for the IBT Certificate. Please clarify if there are any co-applicants for this certificate and if so, they should be identified by name.

Duke Energy appreciates the opportunity to provide comments on the Draft IBT Certificate and looks forward to continued collaboration with stakeholders sharing the basin's water resources. Working collaboratively to develop water supply solutions is critical to the region's responsible growth and economic vitality.

Sincerely,

Jeffrey G. Lineberger, P.E. Director, Water Strategy and Hydro Licensing Duke Energy

cc: Ed Goscicki, P.E. (Union County Public Works) John Mullis (Town of Norwood, NC)

UNION COUNTY

DEPARTMENT OF PUBLIC WORKS

500 North Main Street, Suite 600, Monroe, NC 28112 Phone: (704)296-4210 • Fax: (704)296-4232



October 3, 2016

Dear Ms. Nimmer,

HDR and the Union County Public Works Department has collectively reviewed the Draft Union County IBT Certificate, as presented to the North Carolina Environmental Management Commission on July 14, 2016 and subsequently issued for public review and comment. Upon review of the Draft IBT Certificate, we have identified errors in the following items which we request be corrected in the Final IBT Certificate.

1) In Findings of Fact #1 on pages 2 & 3, the population numbers appear to be for the entire Union County service area (Catawba and Rocky River IBT Basins, combined) and the water demand numbers shown are just the Rocky River IBT Basin customers. Text on page 3 of the Draft IBT Petition stating water demand values should be updated and clarified to should correspond to those values shown in Table ES-1 of Union County's IBT Petition, dated April 29, 2016. The following provides a summary of the information which should be reflected in the Final IBT Certificate.

Year	System (C	County Water atawba and r IBT Basins)	Basin Servi	y Yadkin River ce Area Only er IBT Basin)
	Service Population	Water Demand (MGD, max. month avg.)	Service Population	Water Demand (MGD, max. month avg.
Current (2013)	117,271	13.76	52,550	5.7
Future (2050)	319,760	52.0	179,450	28.9

2) Throughout the Draft IBT Certificate, whenever the City of Monroe water purchase agreement with Union County is mentioned, it indicates Union County will be providing Monroe with water from its grandfathered Catawba IBT allowance. However, this is not accurate, as Union County's interconnection point with Monroe is physically located within the Catawba Basin. Water is supplied to this point from Union County's Catawba River Water Treatment Plant. Since Monroe owns the water transmission infrastructure from the interconnection point to its distribution system in the Rocky River Basin, Monroe technically owns this basin transfer, which is below the IBT statutory threshold. The Final IBT Certificate should be corrected to clarify this, indicating that Union County will be providing Monroe with water from its Catawba River Water Treatment Plant source to an interconnection point located within the Catawba River Basin. Union County appreciates your consideration of these comments.

Sincerely,

TH L 4 her (

Aubrey Lofton, PE Planning & Resource Management Division Director Union County Public Works



September 7, 2016

Ms. Kim Nimmer Division of Water Resources 1611 Mail Service Center Raleigh, North Carolina 27699-611

RE: Union County Inter-Basin Transfer Certificate Request

Dear Ms. Nimmer:

On behalf of the Stanly County Board of Commissioners, please allow this correspondence to express their concerns as it relates to Union County's request for a 23 million gallons per day (MGD) Inter-Basin Transfer (IBT) from the Yadkin River basin to the Rocky River sub-basin.

Multiple Stanly County municipalities have raw water intakes along the Yadkin River basin, and the Yadkin-Pee Dee is the County's sole water source. Based on Union County's final Environmental Impact Statement (EIS), the year 2050 water demand model (evaluated using the CHEOPS tool) suggests there will not be any adverse impact to lake levels or water withdrawals along the Yadkin River basin under normal conditions. However, the model does suggest there will be a minimal impact to Lake Tillery's lake level during conditions similar to the year 1999-2003 drought (referred to as the Drought 1 period in the EIS). Stanly County requests the 1% to 2% identified impact be quantified in feet so the impact is more transparent.

Thus, under similar drought conditions or in situations of more severe drought an adverse impact to lake levels is likely to occur. Significant variations in lake levels will impact property values and recreational opportunities. Please note, lake based tourism generates significant sales tax revenue for Stanly County.

Stanly County appreciates the regional approach to sharing natural resources, and it appears much of the analysis in the final EIS is reasonably supported. At the same time, it is unclear whether or not the year 2050 water demand model sufficiently addresses the potential basin wide residential and commercial growth in counties such as Stanly, Montgomery, Rowan and Davidson and the overall impact on water availability and demand.

Further, Stanly County believes it is important a comprehensive, independent analysis of the proposed IBT's water demand model conclusions be conducted to ensure the model's assumptions and data are accurate.

Stanly County understands and appreciates the benefits of the proposed IBT to both Union County and the Town of Norwood. At the same time, it is the Board's desire to make sure sufficient water resources will be available for our future growth and prosperity. Your kind review and consideration are appreciated. Thank you.

Andrew M. Lucas County Manager

P 704.986.3600F 704.986.3133

www.stanlycountync.gov County Manager's Office 1000 N. First Street, Suite 10A, Albemarle, NC 28001

From:	Sharon Mason <sharon@goldsgym.pro></sharon@goldsgym.pro>
Sent:	Tuesday, September 27, 2016 8:29 AM
То:	Nimmer, Kim
Subject:	UNION COUNTY INTERBASIN TRANSFER FROM LAKE TILLERY

Good Morning Ms. Nimmer....

I would like to join the growing number of Montgomery Residents opposing the Union County request for interbasin transfer of twenty three million gallons of water each day from Lake Tillery. My objection to this transfer is due to the fact that there has not been enough investigation such as a safe yield study to determine how much water can safely be pulled from the Yadkin. There should also be ample time granted for the formation of a stakeholder coalition. The fact that consideration is being given to grant such a large volume - - much larger than they consume every day, causes reason for concern. Are Montgomery County residents truly suppose to shoulder the responsibility for Union county's growth? There are more things to consider than a monetary budget when a county grows and Union should not be allowed to base their growth upon another county's resource. Like a household budget, Union County should be made to live within it's infrastructure budget using the resources currently available. And the City of Norwood should not expect to "grow" through monies received from selling resources that are not all theirs. While Montgomery County isn't growing in leaps and bounds, that hopefully won't always be the case. We have to know we'll have the resources to allow for that growth when the time comes.

My understanding is that FERC requires Lake Tillery maintain a minimum lake level. The transfer of this water will likely create an unnecessary burden on Badin and High Rock Lakes, since they would have to release more water to keep Tillery in compliance. I clearly recall having pity for the folks on High Rock literally having to "mow" under their boats and grassy fields growing hundreds of feet from the river's edge. Again, yet two other counties may have to be called in to support Union County's growth. Right now, I cannot see a fairness in this scenario.

Union County isn't asking for water because of a drought....there is absolutely *no reason* to rush into a decision at this point. A strong and accurate study using the most up-to-date hydrological models to determine the true impact of this transfer must be done before any decision is made to transfer this water.

Thank you for listening and hopefully a Montgomery County-favorable decision can be made. Sincerely, Sharon Mason 142 Forest Lake Court Mt. Gilead, NC

COUNTY OF MONTGOMERY

102 East Spring St. P.O. Box 425 Telephone: (910) 576-4221 Www.montgomerycountync.com

BOARD OF COMMISSIONERS Jim Matheny, Chairman Tripp Myrick, Vice Chairman Jackie Morris, Commissioner Anthony Copeland, Commissioner Mike Criscoe, Commissioner



OFFICERS Matthew Woodard Cou C.D. Crepps Fina Melissa F. Pipkin Reg Russell J. Hollers Cou Chris Watkins Shet Doshia F. Swaringen Cler

CERS County Manager Finance Director Register of Deeds County Attorney Sheriff Clerk to the Board

RESOLUTION BY THE MONTGOMERY COUNTY BOARD OF COMMISSIONERS IN OPPOSITION TO UNION COUNTY'S INTERBASIN TRANSFER OF TWENTY-THREE MILLION GALLONS OF WATER A DAY FROM LAKE TILLERY IN THE YADKIN PEE DEE BASIN.

WHEREAS, the Yadkin is the drinking water resource for the residents of Montgomery County and serves as a source for electric power, recreational activities, and an economic catalyst for the County;

WHEREAS, Union County has a pending application before the Environmental Management Commission to withdraw an amount of water from the Yadkin which is more than double the amount that is currently being consumed by Union County residents and which would extend their maximum capacity by four times their current consumption in order to meet the projected guadrupling of Union County's population by 2050;

WHEREAS, rapid urbanization of counties and communities around Charlotte and Wake County is detrimental to rural counties outside of the suburban arc and to remove resources from counties like Montgomery to feed uncontrolled growth in counties like Union is not in the best interest of any resident of North Carolina;

WHEREAS, controlled growth takes the development and the people to the places where the resources reside and not the resources to the people;

WHEREAS, almost one-half of the tax base in Montgomery County is on the three lakes formed from the Yadkin River and whereas the upper lakes, as part of the FERC licensing agreement, must suffer significant lake level drops in order to maintain stable levels in Lake Tillery, where Union County will make its withdrawal, the proposed transfer will only exacerbate the impact on the northern lakes and depress property values in the County;

WHEREAS, state officials and employees have admitted to Montgomery County that essential partnerships and studies have not been completed in order to ensure the interest of the Yadkin region is best served prior to making a ruling on the Union IBT request—including a "safe yield" evaluation to determine the maximum amounts of water which can be safely withdrawn from the Yadkin; State hydrological modeling of the Yadkin which is not scheduled until 2017 or beyond; the formation of a comprehensive Yadkin stakeholders organization to confirm the validity of local water supply plans and growth projections; and for the Union County produced CHEOPS modeling to be confirmed by independent analysis;

WHEREAS, Union County water rates for 5000 gallons per month are less than half of what Montgomery County charges its customers, and such rate inequities only illustrate the "haves and the have-nots" impact on rural counties not realizing rapid urbanization and the lack of prudent stewardship over an area that supposedly is without adequate water supply and should be encouraging conservation through higher rates;

WHEREAS, Montgomery County is not intolerant, supports controlled growth, and believes that the resources of the State belong to all of the people in the State;

BE IT THEREFORE RESOLVED, the Board of Montgomery County Commissioners is opposed to the granting of an interbasin transfer certification to Union County until the necessary stakeholder coalition is formed, the most up-to-date hydrological models are established by the State; a safe yield study is performed to determine maximum amounts of water which can safely be pulled from the Yadkin, and that with these actions performed, that no certification be granted in an amount exceeding the five million gallon per day IBT which was grandfathered to Union County from the Catawba Basin. A reasonable IBT from the Yadkin not to exceed five million gallons per day will allow for controlled growth in Union County, bringing their maximum capacity to more than two and one half times their current consumption. Montgomery County encourages all counties and municipalities bordering the Yadkin to join in this opposition and for all rural counties across the State to voice their concerns against over-urbanization which depletes the vitality of rural areas.

Adopted, this the 16th day of August, 2016.

MONTGOMERY COUNTY By: Montgomery County Board of Commissioners Chairman, Attest:

Doshia F. Swaringen, Clerk to the Board

From:	rmelton@triad.rr.com
Sent:	Thursday, August 25, 2016 3:38 PM
То:	DWR.IBT
Subject:	Union County Water Request

PLEASE..do not approve of this request..the citizens of Davidson County and High Rock Lake in particular have already seen the devastating effect of a major water draw down of the lake (s) as we saw in 2002...if Lake Tillery is drawn down to support Union County, High Rock will be drained to fill Lake Tillery..NO BODY CAN GUARANTEE that ammount of water will even be available next week, much less years down the road..High Rock Lake has paid it's dues over the years..it's time to leave it alone, let it and Davidson County prosper.

Thank you for your support and concern on this matter, Ron Melton 166 Davidson Heights Dr Winston Salem, NC 27107 336-784-6490

From:	dcm123@carolina.rr.com
Sent:	Tuesday, September 13, 2016 1:34 PM
То:	DWR.IBT
Subject:	EMC for Lake Tillery

Hi,

I have been a homeowner on Lake Tillery on the Montgomery County side since December 2014. We were not made aware of this water issue until a few days before the August 23rd, 2016 town meeting in Norwood, which I attended.

This water issue is very upsetting to us. We purchased our home with the intentions of having a home on the lake for recreational purposes plus, a home for our kids and grand kids to visit and enjoy all of what Lake Tillery has to offer. Also, we intend to retire here.

My problem is with the Impact Study, as it was ordered and paid for by Union County who is benefiting by this deal. It troubles me that citizens of our County were not informed in a timely manner so to have our own studies performed. The results presented at the town meeting, in my opinion, were biased results. Plus some speakers tried to make us believe there would be no effects to our water levels. If this were so, I do not believe we would even be discussing this issue.

If Union County has a water problem, maybe they should control their growth until another solution can be put into motion without hurting a rural area like Montgomery County.

Please stop this from happening to our lake.

Debbie Morehead 910-995-2900

From:	Kevin Morehead <kwm418@gmail.com></kwm418@gmail.com>
Sent:	Thursday, September 08, 2016 11:57 AM
То:	DWR.IBT
Subject:	Union county water???

I am Kevin Morehead, past and future property owner in Mt Gilead NC as of 10-10-2016. In my opinion, this entire matter has been some type of a political underhanded move. Who is responsible; I do not know. As this matter is becoming more well known, I and others are becoming increasingly aware of details that are otherwise not being disclosed to the general public

If Union county needs water, let them get it from a closer and bigger source ie: Catawba river, Lake Wylie, or Norman.

As with most things having to do with a government entity, I'm skeptical as to whether my comments will do any good, but at least, I am trying.

Respectfully, Kevin Morehead 910-894-2900

Transcription for Norwood public hearing – Union County IBT (8/23/2016)

Kevin Morehead – My name is Kevin Morehead, I live in Richmond County. I recently bought a house in Fairway Shores. I've been in the insurance business of 36 years. I hate to be a pessimist, but when you've dealt with the state of North Carolina as much as I have with insurance, it's hard to believe everything you hear from the government. I'm not saying they're lying or they're mis-doing the figures. I wish I was as prepared as the lady in pink, but the first I heard of this was three or four days ago when Fairway Shores notified us because we're members of the homeowners' association. I'm originally from Cleveland County. I sympathize with the gentleman from Lake Wylie because I was born and raised on Lake Wylie, fished it every week. I have compassion for those people who need water. But Stanly and Montgomery counties are rural counties. You've got Charlotte and Monroe that are growing like wildfire. And here's the last thing that I've got to say. If they need water, let them snatch it out of Lake Norman. We have 500 miles of shoreline here, Norman has thousands. They've got plenty of water up there, and it's closer, and it's downhill. Instead of pumping it from Norwood to Monroe, let it run downhill from Lake Norman. Thank you for your time.

From:Rachel Morrison <donrachelmorrison@twc.com>Sent:Monday, October 03, 2016 7:25 PMTo:Nimmer, KimSubject:Lake Tillery water transfer

As the owner of a Lake Tillery water front home I am totally against withdrawing 23,000,000 gallons of water from our lake every day. I'm told this will lower our water level <2"/day. If this water is not replaced the water level will be ~18" lower in 9 days & we won't be able to lower our boat into the water. I know this is a Norwood project. The boundaries' of Norwood include only a small part of the lake. This draw down will affect everyone owning property on both sides of this 115 mi. long lake.

Please consider the property owners. If we lose our water depth we lose our current property value.

Don & Rachel Morrison 17256 Randalls Ferry Rd Norwood, NC 28128

Transcription for Monroe public hearing – Union County IBT (9/1/2016)

Councilman John Mullis – I'll be brief; I didn't prepare any notes. I just wanted to say that this process began when the Town of Norwood passed a Resolution, I believe it was in May of 2013. A lot of time has passed since then and a lot of research has been done. The Norwood Town Council is completely behind this project and supports it. I think as some of our river experts just alluded to, this is a wonderful balancing act for our environment. Three of our commissioners live on the lake, one has made his living on the lake his entire life. Water level is our number one concern. It's our economic property tax base. If we had serious concerns about the effectiveness of the modeling, we would have spoken up already. We've taken a look at it, we're not hydrological experts, but we do trust the modeling. We're very impressed. I've tried to get through most of the 800 pages, and believe it or not I've flipped through about everything. The draft statement that was released, July draft Union County IBT certificate, if you'll begin with page 7, it basically says no impact, and that will start drawing your attention to the droughts that were considered over the period of time. I'll take you back to the chart that was up there a while ago, when you saw more blue than red. At the end of the day, I really think this is, you know Union County is blessed to have growth. We don't have that growth but we have a resource. The water does belong to the people; it belongs to everyone. Norwood just happens to have the access point, we're not selling water, we just have the access point. The Town Commissioners' feelings are very strong that it's pretty apparent that Union is going to have a need in a real short order. We think the engineering has been done for the best method. A couple other things, if you'll go back to the nine findings of fact, the reasonableness and necessary. I think Union County needs this water, I think they've looked at all the methods of getting it and I think they've picked the absolute right one. So, the Town of Norwood stands as a strong partner in favor of this. Thank you.

Kim Nimmer Division of Water Resources 1611 Mail Service Center Raleigh, NC 27699-1611

9/30/16

Dear Ms. Nimmer,

I would like to express support for Union County's Yadkin Regional Water Supply project IBT certificate request.

Union County has completed an extensive Environmental Impact Statement that included review of numerous alternatives and the most robust water quantity modeling effort ever completed in the Yadkin River basin. The modeling effort concludes that even with the proposed water transfer, lake levels will remain virtually unchanged the vast majority of time and during the worst drought on record, lake levels will remain above Duke Energy's normal minimum elevations.

Additionally, the IBT fulfills Union County's current and future water needs while reducing stress on the Catawba basin. By utilizing the Yadkin basin, although a more costly alternative, Union county is sending a clear message that environmental balancing is important. The Yadkin basin being the second largest river basin in NC has the capacity to provide for the needs of Union county and with very minimal almost non-existent environmental impact. That is a big win for humanity.

When one considers that the need for water will never diminish, Union county has put forth a quality plan with their IBT request. The positives are such that future IBT requests will probably never be so obvious with regards to environmental impact. Union has raised the bar with regards to how IBT's should be completed. Simply put, Union county has submitted a model for future IBT's.

As a business leader and stakeholder in Stanly County, I fully support this project and recommend that it move forward. This project is important for the future of Union county, its citizens, job creation and Union county's ability to provide a long-term, sustainable water supply source.

Union County, the Town of Norwood, our local business community and its citizens support this project. I respectfully request that the EMC move to approve Union County's IBT certificate.

Please contact me if I can be of assistance or provide more information on the Yadkin Regional Water Supply project.

Sincerely, John Mullis 330 Island Cove Rd Norwood, NC 28128

From:	Jim Myrick <jmyrick10@triad.rr.com></jmyrick10@triad.rr.com>
Sent:	Wednesday, September 14, 2016 5:35 PM
То:	DWR.IBT
Subject:	Lake Tillery

To Kim Nimmer

As discussed, we are concerned about Union County getting a license to pull 23M gallons of water per day from Lake Tillery.

Other factors include Rockingham lawsuit (requesting more water to Blewitt), new water line to Concord in Tuckertown reserve

Additional water being used locally, hydrodam activity at all lakes, extreme drought conditions, or naturally low levels. The only town in Stanly or Montgomery County to benefit from our loss is Norwood. Duke Energy gets paid on a generating cost basis.

I am an owner at Lake Tillery and do real estate appraising at all the lakes. Some of the houses in the coves cannot get their boats

out if he water level is 1 to 2 feet below standard levels. Property values are affected if the property is no accessible to the lake.

If water levels fluctuate lower, wildlife habitats change, shoreline changes, seawalls deteriorate, and real estate values plunge lower.

Water resource is a valuable commodity and we must protect it and other resources from profiteers.

Thanks for all you do to prevent massive real estate losses and environmental damages.

Jim Myrick Sent from Mail for Windows 10



Uwharrie Point Community Association

August 19, 2016

Ms. Kim Nimmer Division of Water Resources 1611 Mail Service Center Raleigh, NC 27699-1611

Dear Ms. Nimmer,

I am writing to you as President of the Uwharrie Point Community Association. We represent the interests of the owners of over 500 properties on the Uwharrie Point Peninsula at Badin Lake. We are opposed to the proposed transfer of water by Union County from the Yadkin River IBT basin to the Rocky River IBT basin.

Our opposition is based upon the following:

- While the proposed transfer of 23 million gallons of water per day may seem minor based upon normal streamflow and discharge from the reservoirs above Lake Tillery, we are most concerned about the periods of severe and extreme drought when streamflows are dramatically reduced. We have experienced those conditions several times over the last decade. Lake levels drop significantly and this, in turn, has a detrimental impact on the eco-system. Requiring release of an additional 23 million gallons of water per day downstream during these drought conditions would only further exacerbate the problems upstream from Lake Tillery.
- Montgomery County will eventually need more water to support economic growth in our county which today is one of the poorest in the state. While it is impossible to quantify that need right now, taking our water away to support uncontrolled growth in other counties does not seem fair. Once water is committed to Union County, we will never be able to stop or even reduce it at any time in the future.
- It is unclear from your public notice, but it appears that Union County can transfer the full amount of its projected 2050 needs as soon as approval is received and the infrastructure is complete to accomplish the transfer. If a transfer is approved, at a minimum, we believe that there should be a slow ramp up of what they are allowed to transfer from the actual start date until 2050. While they may say they will only take the water they actually need each year, what will prevent them from selling "excess" water to another county in need?

We respectfully request you thoroughly and carefully consider these and other concerns brought forward before you approve this request.

Sincerely, BANACHAR IN

Mark Nicholls President, Uwharrie Point Community Association

1520 Uwharrie Point Parkway, Badin Lake, NC 28127, 336-461-5344 www.uwharriepoint.org E-mail: upca@rtmc.net Gate House: 336-461-4502 FAX: 336-461-3503

Transcription for Monroe public hearing – Union County IBT (9/1/2016)

Patrick Niland – My name is Patrick Niland, and I am the Town Manager for the Town of Wingate. Wingate is one of three municipalities within Union County that provides maintenance on our own distribution lines. While we provide maintenance, we do purchase water from Union County. Wingate is home to about 2,000 full time residents and 1,600 university students. Wingate University has seen a great deal of growth recently in both its undergraduate programs and professional graduate degrees. While Union County as a whole has seen a great deal of growth, eastern Union County is still considered fairly rural. We struggle with a lot of the same issues that rural communities do. We support this project and feel it would benefit eastern Union County by giving us the assurance that when we pursue economic development activities, that an inadequate water supply isn't an issue we'll have to face. We feel that the Environmental Impact Statement that has been completed, that these transfers will be conducted in a responsible manner. Thank you for the opportunity to speak here tonight.

From:	Dave Nowakowski <davenowakowski@yahoo.com></davenowakowski@yahoo.com>
Sent:	Monday, September 26, 2016 11:55 AM
То:	Nimmer, Kim
Cc:	DWR.IBT@ncdenr.go
Subject:	Union County Water deal

Dear EMC,

I wanted to show my concern about this Union County water deal. I feel the local community was blindsided by this and Union County has purposely left Montgomery County in the dark which is the area that will be impacted the most. Here are some of my concerns and would be interested in getting some clarity on the following topics.

1. Kim Nimmers had presented a summary of the Impact study but I haven't been able to find a actual study.

- a. Is that available to the public and if so, where can i find that?
- b. Does the study include the impact of the recently finished Concord/Kannapilas water line into the Yadkin?
- c. Does the study include the new contract between Duke Energy and the state to allow them to discharge additional water down their hydro-dams and out of Tillery?

2. Even though this year has been a decent year for rainfall on average Badin was down 3-4ft, High Rock was down 4ft and Tuckertown 2ft. At the same time Wylie, Mountain Island and Norman had encountered less of an impact. Would the EMC consider recommending Union County pull water from the larger, less impacted lakes?

3. Please understand that Montgomery County isn't blessed with the Revenue and growth that Union County is experiencing and one of the only assets we have is the Lakes. As we start to over utilize it's capacity, people are going to start migrating back to other lakes that are more stable. This will affect property values and small business which rely on the lake for income. I guess what I'm getting at is we have a lot more to loss them most county's.

4. Lake Tillery is already heavily used as a water supply for several surrounding county. From what I understand Tillery is also used as a reserve to keep the salt water out of the Georgetown bays which has heavy industry (steel mills and paper companies). That being said, it's import we protect industry down stream and not over utilize the Yadkin Valley Rivers. The amount being sent down stream is roughly 2300 gallons and that has recently increased do to Duke Power getting permission to push more water through the hydro-dams.

Summary

Please consider recommending Union County increase water consumption from existing sources so we can protect the Yakin Valley from additional over use.

Thank you and I look forward in hearing,

Dave Nowakowski 7049658518

Transcription for Norwood public hearing – Union County IBT (8/23/2016)

David Nowakowski – I think most of the people here covered what I had concerns with but there's a few additional things that weren't brought up tonight that I think is crucial, and that's our water supply. From what I understand, we pay almost double what Union County pays for water, and we're not very wealthy and we're definitely paying higher utilities than most. So, it probably does need to considered how we can grow our future water supply and quality water too. We're constantly turning in our water supply to the water company because it's constantly cloudy and it's broken. If we start pulling water for our county and maybe other local counties, at that point the impact study maybe a lot different. And I also want to say the High Rock, if you look strictly at Lake Tillery yes we had pretty good lake levels. I have family that lives up at High Rock, and every summer we used to build out additional platforms so we could get closer to the water, because it was constantly going down. So you may look at the lake levels here, but upstream they are hurting. If we continue to replenish what we have here, and from what I understand there is a lawsuit with Rockingham County and Duke Energy for them to supply more water downstream. So, there are a lot of other things, and I have confidence in the EMC that they will do the due diligence to find that information. But it is concerning. Thank you.

LETTER PROTESTING THE TRANSFER OF WATER FROM LAKE TILLERY TO UNION COUNTY

Edward Peurifoy 710 Burrage Road Concord, NC 28025 Sept. 22, 2916

North Carolina Department of Environmental Quality c/o Ms. Kim Nimmer

Dear Ms. Nimmer,

Thank you for speaking with me the other day over the phone. I know you are a busy person and I appreciate the time you gave me. This is my letter protesting the transfer of 11 million and up to 23 million gallons of water per day from Lake Tillery to Union County. I am against this transfer for the following reasons:

This loss of water will be a detriment to the wetlands around the lake and downstream.

- 1. The loss of this water will change the nature of the brackish water on the coast and will adversely affect the sea life that depends upon brackish water.
- 2. Duke Power Progress Energy has started a program to reintroduce American Shad to Lake Tillery and its tributaries. The loss of this water could jeopardize this project.
- 3. We already have a number of towns taking water out of the Yadkin-Pee Dee River. The water needs of these towns will be increasing over time and we do not need to be adding additional areas. There is a point at which you have to say no. Let me remind you that the Colorado River no longer reaches the Pacific Ocean because of the overuse of its water.
- 4. There are many homes around the lake that would not be there were it not for the lake and the wonderful quality of the lake. Norwood and Stanley County collect taxes from these homes. Those tax revenues depend upon the value of these homes . If the value of these homes goes down because the lake level goes down then the tax revenues from these homes will also drop. No one is going to buy a home, or build a new home, or even improve an existing home in an area that they know that at a future date they cannot sell that home. The leaders of Norwood and Stanley County need to think long and hard about this.
- 5. When the resources of a rural area are sold off to an urban area so that urban area can continue to grow then the urban area grows at the expense of the rural area's growth.
- 6. Union County would have us believe that the water level of the Yadkin-Pee Dee River and Lake Tillery would be "minor to the point of being difficult to determine by observation". They even hired "experts" to come and study the Yadkin-Pee Dee and Lake Tillery to determine what effect this transfer of water would have on the water levels. It is interesting that these "experts" who were hired and paid by Union County, who wants the water, came to the exact conclusion that Union County wanted to hear. If you believe that the extraction of 11 million and up to 23 million gallons of water per day will not affect the water level of the Yadkin –Pee Dee River and Lake Tillery and that you will not be able "to determine it by visual observation" the water level, then I have a bridge in Brooklyn that I will be glad to sell to you.
- 7. Is Union County going to compensate home owners for the lost of value in our homes or pay for new boat docks that will be needed to adjust to the LOWER lake level? I don't think so.

Sincerely yours, Edward Peurifoy Kristin Peurifoy

IBT Public Comment: Sept 1, 2016

Monroe hearing 9/1/12

My name is Chris Platé and I am the Executive Director of Monroe-Union County Economic Development

I would like speak in favor of the IBT request by Union County.

- FIRST, This request is about providing a long-term, safe source of drinking water for our Citizens; and the economic opportunities enabled by this resource, benefiting the shared labor shed that covers many counties within this region.
- SECOND, Union County is a leader in NC for seeking regional solutions for common issues-From economic development, and water or wastewater, to long-range planning and energy resources. These solutions result in partnerships that benefit the entire region through dividing costs and generating greater benefit than those initiatives by communities that act alone. This collaboration with the Town of Norwood will also provide a beneficial solution with little impact.
- THIRD, This request comes only after Union County has instituted significant water use restrictions in order to preserve and extend our valuable resource.

Since 2000, Union County has consistently been ranked as one of the Top 50 fastest growing counties in the US. In fact, it has been ranked as high as #7 nationally in that timeframe.

We have also been ranked in the Top 10 Nationally for job creation and #1/#9 respectively in North Carolina for incoming investment over the last 2 years.

Union County does not have a major water source within its boundaries; therefore, It is imperative that we achieve the IBT certificate, otherwise the ability to continue to provide our citizens safe drinking water and support the current and future regional career opportunities could be in serious jeopardy.

Allow me to provide some data on the shared labor shed I mentioned earlier. Today, my office tracks and provides services to 171 manufacturing, logistics and commercial businesses. These companies employ over 15,000 people generating \$0.5 Billion in salary to the economy. Only 51% of those people live within Union County's borders, so you can see how allowing Union County's businesses to sustain and grow by granting this IBT request, keeps the region healthy and strong.

Having said all that I am a Union County resident and its chief business recruiter... I can attest both personally and professionally that this project is vital to the long-term civilian and economic health of Union County and the greater Charlotte Region.

From:	Deborah Poole <dpoole5@carolina.rr.com></dpoole5@carolina.rr.com>
Sent:	Sunday, September 25, 2016 8:11 PM
То:	Nimmer, Kim
Subject:	Montgomery County Resolution
Attachments:	Montgomery Co. Union Co. resolution.pdf

We are 100% opposed to the interbasin water transfer from Lake Tillery/Norwood to Union County and support the attached opposition. Please do everything in your power to stop this and please consider all the facts and impacts.

Alvin & Deborah Poole 170 Forest Lake Court Mt. Gilead, NC 27306 336 302 3398

From: Sent: To:	Powers, Sherri T <sherri.t.powers@chemours.com> Friday, August 26, 2016 2:54 PM DWR.IBT</sherri.t.powers@chemours.com>
Subject:	Norwood/Union County Water Inter-basin Plan
Importance:	High

To Whom It May Concern:

I Sherri T. & John K Powers are extremely concerned about the decision by Norwood to supply 23mil gal/day water to Union County from Lake Tillery. We have a home in a community adjacent to Lake Tillery. We feel that the impact study used for decision making was biased. If the water levels fluctuate to much it could cause difficulty getting into and out of the Lagoon Boat storage area and coves of the community. This could in turn cause property values to decrease.

We feel that a new impact study needs to be completed by a 3rd party that has no interconnection with the plan.

The certificate/permits to continue this project need to be delayed until the impact study and findings are complete.

Thanks for your time.



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From:	Craig Reich < craigreich0@gmail.com>
Sent:	Tuesday, September 13, 2016 12:45 PM
То:	Nimmer, Kim
Cc:	Patricia and Earl Trulove
Subject:	Interbasin Transfer, ref Lake Tillery

Dear Kim, I am writing this email to express our opposition to the proposed transfer of water from Lake Tillery to Union County. As property owners on Lake Tillery from the Norwood side this opposition is based on the following concerns:

1. Notifications/transparency of discussions to be held on Aug 23rd. Was not advertised in local Newspaper for residents to be aware, understand it was in the Charlotte Observer, might as well been in the TheYork Times as in affects local residents. There has been a lack of proper notification and transparency.

2. Only one study to date regarding water level affect over time span of the agreement, sponsored and performed by Union Co., one of the beneficiary parties to this agreement. This study lacks many probable variables which may affect lake levels going forward such as; drought, residential/business development along the Yakin basin which water would be required to support this growth.

3. The recent opposition voice by Stanly County Commissioners, and their request for a more thorough study performed by an independent agency.

4. As former residents of the State of California for 25 years, we have experienced first hand the shortages of water and the impact of daily living.

5. If water levels decline, so do property values. We have retired and invested in our home on Lake Tillery, unless the Town of Norwood and those parties in favor to this agreement are in a position to guarantee in writing these present values with dollars penalties if lake levels have a negative affect on the same, then their studies and evidence have no basis.

6. Water is and will continue to be our most precious resource, there are a number of articles and books published which predict wars in the future will be fought over water. We as a developing society must learn to live within our means, If Union County continues to sponor growth then they must find those resources within their County to support their own requirements. If certain resources are not available they must limit the plans, not depend on others to supplement their needs.

7. If the Town of Norwood is to exist, it needs a FULL Lake Tillery, not a pumping station and monthly Union County dollars for water.

Respectfully submitted, Craig and Charlotte Reich 10809 Willow Oak Road Norwood 28128

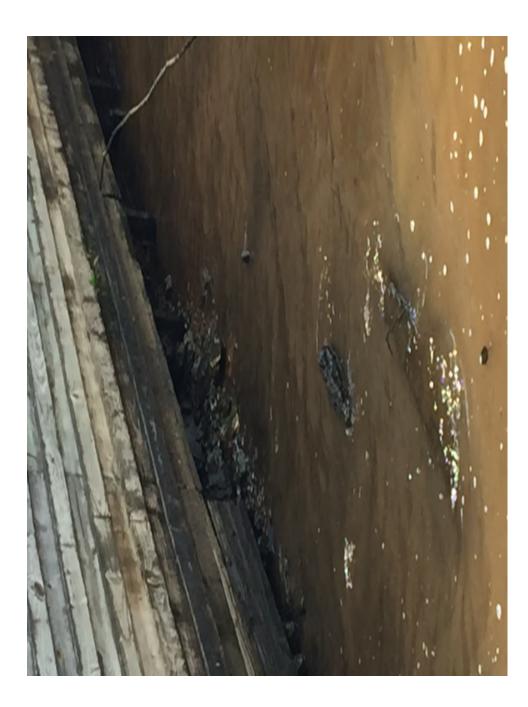
From:	dwritchie@windstream.net
Sent:	Thursday, August 25, 2016 4:54 PM
То:	DWR.IBT
Subject:	Re: FW: Lake Tillery - Union County IBT

I have lived on Lake Tillery since 1992 and have enjoyed boating on the lake my entire life (I am 68 years old). It is very important to me and lots of other people for the lake level to remain near full pond at all times. I would like to express my displeasure with the proposal to send 25 million gallons of water per day to Union County and any other withdrawals that would affect our water level. It is just wrong on so many levels.

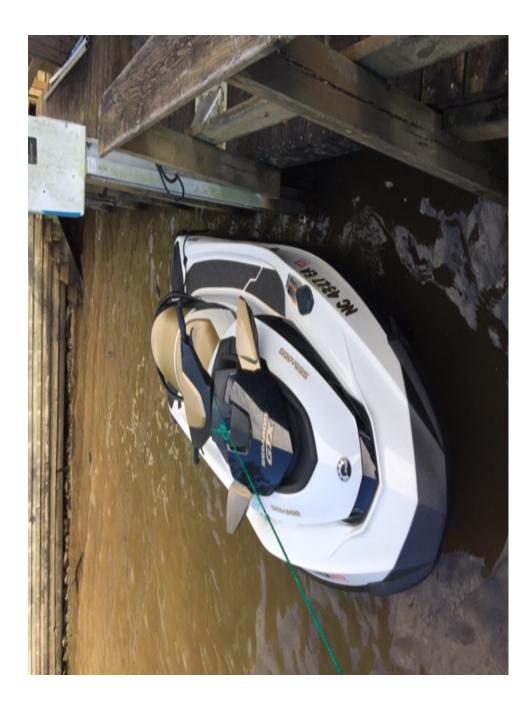
From:	Michelle Roberson <michelleroberson@icloud.com></michelleroberson@icloud.com>
Sent:	Sunday, September 04, 2016 8:47 AM
То:	Nimmer, Kim; DWR.IBT
Subject:	Tillery

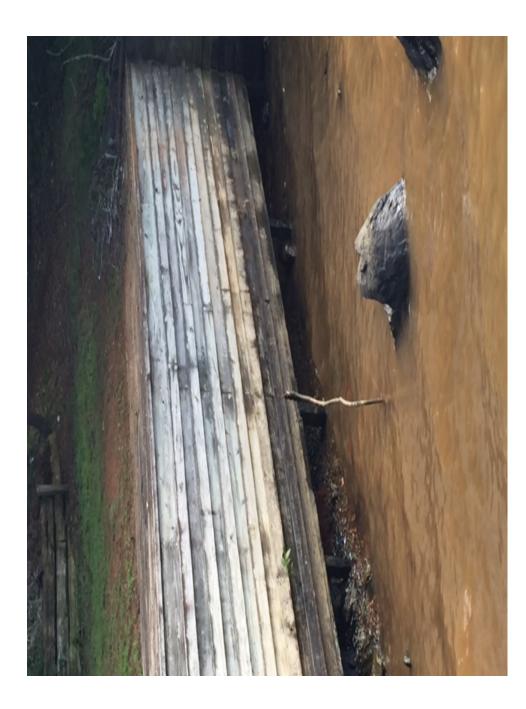
To Whom It May Concern:

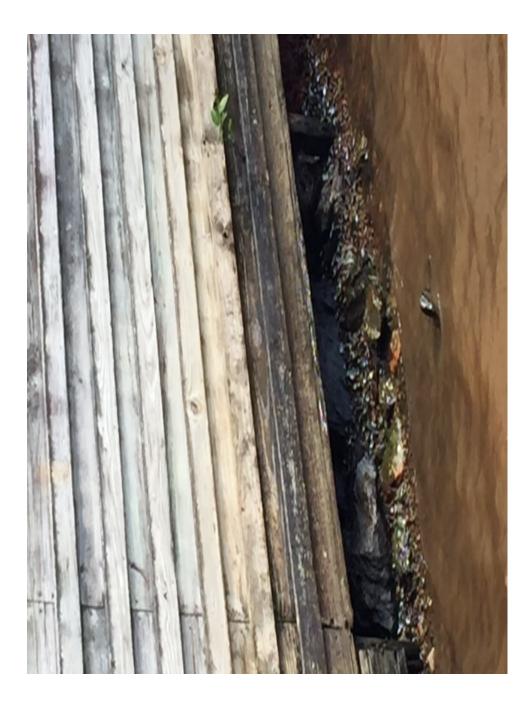
My family came to enjoy a long Labor Day weekend at Lake Tillery this weekend. We had to put one of our jetskis in the water that had been serviced. When we got to our dock, we lowered the jetski lift all the way to the bottom and we still could not get the jetski on the lift because the water level was so low. We then tried to take our boat out and, again, lowered the lift till it hit bottom and we could not get our boat off the lift because of the low water level. As you can see from attached pictures, thewater level was at least 2 feet lower than normal. If it is this bad already, I cannot imagine what it will be like if Union County is allowed to drain water from Tillery to sell. Please do not allow this to happen as it then makes having a lake house worthless. We love Lake Tillery and want to keep it the way it is for generations to come to enjoy it.











Respectfully,

Michelle Roberson

From:	KIM.ROBERTSON@comcast.net
Sent:	Wednesday, September 28, 2016 7:48 AM
То:	Nimmer, Kim
Subject:	Lake Tillery water sale to Union county

Good Morning,

My name is Kim Robertson. My husband and I are homeowners on Lake Tillery. It has come to my attention that an inter-basin transfer from Lake Tillery to Union county is being planned. We are new homeowners as we purchased property in 2014. Our home was completed in 2015. We currently reside out of state and had no knowledge of this transaction. I learned of this IBT by happenstance.

Many homeowners/property owners at Lake Tillery do not reside there permanently and do not subscribe to local papers. I am told that notices were placed in newspapers to inform the public about hearings on this matter. I feel all property owners should have been mailed information about this process. How can our voices be heard if we have no knowledge of the contract? This matter directly affects our property values. Also, the river basin that feeds Lake Tillery is being used to sustain property development that Union county obviously does not have the resources to support. I feel limiting development to match local resources should be the first consideration instead of building and then figuring out resources.

I am opposed to this water sale.

Thank you for the opportunity to express my views.

Kim Robertson

From:	Rebecca Rogers <rebeccarogers@goodyear.com></rebeccarogers@goodyear.com>
Sent:	Tuesday, September 27, 2016 3:45 PM
То:	DWR.IBT
Subject:	Very concerned about water levels at lake Tillery and the new deal with union county

I am a property owner at Lake Tillery and I am very concerned that enough research has not been done on the deal with giving union county water from our lake. Union County is not trying to conserve water or build their on reservoir. Is there any indication of Union county submitting a plan for water preservation?

I feel that there needs to be addition studies on the impact of the new contract that duke energy signed with the state to allow then to generate more hydroelectricity through the lower dams. Water levels are down at Badin and High Rock, and tuckertown even though rainfall has been decent this year. What kind of impact will there be when there is a drought year if Union County is allow to get water with no preservation plan or water reservoir?

Please, if nothing else, do this as a temporary solution that will be under study with a dead line of a year or two to see the impact before you sign something that can not be reversed and can cause devastating results.

Becky Rogers - Office Manager Location #220 Goodyear Commercial Tire & Service Centers 1405 Jake Alexander Blvd. West Salisbury, NC 28147 Phone 704-633-0531 / Fax 704-633-3170

From:Gay Russell <grrussell@embarqmail.com>Sent:Friday, September 16, 2016 1:13 PMTo:Nimmer, KimSubject:Water transfer

I strongly oppose water transfer from Lake Tillery to Union County. I also mention that my faith in this governor's administration has been deeply eroded because of non-notification postings in Montgomery County and Stanly County newspapers. I am rethinking my November ballot votes for his continued governance. Gay R. Russell

Sent from my iPhone



RICHMOND COUNTY BOARD OF COMMISSIONERS

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September 20, 2016

Ms. Kim Nimmer Division of Water Resources 1611 Mail Service Center Raleigh, NC 27699-1611

Dear Ms. Nimmer,

On Tuesday, September 6, 2016 the Richmond County Board of Commissioners unanimously voted to oppose the Union County proposed 23 MGD transfer from the Yadkin Basin to the Catawba Basin. The Richmond County Board of Commissioners respectively request the NC Environmental Management Commission to delay their decision until the following items can be completed and properly reviewed.

- 1) Yadkin basin hydrology study is done to determine safe yield.
- 2) An independent assessment is done of Union County's projected growth through 2050 (our concern is that letting Union County line jump here encourages municipalities to inflate their forecasts just to secure water down the road. A coordinated planning process would alleviate that).
- 3) Completion of an assimilative capacity study of the receiving basin to determine its future wastewater effluent handling capacity and the impact the proposed transfer may have on it.

I will ask the Commission to delay their decision until this critical information is available in order to make a better informed decision about the resource and current /future impacts on users like Richmond County and all other systems along the Yadkin/Pee Dee River basin.

Sincerely,

Ahl le

G. Richard Sago II, PE, CEcD County Manager

Transcription for Wadesboro public hearing – Union County IBT (8/24/2016)

Dan Samples - My name is Dan Samples. I live in a house on Lake Tillery. All the charts and all that stuff are real nice, but I don't feel much reassurance from all that because things happen and you come back and say well that's too bad, we missed it. Anyway, I appreciate the effort and coming here to hear us. Like I said, I live on Lake Tillery and I'm not a real environmentalist, I'm not political or anything else, but I've always been opposed to this IBT stuff. I've never liked it. I don't think it's good environmental policy. So mainly for that reason I'm opposed to this and taking 23 million gallons a day out of Lake Tillery, there's no way that lake level is going to maintain the way it is right now. Duke Progress has done a really good job over the time I've been here keeping that lake level fairly close. But that's a lot of water to send out and the IBT makes it even worse. As a citizen I'm against this kind of stuff going on. I hope you delay the vote on this until a later time when we can get more studies put into it. I was shocked when I read in the paper the other day that this was even going on. I don't know how much the public really knows about it. Thank you very much.

9/29/2016

Sharon L. Samples 3400 Beechmint Dr. Mint Hill, N.C. 28227

Ms. Kim Nimmer North Carolina Division of Water Quality Resources 1611 Mall Service Center Raleigh, N.C. 27699-1611

To the North Carolina Management Commission:

I would ask you please to reconsider the InterBasis Transfer agreement between the town of Norwood, N.C., and Union County. This agreement would transfer 23 million gallons of water per day to be redirected from the Yadkin River Basin to the Rocky River Basin.

This action would have harmful effects on Lake Tillery and the property owners who live there in that the levels of the lake would fluctuate dramatically.

Do the residents of Norwood and surrounding areas know of this proposal? Have impact studies been done? Has the Army Corps of Engineers examined this proposal and the effects it will have on the lakes and rivers included in the areas of this proposal?

This is a fifty-year agreement. When unanticipated harm occurs, there will be no recourse until the fifty-year time span has elapsed. The population of Union County is expected to increase for the foreseeable future. Rather than taking away a valuable resource from the town of Norwood, should Union County itself not be required to impose a moratorium on growth within its own borders? Should Union County not be required to institute water conservation measures of its own citizens?

Please reconsider passing this InterBasis Transfer agreement. It will only harm the delicate environment around Norwood, Lake Tillery, and the surrounding water system.

Respectfully,

Sharon Samples

Sharen Samples



DIVISION OF WATER RESOLACES

and the second s



Yadkin Riverkeeper 846 W 4th St. Winston-Salem, NC 27101

Phone : 336-722-4949 www.yadkinriverkeeper.org

Ms. Kim Nimmer Interbasin Transfer Program Coordinator NC Division of Water Resources 1611 Mail Service Center Raleigh, North Carolina 27699-1611

Re: Draft Determination to Grant Interbasin Transfer Certificate to Union County Public Works Water System

Dear Ms. Nimmer,

Find below comments on behalf of Yadkin Riverkeeper and NC Conservation Network on the proposed Union County Interbasin Certificate.

Yadkin Riverkeeper is a 501c3 organization based out of Winston-Salem, NC with over 300 members across the Yadkin Pee Dee River Basin and country, including members who live and recreate in both the source and receiving basins of the proposed Interbasin Transfer from Norwood on Lake Tillery to Union County. Yadkin Riverkeeper requests that the Commission deny the reject the proposed certificate for the reasons outlined below, or, in alternative, it attach conditions to the certificate addressing these concerns.

The NC Conservation Network (NCCN) is a state-level advocacy group working in partnership with 70 affiliate organizations and over 150,000 supporters to protect public health

and the environment across North Carolina. Our supporters include residents who swim, fish, and boat on Lake Tillery and the streams of the Yadkin basin generally, and will be affected by this proposed interbasin transfer.

Together, we oppose the Environmental Management Commission's (EMC) July, 2016 draft determination to grant an interbasin transfer certificate to Union County Public Works Water System to permit the transfer of up to 23,000,000 gallons of water per day from Lake Tillery in the Yadkin River Basin to the Rocky River Basin. We urge the Commission deny the certificate or in alternative, limit the IBT amount to 5 MGD with any increase conditional on measures detailed below.

Statute mandates that the Commission consider the following factors before granting the proposed IBT certificate to transfer water between Norwood on Lake Tillery and Union County in the Rocky River watershed:

1. Necessity, reasonable and proposed uses

Yadkin Riverkeeper requests that the Commission require Union County to finance the re-examination of the certificate's necessity by a consultant to be agreed upon in consultation with members of the source and receiving basin subject to the Commission's approval. To our knowledge, no true third party analysis of Union County's projected growth numbers exists. This fundamentally flawed methodology encourages localities to nudge upward their growth projections in order to secure valuable water rights. Without such an analysis which includes an examination of "reasonable alternatives" including water efficiency measures and potable reuse the actual necessity of the proposed transfer can not be evaluated as the statute requires.

We propose that the Commission reject the certificate unless Union County is willing to submit its growth and water demand projections to rigorous, independent third party analysis by a consultant chosen by the consensus of the source basin municipalities. Several of these municipalities have already passed resolutions in opposition to the proposed transfer and, in the interest of avoiding litigation, the Riverkeeper maintains that the time and money put into the present analysis could be best preserved by submitting to such an independent review.

Until such a study is conducted, the current evaluation of "reasonable use" is plainly too narrow to meet the statutory mandate. A defensible analysis, meant to protect the taxpayers of Union County as well as source and receiving basin stakeholders, should analyze a range of projected demand targets. It may well be that an optimal alternative, with all impacts considered, involves a smaller volume of transferred water combined with greater water use efficiency measures and direct potable reuse.

We request that the commission, should it approve the certificate, do so for now more than five million gallons, with any future increase to be predicated upon the satisfaction of an independent review of Union County's projected demand numbers, Union County's attainment of water efficiency measures as shall be deemed appropriate by the commission and a third party analysis of projected flows and demands in the source and receiving basins. To grant the certificate as written is simply to write a blank check which would tie the hands of the state to protect the needs of other users in the Yadkin Pee Dee watershed for a generation to come.

2. Present and reasonably foreseeable detrimental effects on the source basin

If the past is any indication, we can expect further growth and development in the watershed of Lake Tillery to contribute to a historical pattern of increased impairment in this drinking water reservoir. Yadkin Riverkeeper requests that the Commission investigate the possibility of upgrading the watershed protection for Lake Tillery from WS-IV to WS-III to prevent reasonably foreseeable detrimental effects to the source basin.

Lake Tillery is a reservoir located west of the Uwharrie National Forest which straddles Stanly and Montgomery county, North Carolina (Figure 1). It is classified as a WS-IV; B; CA water body which is defined as a moderate to high density public water supply source by the Department of Water Resources (DWR) and is additionally used for secondary recreational purposes. The reservoir has approximately 118 miles of shoreline, and is primarily surrounded by forests (Progress Energy Carolinas 2011). The Lake Tillery Watershed at the tenth hydrologic unit level is 7.53 percent developed with the approximate equivalent density of one dwelling per two acres. It's half-mile critical area is just a bit higher with 8.33 percent developed cover (Figure 2).

Both of these statistics far below the low density classification option for a WS-IV waterbody which allows 24 percent built upon area within the critical area and surrounding watershed. In fact, Lake Tillery's density is well within the allowable density parameters set by WS-III level water bodies, and has comprable density (calculated from percent developed land cover) to some WS-III water bodies, such as the Kings Mountain Reservoir, also known as Moss Lake, in the Buffalo Creek watershed (Figure 1 and 2). Both water bodies are important drinking water supply sources yet Lake Tillery was given a "higher" score on susceptibility for contamination by the SWAP (Source Water Assessment Program) conducted by the EPA in their 2014 Annual Water Quality Report.

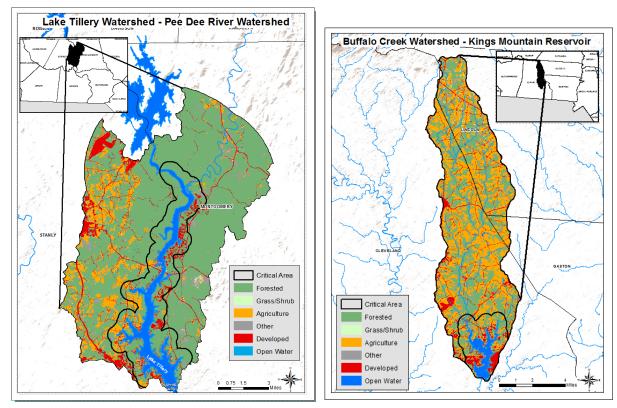


Figure 1.

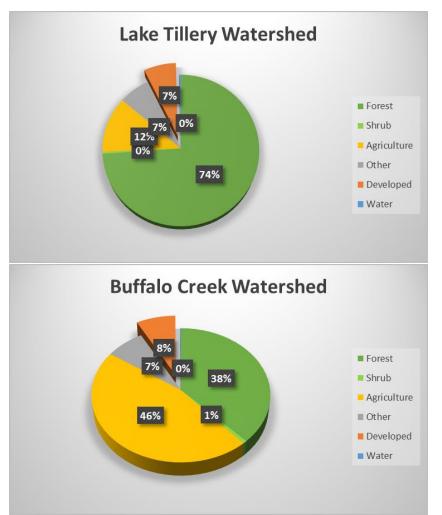


Figure 2: Lake Tillery watershed percent land cover type versus Buffalo Creek watershed produced from USGS GAP National Land Cover Database

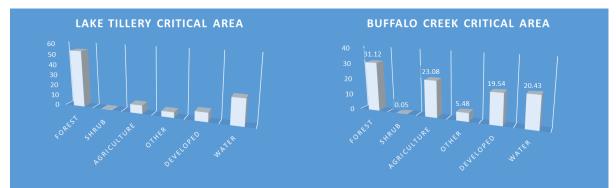


Figure 3: Lake Tillery half mile critical area land cover type percent versus Buffalo Creek (Kings Mountain Reservoir) half mile critical area produced from USGS GAP National Land Cover Database)

Lake Tillery would benefit from being reclassified as a WS-III water body, which by definition are HQW (High Quality Waters) along with WS-I and WS-II, and must therefore meet water quality standards enforced by the Environmental Mangement Commission (15A NCAC 18C .0710). WS-III class waters therefore merit greater protective measures than WS-IV.

Discrepancies between class WS-IV and WS-III water protection measures include differences in the amount and source of wastewater discharge, erosion policies, landfill construction and specifications, and transportation best management practices within the watershed.

Section 4.3 of the Environmental Resource Report states that when Lake Tillery was first tested in 1955 it was classified as a natural, non-polluted source of water based on solids, turbidity, color, nutrients, oxygen demand, coliform bacteria count, sulfates, chloride, and heavy metal levels, however, by 1970's several instances of nutrient loading had occurred along with instances of oxygen saturation, and high copper and lead concentrations in the 1980's (Duke Energy). Currently, nutrient and sediment loading are the greatest detriment to the lake due to mining, construction, agriculture, and wastewater treatment discharge (Duke Energy). It most recently appeared on the 2014 303(d) water impairment report for a PCB fish tissue advisory.

As a WS-IV class surface water, domestic and industrial wastewater are permitted to enter the lake, however, in a WS-III class water body, a general permit needs to be obtained and only allows relatively insignificant amounts of wastewater discharge (NC DEQ 2011). Due to the lakes proximity to heavy industrial plants stricter regulations on wastewater reentrance must be made. Furthermore, no specific restrictions are put in place for new landfill construction in a WS-IV watershed, however, new landfills in a WS-III watershed are required to obtain a National Pollutant Discharge Elimination System permit if treated leachate is discharged (NC DEQ 2011). A stricter erosion policy is also mandated for WS-III water bodies which goes beyond the general specifications listed under the N.C. Sedimentation Pollution Control Act that all surface water must adhere to. Lastly, reclassification to WS-III means transportation best management practices are held to a higher standard.

In sum, Yadkin Riverkeeper's members who live and recreate on Lake Tillery express concern over the combination of development pressure along the lake combined with increased water withdrawls will worsen water quality in the Lake and potentially lower lake levels. Tillery is a prime recreational area, bordering as it does on Morrow Mountain State Park and Uwharrie National Forest.

In order to prevent development from further impairing Lake Tillery, we request that the Commission report on the feasibility of an improved watershed classification for the source water body.

3. Cumulative effects on the source major river basin

Yadkin Riverkeeper's mission is to protect and measurably improve water quality in the source basin, the Yadkin River. It is of concern to us that an interbasin transfer of this magnitude could be implemented before the Yadkin Pee Dee Water Management Group, a stakeholder

collaborative convened for long-term water supply planning, is able to supply an independent third-party assessment of long-term water supply and demand for the Yadkin River-the source of this IBT withdrawl. We urge the Commission to delay final approval of this certificate, or in alternative, to issue the certificate for 5MGD with any increase being conditional upon the validation of Union County's projected impacts on the source major basin by the study of the basin management group and approved by DWR.

Sufficient stream flow is essential to protecting many designated uses, and the physical, chemical, and biological quality of the waters of the State. Flow is fundamental to achieving the goals of the Clean Water Act to protect and restore the chemical, physical and biological quality of the state's waters. The objective of the Clean Water Act is "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." 33 U.S.C. § 1251(a). The goal is to achieve, "wherever attainable," "water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water." Id. at § 1251(a)(2). The water quality components of the Clean Water Act are aimed at protecting the full scope of benefits that clean and abundant water provide to society at large.

River basin models and the decisions based on those models need to incorporate techniques that adequately allows for flow variability based on a "natural flow paradigm." The importance of seasonal, intra-annual and inter-annual variable flow patterns needed to sustain natural riverine characteristics that support recreation and downstream uses should also be recognized.

Reliance on the 7Q10 or other similarly low flows as a default flow should be avoided; such low flows mimic drought conditions and are not adequate to protect aquatic life or other uses. Such low flows are relevant only for designating the lowest discharge into which a pollutant discharge can be allowed and should not be approved as the instream flow for any other stream management purpose. As a minimum flow standard to sustain aquatic life, 7Q10 lacks any scientific or common sense foundations and can be expected to result in severe degradation of riverine biota and processes by effectively imposing a "permanent drought".

The transfer of water from the Yadkin to the Rocky River basins must take into account flows necessary to protect and conserve fish and wildlife. SL 2010-143 developed a system for predicting the flows needed to protect and even restore the ecological health of the state's river system. That scientific analysis has been peer reviewed and approved as the best available science to predict the impact of flow alteration on the ecology of the river. That methodology should be incorporated into the analysis and recommendation of the water transfer."

4. Effects on receiving basin

The impacts of adding several million gallons a day of treated wastewater effluent to the Rocky River are not considered in the draft IBT certificate. Given the size of the combined discharge and the presence of downstream drinking water intakes, we request that the EMC have staff examine the potential impairment, nutrient and drinking water impacts of the combined effluent stream enabled by the IBT. We do not believe that staff's previous responsethat such effects will be considered via individual permitting-to satisfy the Commission's obligation to consider this factor at the time it votes on the certificate itself.

We also urge staff to consider not only the impacts of the construction of the physical water conveyance apparatus but also the induced growth that the water provided by this interbasin transfer would induce. Indeed, if the water is necessary for this growth to occur then that growth must be a secondary and cumulative impact of the project authorized by this certificate. Until Union County can commission such an analysis, the certificate as submitted does not satisfy the statutory requirement to consider secondary and cumulative impacts on the receiving basin.

5. Availability of reasonable alternatives

Our concerns here can be summarized as those of scope. The alternatives analysis does not consider different quantities of water to be transferred as "alternatives". Instead, the plan presents a variety of conveyances to satisfy a rigid, set "demand" projection. If the past decade of boom and bust in Union County has taught us anything it is that forty and fifty year demand projections are anything but rigid. The availability of reasonable alternatives should be re-evaluated both in light of a reduced initial IBT allotment-5MGD-conditional upon satisfying average consumption reduction and potable reuse targets as well as re-evaluation of source basin impacts by basin stakeholder groups.

9. Any other FACTS or circumstances deemed reasonably necessary

The fact is that the United States Forest Service Survey predicts, in "Impacts of Climate Change and Variability on Water Resources in the Southeast USA" that, 'Water supply stress is projected to increase significantly by 2050 due to hydrologic alteration caused by climate change and increased water use by key economic sectors." This is certainly true of both the source and receiving basins. In addition, "Declining runoff and increasing demands for water resources are

likely to increase pressure on existing reservoirs, leading to deeper and longer lasting drawdowns."

Further, the authors argue that, "The uncertainty of predicting, local regional, global precipitation patterns is well recognized." For this reason, we urge that the Commission order Union County to re-evaluate future water supply projections in light of the most severe drought predicted by current modeling, not simply the most severe drought on record. It likely that, in addition to changes in seasonal flow, climate change will change patterns of precipitation, making today's modeling unsuitable to predict worst-case conditions.

In alternative, we request that the Commission limit Union County's ability to withdraw from the Yadkin to 5MGD until ten years of data and a flow modeling update, conducted in 2021, either by Union County consultants or a third-party source and receiving basin stakeholders, validates or disproves the flow and growth assumptions upon which the present certificate is based.

Sincerely, Will Scott Yadkin Riverkeeper

Monse hearing 9/1/2016

GOOD EVENING DISTINGUISHED PANEL, ON BEHALF OF THE BOARD OF COUNTY COMMISSIONERS, WELCOME TO UNION COUNTY AND THANK YOU FOR ALLOWING ME THE OPPORTUNITY TO COMMENT REGARDING THE PROPOSED YADKIN REGIONAL WATER SUPPLY.

I AM JERRY SIMPSON, A LIFELONG RESIDENT OF UNION COUNTY AND SERVING MY SECOND TERM AS COUNTY COMMISSIONER. UPON BEING ELECTED IN 2010 ONE OF MY FIRST OPPORTUNITIES AS COMMISSIONER WAS TO SERVE ON THE EXECUTIVE COMMITTEE FOR THE CENTRALINA COUNCIL OF GOVERNMENT. AT THAT TIME WE WERE ENGAGING IN A PROCESS KNOWN AS CONNECT OUR FUTURE. CONNECT OUR FUTURE IS AN ONGOING COLLABORATIVE PROCESS AIMED AT CREATING A FRAMEWORK FOR GUIDING AND INVESTING IN THE REGION'S GROWTH. A PROCESS IN WHICH RESIDENTS, CITIES, COUNTIES, BUSINESSES, EDUCATORS, NON-PROFITS, AND OTHER ORGANIZATIONS WORK COOPERATIVELY OVER TIME, LAYING THE FOUNDATION UPON WHICH TOGETHER WE WILL GROW JOBS AND THE ECONOMY, IMPROVE QUALITY OF LIFE AND CONTROL THE COST OF GOVERNMENT IN OUR REGION'S COMMUNITIES.

ONE OF THE MAJOR EMPHASIES UNDERLYING THE NEED FOR THIS PROCESS TO OCCUR WAS THE IDENTIFICATION OF THE CENTRALINA REGION AS THE FASTEST GROWING REGION IN THE US WITH POPULATION EXCEEDING ONE MILLION. IN ADDITION, IT IS PROJECTED THAT THE REGION WILL GROW BY 50% OVER THE NEXT TWO DECADES AND DOUBLE OVER THE NEXT 40 YEARS.

HAVING LIVED AND WORKED HERE IN UNION COUNTY, I AM FAMILIAR WITH THE COUNTY'S HISTORY OF SUSTAINED POPULATION GROWTH, ECONOMIC

Monroe Learing 9/1/16 P.Z.

DEVELOPMENT PATTERNS, AND ITS UNIQUE GEOGRAPHY BEING SERVED BY TWO MAJOR RIVER BASINS, THE CATAWBA AND THE YADKIN-PEE DEE.

ALTHOUGH THE CATAWBA SERVES AS OUR PRIMARY WATER SOURCE CURRENTLY, UNION COUNTY HAS BEEN EXPLORING OPTIONS FOR A SUSTAINABLE WATER SUPPLY FOR OUR YADKIN BASIN RESIDENTS FOR NEARLY TWO DECADES. WE HAVE BEEN ACTIVELY ENGAGED WITH THIS SPECIFIC ENDEAVOR FOR SECURING YADKIN WATER FOR OUR YADKIN NEEDS SINCE 2012.

IF I MAY, PLEASE ALLOW ME TO EMPHASIZE THE CRITICAL NATURE OF THIS PROJECT FOR OUR REGION.

- FIRST, THIS IS THE MOST EXPENSIVE, EXPANSIVE CAPITAL PROJECT UNDERTAKING IN UNION COUNTY'S HISTORY.
- OUR CATAWBA RIVER WATER TREATMENT PLANT'S WATER SUPPLY PROJECTIONS INDICATE CAPACITY LIMITATIONS WITHIN THE NEXT FEW YEARS. A SIGNIFICANT PART OF THIS PROPOSED IBT REQUEST WAS TO DELAY ANY EXPANSION AT THAT FACILITY.
- ANY DELAY IN THIS PROJECT <u>ANY DELAY</u> WILL REQUIRE US TO SERIOUSLY EVALUATE EXPANDING OUR CATAWBA RIVER WATER TREATMENT PLANT AND REQUEST AN ADDITIONAL IBT AMOUNT FROM THAT SOURCE WATER SUPPLY, AN ALTERNATIVE THAT HAS ALWAYS BEEN OUR LEAST COSTLY OPTION.
- WE HAVE SPENT THOUSANDS OF DOLLARS ON PUBLIC NOTIFICATIONS IN REQUESTING THIS IBT AND FOLLOWED THE STATUTORY REQUIREMENTS FOR DOING SO.
- OUR PURSUIT OF YADKIN WATER FOR YADKIN NEEDS HAS BEEN COLLABORATIVE WITHIN THE REGION, TRANSPARENT, CONSIDERED ALL

Monroe hearing 9/1/16 p.3

AVAILABLE ALTERNATIVES AND IS FOCUSED ON PROVIDING A SUSTAINABLE WATER SUPPLY FOR OUR COMMUNITY.

THANK YOU AGAIN FOR YOUR TIME AND ATTENTIVENESS.

Transcription for Wadesboro public hearing – Union County IBT (8/24/2016)

Dwight Smith – I'm from Norwood and I endorse this interbasin transfer and also Union County taking water from Lake Tillery. There is a lot of talk about the interbasin transfer from the Yadkin to the Rocky River. The point of taking water from the Yadkin is just about a mile and a half from where it will go back into the Pee Dee River. So whatever water is transferred is only out of the river for about a mile, maybe a mile and a half. The other point is, God gave us water, and I know that is the wrong thing to bring up right now. But the thing about it is, the state of North Carolina, and especially Stanly County, because our commissioners spent I think they said \$5 million dollars, and most of you read about it in the paper, trying to stop ALCOA. I know you guys heard enough about that. But, I feel like water belongs to everybody in the state of North Carolina, not just the people who live along the river. That we all should share in that great gift that we get. You know, I'm jealous of Union County because they are growing so fast, but I think we need to share our resources with everybody in North Carolina not just those contained right on the lake.

From:Hilda Snuggs <hbsnuggs@gmail.com>Sent:Tuesday, September 20, 2016 7:39 AMTo:Nimmer, KimSubject:Water Transfer

As a lake property owner in Stanly County, I am strongly opposed to the transfer of Lake Tillery waters to Union County. Thank you for your efforts to preserve our resources and oppose the exploitation.

Hilda B. Snuggs

250 N 4th St Albemarle NC 28001

704-983-3590 704-985-2466 C

Transcription for Monroe public hearing – Union County IBT (9/1/2016)

Gary Studley – My name is Gary Studley. I'm a Union County resident as well as we have got a house over on Lake Tillery at Fairway Shores. Our concern is for the lake level. I know what the studies show, how Duke is managing water, but on a normal daily basis that water drops eight to ten inches a day when they're filling it and taking water out for power. If this hurts the lake level another nine inches, there's going to be a lot of property owners that cannot get boats into the water. Again, my concern is the lake level. We pay a lot of property tax in Montgomery County, and a house on a lake is no good without a lake.

From:	Lisa Swan <lass919@gmail.com></lass919@gmail.com>
Sent:	Thursday, September 08, 2016 9:34 AM
То:	DWR.IBT
Subject:	Lake Tillery IBT transfer/Union County

Dear Ms. Nimmer, Division of Water Resources:

I am writing to you as instructed by the Montgomery County and Stanly County commissioners regarding the inter basin transfer of water from Lake Tillery to Union County.

I wish to voice my opposition to this IBT from Lake Tillery for the residents of union county. As referenced in the article published on 9/7/16 in the Montgomery Herald, the union county officials did not even consider alternates, and less objectionable methods of increasing their water availability, and there were many listed.

We, as residents of Lake Tillery, have definite and real concerns about this siphoning of water from this lake. First and foremost, if our lake levels are affected, and they will be, our property values will go down considerably. This 23 million gallons a day they wish to siphon equals 35 Olympic sized swimming pools. Why should the residents of this lake endure decreasing property values so another county's residents property values remain the same, or endure no loss. Second, available use of the lake. This lake has been a residential lake and recreational lake at consistent levels since its creation. Just recently, the water levels were dropped over the Labor Day weekend and we could not even get our boat off of the lift the water was so low. And, it created a drop off of our dock to almost 5 feet, not allowing children to get in and out of the water at all. It renders homeowners helpless, dry and landlocked, and eliminates the very reason why we purchased these homes in the first place.

I am encouraged by the article that states Montgomery County is stepping up their efforts to intervene in this process that has been deceptive, manipulative, done incorrectly, and probably illegal since counties involved were not properly notified of the process which began in 2011 in an effort to hide what was being done. If it were a good thing for the residents here, there would have been no need whatsoever for deceptively trying to push this through without notice.

Again, as a resident of this lake, with about 5 feet of water in front of my dock, when water levels are dropped for any reason, it eliminates our ability to get out off of our dock, via boat or in person. This greatly WILL affect our desire to live here, and then our ability to sell due to loss of value in lake front property. The residents of this lake, like all water front property, pay a premium to be where we are. If you take away the ability to use the water, the premium is lost to each and every home owner in attempting to sell the home they can no longer use. I would have NEVER bought my home here if it did not have CONSISTENT water levels, as we have experienced in this cove for the TEN years that we have been here, and on this lake altogether since I've been coming here as a child, 45 or so years ago.

I ask that you please take my, and my neighbors in Emerald Shores, concerns highly when this issue is discussed further. As stated above, there are many other avenues union county can use for increasing their water availability as a result of their lack of proper infrastructure planning. This lack of planning for their growth and development should not be placed on the backs of other local areas. Please do not let this lake's residents pay the price for their overconsumption of a natural resource that they can get from Charlotte, Catawba (where they are currently getting it), Narrows Reservoir, Blewett Falls Lake, as well as many others as stated in the article published today.

If I can sign a petition, or contribute in any way toward stopping this IBT, please let me know.

Thank you,

Lisa Swan

Sent from my iPad



300 N. Greene Street Suite 1400 Greensboro, NC 27401

October 3, 2016

VIA E-MAIL: dwr.ibt@ncdenr.gov

Kim Nimmer Division of Water Resources 1611 Mail Service Center Raleigh, NC 27699 -1611

Dear Ms. Nimmer:

We submit the following comments in opposition to the Environmental Management Commission's Draft Union County IBT Certificate (hereinafter "Draft Certificate") to grant Union County's water system interbasin transfer ("IBT") certification request. These comments are submitted on behalf of the following businesses and local governments of Montgomery County:

J5 Development Inc., d/b/a Lilly's Bridge Marina New South Realty, Inc. Uwharrie Cabins, Inc. Montgomery County Town of Mt. Gilead

As described below, the Commission cannot lawfully grant this interbasin transfer certificate because: (1) Montgomery County is directly impacted by this IBT request but has been excluded from the process; (2) the statutory notice requirements have not been fulfilled; (3) the Commission's Findings of Fact are erroneous for lack of sufficient evidence; (4) the Commission's determination erroneously relies on the incomplete and inadequate environmental impact statement; and (5) the modeling software and formulas were not made available for comment, even though they were referenced by an appendix in the Environmental Impact Statement, and invalidate the opportunity to comment. For these reasons the certificate must be denied until such time as the people of Montgomery County are given a lawful opportunity to participate in the entire process, from the beginning.

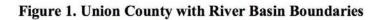
I. Montgomery County is directly impacted by this IBT request but has been unlawfully excluded from the process.

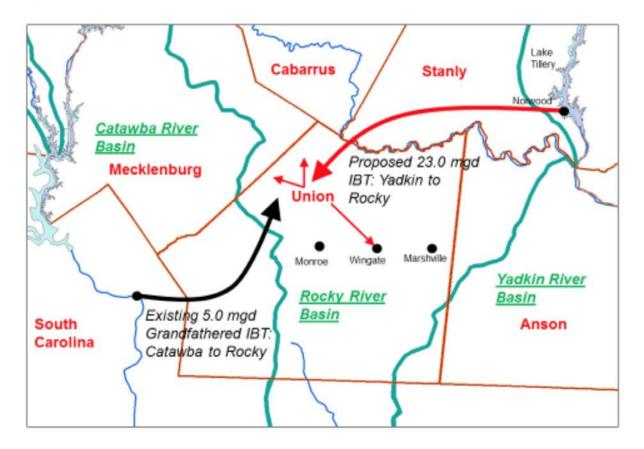
The Draft Certificate from the Environmental Management Commission ("the Commission") authorizes Union County to withdraw 23 millions gallons per day (mgd) from

Thomas E. Terrell, Jr. | Direct: 336.378.5412 | Fax: 336.433.7482 | tom.terrell@smithmoorelaw.com | www.smithmoorelaw.com ATLANTA | CHARLESTON | CHARLOTTE | GREENSBORO | GREENVILLE | RALEIGH | WILMINGTON



Lake Tillery in the Yadkin River IBT Basin. As described in the Environmental Impact Statement, "[L]ake [Tillery] forms the boundary between Stanly and <u>Montgomery County</u> in the southeastern Piedmont region of North Carolina, approximately four miles west of <u>Mount Gilead</u>, North Carolina." (Environmental Impact Statement, page 35) (emphasis added). Montgomery County and Mount Gilead are specifically mentioned when describing the location of the withdrawal point, yet the people of Montgomery County and Mount Gilead were not notified of the proposed IBT and were excluded from participating in the process. As a result, potential impacts to the county and town were not analyzed. This exclusion is further illustrated in Figure 1 in the Draft Certificate found on page 3:







In the upper right hand corner of Figure 1 is Lake Tillery with Stanly County depicted to the left, and Anson County depicted below. Montgomery County is shown to the right of Lake Tillery, yet it is not labelled. This failure to acknowledge the presence of Montgomery County on Figure 1 is illustrative of the failure of Union County and the Commission to acknowledge the statutory right of the people of Montgomery County and Mount Gilead to participate in this IBT process by failing to properly notify them and is a violation of their statutory and due process rights.

II. Failure to provide adequate legal notice to the people within Montgomery County is a statutory violation that has fundamentally flawed the entire Interbasin Transfer process.

N.C. Gen. Stat. § 143-215.22L requires notice to be published in a newspaper of general circulation in each county located in whole or in part of the source river basin (upstream or downstream of the withdrawal point), as well as in each county of the receiving river basin. This notice via newspaper publication is required at four separate phases of the Interbasin Transfer request:

- 1. Notice of Scoping Meetings (N.C. Gen. Stat. § 143-215.22L(c))
- 2. Notice of Public Hearings on Draft Environmental Documents (Id. § 143-215.22L(e))
- 3. Notice of Draft Determination (*Id.* § 143-215.22L(i))
- 4. Notice of Public Hearings on Draft Determination (Id. § 143-215.22L(j))

Montgomery County is located within the source river basin, directly adjacent to the withdrawal point and the county limits include parts of Lake Tillery (the withdrawal source). *See Figure 1 above.* Thus, people within Montgomery County were required to be notified by publication in a newspaper of general circulation in Montgomery County under N.C. Gen. Stat. § 143-215.22L(c). The Montgomery Herald is the only newspaper in the county that qualifies for legal notice under N.C. Gen. Stat. § 1-597. The Herald has submitted an affidavit (*see* attached) that no legal notices have been received or published regarding this proposed interbasin transfer request. Thus, Montgomery County was not legally notified via publication and this statutory violation renders the IBT request unlawful and invalid.

The Board of Commissioners of Montgomery County and the town of Mount Gilead were also required to be notified via first class mail or electronic mail under N.C. Gen. Stat. §



143-215.22L(c)(3). At this time we have reason to believe that there was also a failure to notify these parties, or that there was only partial, but still inadequate, compliance.

Failure to provide adequate legal notice is a statutory violation that fundamentally flaws the entire IBT process. The people of Montgomery County were excluded from the entire process (while the Commissioners were at best only partially excluded) until now, and other than the obvious due process violation resulting from their inability to participate in the various public hearings and comment periods, the exclusion of Montgomery County has directly impacted the IBT process in the following ways:

- 1. The scoping meetings required under N.C. Gen. Stat. § 143-215.22L(c) were ineffective because they failed to inform and failed to gather comments from the people within a county that is directly impacted;
- 2. The environmental documents prepared in accordance with N.C. Gen. Stat. § 143-215.22L(d) failed to conduct a comprehensive analysis of the impacts because the impacts within Montgomery County were not included;
- 3. The Commission's determination that the environmental documents were adequate under N.C. Gen. Stat. § 143-215.22L(f) was unlawful and invalid because the environmental documents did not and could not conduct a comprehensive analysis of the impacts without the people of Montgomery County's participation and consideration;
- 4. The Commission cannot make Findings of Fact under N.C. Gen. Stat. § 143-215.22L(k) in reliance on the environmental documents and comments because the underlying documents are flawed for failing to consider and include the impacts within Montgomery County;
- 5. Union County cannot establish by a preponderance of the evidence (and the Commission cannot lawfully find) as required under N.C. Gen. Stat. § 143-215.22L(m)(1) that the benefits of the proposed transfer outweigh the detriments because the environmental documents are inadequate and the benefits and/or detriments within Montgomery County have not been fully considered;
- 6. Likewise, Union County cannot establish by a preponderance of the evidence under N.C. Gen. Stat. § 143-215.22L(m)(3) that the detriments have been or will



> be mitigated to the maximum degree practicable because the detriments within Montgomery County have not been fully considered or established.

Therefore, the statutory violation of failing to provide adequate notice to all potentially impacted people has resulted in a legally and substantively flawed draft determination from the Commission.

III. The Commission's draft Findings of Fact are erroneous because they did not consider any information that would have arisen from public participation within Montgomery County.

Because Montgomery County was deprived of the opportunity to participate in the IBT process, the Commission's Findings of Fact contained in the Draft Certificate are erroneous and cannot be supported. N.C. Gen. Stat. § 143-215.22L(k). For example:

- The Commission's draft Finding of Fact that "the detrimental effects on the source basin described in N.C.G.S. § 143-215.22L(k)(2)will be minimal" (Draft Certificate, page 10) cannot be supported by the evidence because all the effects within Montgomery County have not been considered;
- The Commission's draft Finding of Fact that the "cumulative effects of this proposed water transfer and consumptive water uses as described in N.C.G.S. § 143-215.22L(k)(3) will not have a noticeable effect on the source river basin" (Draft Certificate, page 11) is an unlawful finding and cannot be supported by the evidence without considering all the effects within Montgomery County;
- 3. The Commission's draft Finding of Fact "that reasonable alternatives to the proposed IBT were considered" (Draft Certificate, page 15) is unlawful and cannot be supported by the evidence without knowing whether there are any impacts to Montgomery County;
- 4. The Commission's determination that "the benefits of the proposed transfer outweigh the detriments" (Draft Certificate, page 17) is not supported by the Findings of Fact because the Findings are erroneous for failing to include any effects and impacts within Montgomery County.



Therefore, the Draft Union County IBT Certificate is unlawful because it is based on insufficient evidence in the record without statutory notice and comment from Montgomery County. The Commission should not grant this certificate and should instead request that Union County correct this statutory violation by properly following the statutory procedure.

IV. The evidence that the Commission relied upon to draft the Certificate is incomplete and unreliable since it failed to gain participation from the people of Montgomery County in which Lake Tillery is located.

The Commission must find that the applicant has established by a preponderance of the evidence that the benefits of the proposed transfer outweigh the detriments before granting a certificate. N.C. Gen. Stat. § 143-215.22L(m)(1). To make this determination, the Commission must rely on the environmental documents prepared. *Id.* However, failure to involve the people of Montgomery County, who share ownership of Lake Tillery, in the scoping meetings for the environmental documents directly impacts the mitigation and alternatives analysis for the proposed transfer that will take 23 mgd of their water. Had the citizens received notice, they would have participated meaningfully in the review process to protect their interests in Lake Tillery. The unlawful exclusion of this county has rendered the environmental documents inadequate and below is a partial list of the reasons why:

- 1. Five of the EIS alternatives (Nos. 4, 5, 6, 7, and 10) are legally prohibited and should never have been studied as "reasonable" alternatives.
- 2. Three of the EIS alternatives (groundwater withdrawal, water demand management, and water returns from Rocky River Basin) were dismissed because not one of them could singly meet 2050 needs. An integrated water supply plan could potentially meet the full demand, or significantly reduce the IBT requirement. The EIS failed to consider the reasonable combination of these alternatives before concluding that taking 100% of the water from Montgomery County citizens was the best alternative.
- 3. The EIS does not study or calculate the effects of any form of non-potable water conservation. This is a glaring omission.

For example, Union County does not include a non-potable reuse system for the Yadkin Basin Service Area as one of the option in the EIS to reduce IBT requirements. These



systems are a proven technology and widely used throughout the United States to provide residential and commercial irrigation and industrial water supplies. The EIS discusses the fact that the maximum month average daily supply is almost 40% greater than the annual average demand and that the higher demands are associated with hot dry months. The EIS also makes the point when discussing the indirect *potable* reuse option (Alternative 11, EIS Section 3.3.4.3, page 122) (emphasis added) that the wastewater return flows are less than the maximum month average daily demand during the hotter drier months. This indicates that a significant fraction for the IBT requirement is for irrigation.

Furthermore, the demand projections include a 1% annual service area growth rate. This means that between 2013 and 2050, the Yadkin Basin Service Area will increase by almost 45%. This growth provides an opportunity to install a reuse system at the same time that the water supply is expanded.

4. Some of the alternatives are discounted by providing general statements that are not supported by data or analysis.

For example, the draft determination uses a summary conclusion with the exact language as the EIS in dismissing an option without benefit of analysis that could reduce water transfer from Lake Tillery by 29% to 35%.

If Alternative 11 were to be used as a means to reduce the net IBT of water transfers from Lake Tillery as proposed in Alternative 1, it is estimated that the IBT could be reduced by approximately 29% to 35% depending on projection year and actual future wastewater flows generated. However, such benefits afforded to water quantity in Lake Tillery **may be** outweighed by water quality and environmental impacts of a new wastewater discharge and associated sanitary sewer transmission infrastructure required as part of this alternative.

Draft Certificate, page 15; EIS, Section 3.3.34.6, page 127 (emphasis added).

- 5. Union County did not study or consider a reservoir within its own basin.
- 6. The Draft Certificate uses EIS (Section 2.3) population growth projections for the entire system and compares it interchangeably with water demand data from the Yadkin Basin only, an apple/orange comparison that is misleading and, in itself, impairs the findings.



Specifically, the Draft Certificate's findings of fact on page 3 are incorrect, inconsistent with the EIS and are misleading. The findings are incorrect in that they compare total system population, both Catawba and Yadkin River Basins, with a demand figure that is based solely on Yadkin River Basin. In 2013, the population served by Union County Water System was 117,271 (see EIS, Table 2-2, page 12). However, this population value includes both the Catawba River Basin (pop. 64,722) and the Yadkin River Basin (pop. 52,550). The average day maximum month demand (MMD) was 7.7 mgd only for the Yadkin River Basin (see EIS Figure 2-2, column H). The 2013 system-wide demand, which would correspond to the stated population of 117,271, was 16.6 mgd. Similarly in 2050, the projected system-wide population is 319,760 and the system-wide demand is projected to be 50 mgd (not counting the 2 mgd provided to City of Monroe after 2014), not 28.9 mgd (MMD), as quoted in the findings of fact. The 28.9 mgd (MMD) is only for the Yadkin River Basin.

7. When the demand numbers are corrected to match the system-wide population figures, the per capita usage will increase by 10.4% by 2050, to be absorbed by Montgomery County rather than addressed with conservation measures throughout the system, essentially concluding that while Union county seeks to take all of its excess needs from Montgomery County it is being 10.4% less efficient in its use of water. Such conclusion underscores the need for a new EIS with conservation measures built into the study from the beginning.

Specifically, using the appropriate population and water demand values, the 2013 MMD unit demand is 141.6 gallons per capita day (gpcd), and the 2050 MMD unit demand is 156.4 gpcd. This is a 10.4 percent increase in the unit (i.e., per capita) demand. This suggests that Union County is not incorporating any significant water conservation, such as a non-potable reuse system, into their planning process; even though they discuss in the findings of fact (page 3, line 8) that increased outdoor water use contributes to this increase in the unit demand.

8. The argument that the unit water demand is largely driven by a demographic shift in the county from predominantly rural to suburban residential land use is not supported by data in the EIS. Furthermore, neither the EIS nor the Draft Certificate appear to account for reduced agricultural water use.



> 9. Lake Tillery forms a substantial part of the Montgomery County economy, and half of the lake lies within the county. Nonetheless, the EIS does not attempt to study all the reasonably foreseeable future detrimental effects to industrial, economic, agricultural, private, recreational, and other productive and beneficial uses of the environment within Montgomery County that borders the water source where the withdrawal will occur. Accordingly, it is apparent that lack of notice actually resulted in lack of consideration of impacts.

V. Notice and Comment on the Draft Certificate is short-circuited by a failure to provide means to view the model that was used to evaluate the direct impacts on the source basin including Montgomery County.

The basis of all Findings of Fact in the Draft Union County IBT Certificate and the supporting EIS are all based on the result of the Computerized Hydro Electric Operations Planning Software (CHEOPSTM model). (Draft Certificate, Findings of Fact, paragraph (2), page 5). This model is designed to evaluate the effects of operational changes and physical modifications at multi-development hydroelectric project. The model was originally developed to support the Federal Energy Regulatory Commission (FERC) relicensing process for the Yadkin-Pee Dee Hydroelectric Project. However, the model was updated (i.e., modified) in 2013 for the Union County IBT Environmental Impact Statement. The updated CHEOPSTM model was used to evaluate the direct impacts on the source basin resulting from the proposed Union County IBT allocation. In fact, this model forms the basis for most of the conclusions reached in the Environmental Impact Statement (EIS) relating to alternatives that involve Lake Tillery. This model is a very important component of the EIS. Appendix E of the EIS references the model results (CD-2) and model reference files (CD-4). However, the CDs are not on the DEQ website. Furthermore, model results and reference files are not adequate for model validation; the software is also required.

As the basis of all the findings, the results of the model and the validation of the model by the Commission are critical to the process. The absence of documentation on the validation of the results by the Commission is a significant defect and provides an opportunity to challenge the basis of granting the IBT Certificate. In addition, as discussed in a subsequent section of this report, the lack of proper notification or participation of Montgomery County as a potentially affected stakeholder did not provide for an opportunity to provide additional reasonable alternatives and mitigation measures.

VI. Conclusion

In conclusion, the Commission cannot lawfully grant the Union County IBT Certificate as it is currently drafted and the Commission must deny the request.

Additionally, we request to be notified of any and all actions taken in this IBT process.

Sincerely,

Sincerly,

Smith Moore Leatherwood LLP

Elamas E. Terrell, J.

Thomas E. Terrell, Jr.

Marlies Kelley Law Offices, PLLC

Penny K

Mary Penny Kelley

NORTH CAROLINA

AFFIDAVIT OF TAMMY DUNN

MONTGOMERY COUNTY

Tammy Dunn, under solemn affirmation, says:

1. My name is Tammy Dunn. I am over the age of 18 years of age and not under a legal disability.

2. I serve as the Editor of the Montgomery Herald and am familiar with its business operations and records.

3. The Montgomery Herald is the only newspaper of general circulation in Montgomery County that meets the general circulation requirements of N.C.G.S. 1-597.

4. Our records show that no legal notices related to Union County's proposed interbasin transfer were received from Union County, NCDENR, or NCDEQ for publication in the Montgomery Herald.

5. On August 16, 2016 I received an email from Ms. Kim Nimmer, IBT Program Coordinator, who informed me that her records also show that no legal notices were sent to the Montgomery Herald.

This the 29th day of September, 2016. Tammy Dunn

NORTH CAROLINA

MONTGOMERY COUNTY

I certify that Tammy Dunn personally appeared before me this day, acknowledging to me that she signed the foregoing document.

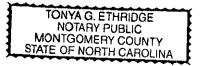
Today's Date: September 29, 2016.

[Notary's signature as name appears on spal]

ISNYa

[Notary's printed name as name appears on seal]

My commission expires: March 6th, 2015



From:Norma Thompson <flybyu24@icloud.com>Sent:Sunday, September 18, 2016 10:48 PMTo:DWR.IBTSubject:Fwd: water supply

Begin forwarded message:

From: Jim Myrick <jmyrick10@triad.rr.com> Date: September 18, 2016 6:09:04 PM To: Norma Thompson <flybyu24@icloud.com> Subject: RE: water supply

Please send your info to Kim Nimmer email dwr.ibt@ncdenr.gov

She is with Water Resources in Raleigh.

Thanks

Jim Myrick Sent from Mail for Windows 10

From: Norma Thompson Sent: Sunday, September 18, 2016 1:19 PM To: jmyrick10@triad.rr.com Subject: Re: water supply

Mr. Myrick, Mike & I oppose Union county taking water from Lake Tillery to the detriment of Montgomery County. Montgomery is already one of the lowest income counties in the state, by taking away more of the county's tax base, a tremendous burden will be put on it's citizens. Please consider the impact this proposal will hv on these citizens as well. Sincerely, Mike & Jean Thompson

Sent from my iPhone

517 Montgomery Shores Drive Mount Gilead, NC 27306

Kim Nimmer Division of Water Resources 1611 Mail Service Center Raleigh, NC 27699-1611

Dear Montgomery County Officials:

As a long-time citizen of Mount Gilead and Montgomery County, I am writing you in regard to the Union County request to take 23 Million gallons of water a day from Lake Tillery, which will go from the Yadkin-Pee Dee River Basin to the Rocky River Basin. Our comments are directly tied to the findings of <u>Present and reasonably foreseeable</u> detrimental effects on the source basin and <u>Cumulative effects on the source major river</u> basin of any water transfer or consumptive water use currently authorized or projected in a Local Water Supply Plan.

We live on a small cove on Lake Tillery and are very concerned about the impact this decision could make not only on Lake Tillery but also the surrounding water resources of Montgomery and Stanly Counties. We are amazed that no research, impact or simulation studies have been conducted by our counties or the state, including no safe yield studies for Lake Tillery. This year alone we have had frequent drastic drops in water levels which tend to impact all properties bordering the lake, including our valuable recreational areas. In addition to these concerns we understand that if lake levels drop, our tax base in the future will significantly be affected. Rural NC counties such as Montgomery must be included in our state's present and future prosperity. Economic development is crucial to our growth and the well-being of <u>all</u> our citizens.

Therefore, any decisions regarding Union County's IBT request should be delayed until proper studies can be conducted and reported on to all those who would be impacted by any decisions. Our representatives should vote to allocate funds as needed for the studies. All properties that adjoin the identified lakes should be alerted to the progress of these studies and any information that regards future water management. Norwood alone should <u>not</u> be making these major decisions nor benefit or solely profit from any approval of the Union County request.

Sincerely yours,

Judith A. Timms Rayford W. Timms



September 12, 2016

DIVISION OF WATER RESOURCE

To Kim Mimmed: Many of the property owners on the norwood Morth Caroleia side of Lake Tillery are upset. We did not get notification about a public hearing in Morwood on August 23, 2016. The hearing was about Union County gotting an Interbasin Fransfer Certificate that would enable water to be premped to Union County from Lake Tillery. At the hearing in Morwood, several from Montgomery County spoke against the project, Why was norwood quiet? Because most of us concerned NOW had not heard about the project on the meeting. Out of The eight speakers that night, we have read that only one spoke for the transfer - Norwood Commessioner Robbie Cohen. y us that live on the lake in Morwood, we are at this time very much against the Uneon County/Morwood interbasin transfer. We feel that not enough studies have been done to ensure that no harm will come to us nor to counties and cities up and down sheap Many communities depend on This water supply.

also, homeowness on the lake are concerned about water levels and our property values. We enjoy our homes. We do not want to be another Lake Morman, where water levels fluctuate se drastically each day. Boats are sitting in the mud each morning More thought and research needs to be done before continuing with this interbasin transfer. We have read that both Stanly County Commissioners and Montgomery County Board of Commensioners are opposed to this requested IBT at thes time, We need to protect our natural resources and our property values.

Sincerely, Pat + Earl Thelore 1135 Berry Hell Drive Morwood, Morth Carolina 28/28

From:	Patricia and Earl Trulove <trulovee@live.com></trulovee@live.com>
Sent:	Monday, September 12, 2016 6:29 PM
То:	DWR.IBT
Subject:	Norwood/Union County Interbasin Transfer

To Kim Nimmer:

Many of the property owners on the Norwood North Carolina side of Lake Tillery are upset. We did not get notification about a public hearing IN Norwood on August 23, 2016. The hearing was about Union County getting an Interbasin Transfer Certificate that would enable water to be pumped to Union County from Lake Tillery. At the hearing in Norwood, several from Montgomery County spoke against the project. Why was Norwood quiet? Because most of us concerned NOW had not heard about the project OR the meeting. Out of the eight speakers that night, we have READ that only one spoke for the transfer --- Norwood Commissioner Robbie Cohen.

Now that word is getting around to some of us that live on the lake in the Norwood area, we are at this time very much against the Union County/ Norwood Interbasin transfer. We feel that not enough studies have been done to ensure that no harm will come to us or to counties and cities up and downstream. Many communities depend on this water supply. Also, homeowners on the lake are concerned about water levels and our property values. We enjoy our homes. We do not want to be another Lake Norman, where water levels fluctuate so drastically each day. Boats are sitting in the mud each morning.

More thought and research need to be done BEFORE continuing with this Interbasin transfer. We have read that both Stanly County Commissioners and Montgomery County Board of Commissioners are opposed to this IBT at this time. We need to protect our natural resources and our property values.

Sincerely, Pat and Earl Trulove 1135 Berry Hill Drive Norwood, North Carolina 28128

Sent from my iPad

From:	Chris Weidenhammer <c.whammer@yahoo.com></c.whammer@yahoo.com>
Sent:	Monday, September 12, 2016 10:07 PM
То:	DWR.IBT; Chris Weidenhammer
Subject:	Comment on the proposed interbasin transfer request by Union County for water from Lake Tillery
Attachments:	Union County interbasin transfer comments (Chris W).docx

Below and attached are my comments on the proposed interbasin transfer request by Union County for water from Lake Tillery.

My primary residence is in Union County and I also own a home on Lake Tillery. That makes me probably one of few individuals able to see both sides of this issue. My answer, I am totally opposed to the interbasin transfer.

1) Union County admits they have sufficient water for today's needs (plus roughly another 20%). If there is a limit to the county's current water infrastructure then the county needs to limit its growth. They cannot be allowed to outgrow their infrastructure. There is a reason why people don't live in the desert, because they can't sustain themselves. It's about time that Union County officials acceptable their responsibility to control the county's growth. As part of this discussion, Union County should disclose how much water is consumed outside of residences or businesses, that is for things like watering yards, washing cars, etc. If my usage is representative of all of Union County it would be that more than 50% of the water usage is used outside the home. Clearly Lake Tillery water should not be used to support purely discretionary water use. Union County actually has no way of truly knowing the answer because it doesn't measure it, though it can be estimated by looking at average water usage in the winter versus the spring and summer. So what Union County wants is maximum use of Lake Tillery water when Lake Tillery needs it most (spring, summer and fall).

2) I don't see how from either a legal perspective or a practical one that Norwood would actually have title or ownership to the water such that they would have any right to sell it.

3) The city of Norwood should not have a unilateral right to make a decision that will affect my property value. Property values will absolutely be destroyed if water levels are not kept up. That is close to the very essence of taxation without representation and starts down the path of breaching the 5th Amendment to the US Constitution, you know the part that says property (in this case the water) shall not be taken for public use, without just compensation.

4) The state of NC needs to protect the natural resources of all citizens and the state should take measures to ensure that these water resources will be protected. Montgomery County and Stanley County need to attract industry and residents. One means is through all of the activity and quality of life Lake Tillery provides. So actions that inhibit such growth should be stopped.

There are two fairly obvious and reasonable alternatives to interbasin transfer proposed by the city of Norwood and Union County:
 1) Have a condition of the sale of any water be that no water can be transferred if it results in the Lake Tillery water level dropping below its <u>actual normal, non-drought elevation</u>. Not any designed minimum elevation or regulatory minimum elevations,

but actual ones. That level is easily measured today as, for example, everyone has such a marking on their dock piers. Norwood says the modeling shows this would not affect the normal water levels and if that's truly the case then they would be selling "excess" water (separately, there is no way a study or hydrologic modeling sponsored and scoped by either Union County or Norwood can be deemed objective and should be disregarded). There is a straight forward way to enforce this requirement. This is a very easily solution to engineer into the pipeline intake and can be monitored by non-Norwood officials. There would need to be fines to both Union County and the City of Norwood for breaching this requirement. Better yet, hold the county and city managers personally responsible for any breaches. Yes, this does mean that during a drought, if the water level drops, then no water could be sold to Union County.

2) Let the market decide the price. It was published that during the operations of the project Union County will pay to Norwood 5 cents per 1,000 gallons of water on a monthly basis, with an annual escalation rate of 0.25 percent on the 5 cents starting at the sixth year of operations. Today, I pay as much as \$10.10 per 1,000 gallons to Union County (I'll gladly show you my statement). So the solution then is Norwood sells the water to Union County for \$10.10 per 1,000 gallons; Norwood keeps 5 cents and the remaining \$10.05 per 1,000 gallons then gets distributed to those who own property on Lake Tillery. After all Norwood only values the water at 5 cents per 1,000 gallons, but Union County values it \$10.10 per 1,000 gallons. And this usage is going to be for outside the home and businesses, so let the home owners and business owners pay for the right to use water in a purely discretionary manner. This can be easily engineered into the pipeline as the amount of water through the pipeline is easily measured and the accounting can be monitored by an objective third party. If the Union County residents don't want to pay the high price for this water then let them buy the water from someone else. Politicians are not qualified to make these kind of economic decisions, that's why the residents should be allowed to decide with their wallet.

Regards,

Chris Weidenhammer

Good evening, I am Amanda Whitaker, Economic Development Director for Montgomery County. On behalf of the Montgomery County Board of Commissioners, we respectfully request the Environmental Management Commission to delay a decision on the Union County IBT transfer application until the NC Department of Environmental Quality independently verifies the findings of fact required under NCGS 143-215.22L.

The concerns of the residents of Montgomery County mirror the nine facts which must be proven in order to approve the application. Of particular interests are items #2, "present and reasonably foreseeable detrimental effects on the source basin"; #3: "cumulative effects on the source major river basin of any transfer or consumptive water use currently authorized or projected"; and #7 "other facts or circumstances reasonably necessary".

As stewards of the interests and rights of the people of Montgomery County, we have asked fundamental questions related to this proposed transfer. We have acted impartially. What we have found, however, is the lack of clear evidence to support the findings of facts required.

We have been told that safe yield studies have not been completed to determine how much water can safely be removed from the basin; we have been told that the impact models being utilized are outdated; we have been told that the formation of a unified stakeholders committee is essential prior to an IBT decision of this magnitude, but such an entity has yet to be solidified and the collective interests of the Yadkin members recorded.

What we have been told by everyone we have spoken too, however, from energy corporations, to State officials, to environmentalists is that THIS IS A SERIOUS ISSUE.

The people of Montgomery County simply ask for a level of assurance equal to the seriousness of the issue. *"Evidence before us"*, *"models in place"*, *"no contrary information"* is frankly not good enough. The water does not belong to the folks back over in Montgomery County, but the ill-effects of a bad decision will be ours forever.

There is time, ample time, to make sure we are doing the right thing. Montgomery County has asked its legislative representatives to vote for allocating the funds necessary to research, develop, and test the impacts. Please allow them time to do the right thing.

The Montgomery County Board of Commissioners has adopted a resolution relating to the IBT request. We respectfully ask for that resolution to be included with these comments.

Our concerns do not stop at the water's edge, and our resolution discusses implications beyond the environmental and recreational concerns. This transfer request, and others like it, represents an alarming trend against the interest of rural counties in NC. We ask for our legislators to make sure we are all included in the growing prosperity of our state. We recently were told by one group of state officials that "TIMES ARE GOOD IN NC". Well, the prosperity is not being shared. If we share the water, we should share the riches. Thank you.

From:	Joseph Whitel0 < josephew62@icloud.com>
Sent:	Thursday, August 25, 2016 2:40 PM
То:	DWR.IBT
Subject:	Lake tillery water supply?

I would like to express my concerns on pumping water to union county? If the draw down effects our water access very much, we will not be able to launch our boat or jet ski? This will also have a negative impact on Moral Mountain state park ? Montgomery county needs to take care or our resources! Thanks Joe White

From:	Joseph Whitel0 <josephew62@icloud.com></josephew62@icloud.com>
Sent:	Tuesday, September 06, 2016 8:56 PM
То:	Nimmer, Kim
Subject:	Low water

We at Carolina Forest are very concerned about the water level. This past week we were unable to get our boat out for the holiday, very disappointing for our children! We have been on Lake Tillery since 1988 and have seen a lot of change in the last 10 years that are not good! The flow rate has been very damaging to the lake shore and also we have lost 4 islands in front of Morrow Mountain State Park! This has hurt fishing along the shores and we don't have the islands to camp and picnic on any more! we feel more flow on the Lake can only harm Montgomery and Stanly County residents and visitors! Thanks for reading this! Joe and Lannette White

Transcription for Monroe public hearing – Union County IBT (9/1/2016)

Stephen White – Good evening. I'm the manager of Lancaster County Water & Sewer District. Since the early 1990s, Lancaster County Water and Sewer District and Union County have joined together in a joint venture partnership with Catawba River Water Treatment Plant, which is located in Lancaster County, South Carolina. I'd like to make two points: one is regional solutions, like the one between Union County and Lancaster County Water & Sewer District are necessary to solve water supply challenges in our region. Without this Yadkin River IBT, our partner is going to need more water from the strained Catawba River. Regional solutions are necessary. In our partnership with Union County both of our organizations have accomplished more together than they ever could separately. By working together, we have been able to provide an affordable, long-term, sustainable water supply for our Catawba River Basin service area customers. We are now working together now on a new raw water reservoir to make us both more drought tolerant, and help preserve the Catawba River in times of low flow, including drought. A delayed response to this Yadkin IBT request will require Union County to secure more water from the Catawba River. Union County has been working to develop a new water supply for their Yadkin River Basin for many, many years, as already been noted here tonight. And also noted already, they have a grandfathered IBT in North Carolina from the Catawba River of 5 million gallons per day. We are currently working on completing a Master Plan study of the Catawba River Water Treatment Plant. We heard just this week of updates on our water demand projections, that these projections indicate that we will exceed our rated capacity within a few years. That is, the time that it would take for Union County to build the proposed Yadkin River Water Supply Project. Without this IBT approval, our partner will have no choice but to pull more water from the Catawba River. It is our hope that the North Carolina Environmental Management Commission sees the value of using Yadkin River water to serve the needs of Union County in the Yadkin River Basin. Lancaster County Water & Sewer District wholeheartedly supports this IBT request. Thank you.

From:	Adele M Willard <amwillard@carolina.rr.com></amwillard@carolina.rr.com>
Sent:	Sunday, September 25, 2016 3:22 PM
То:	Nimmer, Kim
Cc:	pat and earl trulove
Subject:	Interbasin Transfer, ref Lake Tillery

Dear Kim,

I am writing this email to register my opposition to the proposed transfer of water from Lake Tillery to Union County. As property owners on Lake Tillery in Norwood, North Carolina, our concerns are:

1. A lack of proper notification and transparency. Discussions held on August 23 were not advertised in local newspapers for residents' awareness. Advertising in The Charlotte Observer affected few of the concerned citizens.

2. Only one study to date regarding water level affect over time span of the agreement, sponsored and performed by Union County, one of the beneficiary parties to this agreement. This study lacks many probable factors which may affect lake levels going forward such as; drought, residential/business development along the Yadkin basin which water would be required to support growth.

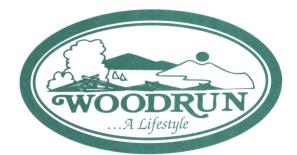
3. My husband is an engineer and determined that based on the published surface area of Lake Tillery, pumping 23 million gallons of water a day will drop the lake levels 1.7 inches a day if normal conditions exist. Again, this does NOT address drought conditions. We are already experiencing low lake levels which are negatively impacting homeowners from the use of their boats.

4. The recent opposition voiced by Stanly County Commissioners and Andy Lucas, Stanly County manager, and their request for a more thorough study performed by an independent agency.

5. If water levels decline, so do property values. We have retired and invested in our home on Lake Tillery. The town of Norwood and those parties in favor to this agreement, need to guarantee in writing, that future property values will not be negatively affected. In addition, they must be prepared to compensate property owners for any decline in future property values.

6. I, Adele, lived and worked in Union County for 48 years. I have experienced water rationing and therefore increased water rates. I have witnessed first hand the monumental growth and development of the area. Sources report that construction companies and landscaping companies are contracted to the maximum. It appears there is no cap on growth or responsible planning to address growth. Water is our most valuable resource. Union County is demonstrating poor planning and exhausting their resources. Dependence upon others to supplement their needs is unacceptable.

7. A prospering Town of Norwood needs a FULL Lake Tillery, NOT a pumping station and monthly Union County dollars for water.
Respectfully submitted,
Jerry and Adele Willard
10316 Sycamore Road
Norwood, NC 28128



Woodrun Association Inc. 5024 Woodrun on Tillery Mount Gilead, NC 27306

September 8, 2016

Environmental Commission Kim Nimmer 1611 Mail Service Center Raleigh, NC 27699

Dear Environmental Management Commission

One of our greatest natural resources for the development and growth of Montgomery and Stanly Counties is Lake Tillery. The power, recreation, job development, economic development and industry possibilities it offers are tremendous selling points for future development and growth. We believe that the Union County water project would greatly diminish that future.

Woodrun Home Owners Association, Board of Directors, representing approximately 1200 property owners in Montgomery County, emphatically supports the Montgomery County Commissioners resolution concerning the Union County water transfer.

Sincerely

On behalf of the Woodrun Board of Directors

Chairman, Steve Gladden

Cc: Montgomery County Commission

Montgomery Herald



DVISION OF MATER RESOURCES



OIVISION OF WATER RESOURCES

Charles Wriker 5196 Woodrun On Tillery Mount Gilead, North Carolina 27306

September 8, 2016

Division of Water Resources Attention Kim Nimmer 1611 Mail Service Center Raleigh, North Carolina, 27699

Attn: Environmental Management Commission

I find it reprehensible that Union County and the town of Norwood would atempt to put through a deal like this to avoid any notification of intention to Montgomery County. Placing their notices in the State of Virginia, and South Carolina a clear violation of state statute. Local newspapers as well as Commissioners were not notified as required by law. These tactics make it very dubious of any reports generated by either Union County or Norwood. Union County would not have this problem had it not permitted this urban sprawl to happen in the first place. Let them get their water fro Lake Norman which has a great deal more water than Lake Tillery.

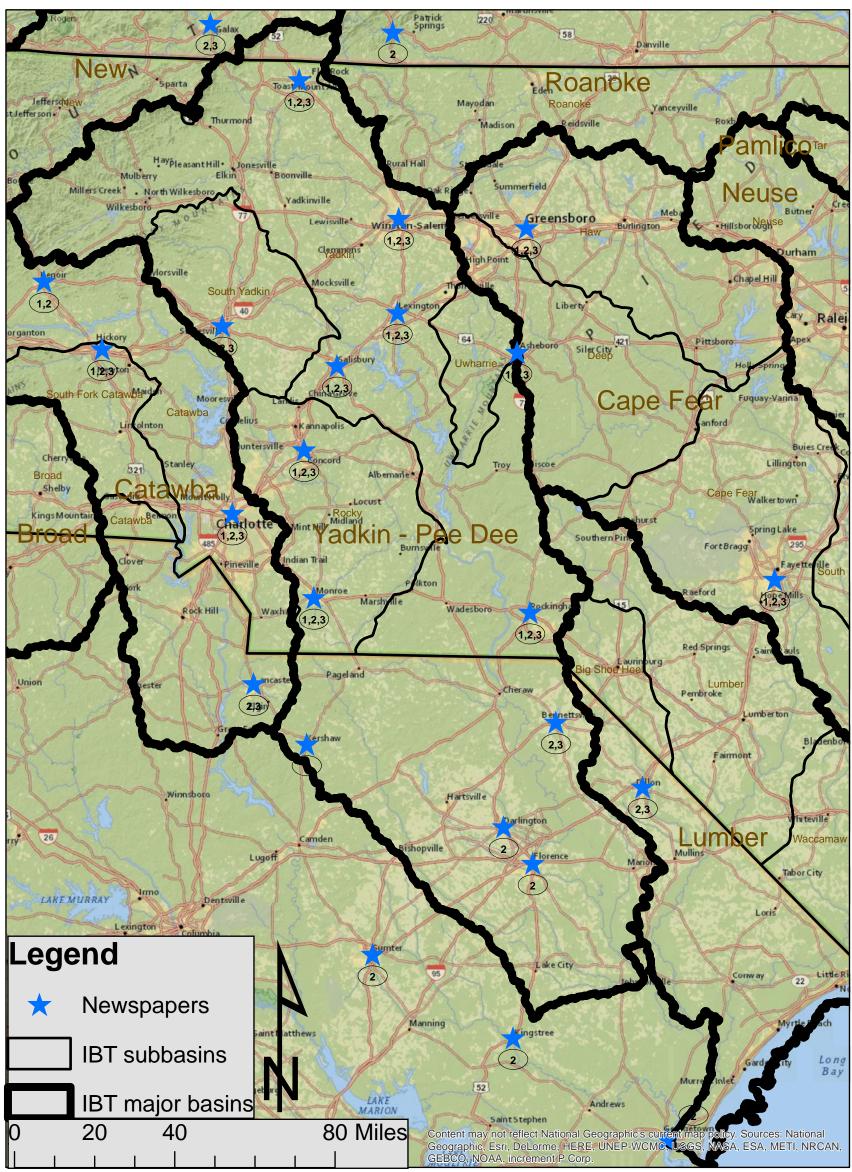
Charles Wriker Charles Wriker

Appendix B

Distribution Lists for

Public Notices

Distribution of Public Notices Publications



Ovals = Publication of Public Notice for each of the 3 rounds

Public Notice for Public Meetings Held in October 2013 for NOI - Persons Contacted via First-class Mail:

Fred McClure
Richard Linville
Kenneth R. Robinette
Keith Elmore
Wesley Blackwell
Robert Archie Scott
Elista Smith
Larry Adams
Town of Ellerbe Mayor
Victor Varela
James Misenheimer
Antonio Blue
Anthony Lowe
Richard Allen
Bill Thacker
Michael Criscoe
James Lawrence
Beauford Taylor
Ann S. Taylor
Barbara Ann Hopkins
Tim Barnett
Lovith Anderson Jr
Wayne D. Rhodes
Nancy Galloway
T. Ashby Gregg Jr
Henry Furr
John Campolong
Houston Pratt
Lyndell Ingram
William R. Reynolds
Terry Knotts
Keith Bailey
Valencia S. Thomas
John H. Douglas
Alexander Boyd
John Steele
Darrick Jackson
Glenn C. Davis
Mark Holloway
Dianne Thomas
James Furr
Grady Richardson
Town of Norman Mayor
Pat McCrory

Bob McDonnell
Nikki Haley
Shane Staples
Frontier Natural Gas
William C. Howard JR., PE
Tim Brown
Jewell Jordan
Joel Clark
Bruce T. Haas
Jewell Jordan
Paul Smart
CHEMTRADE PERFORMANCE CHEMICALS US LLC
CHESTER METROPOLITAN DISTRICT
SOUTH CAROLINA DEPARTMENT OF PARKS RECREATION & TOURISM
WHITE PLAINS COUNTRY CLUB
HANSON AGGREGATES SOUTHEAST LLC
HANSON AGGREGATES SOUTHEAST LLC
GALEY & LORD INDUSTRIES LLC
SONOCO PRODUCTS COMPANY
NUCOR CORPORATION
PROGRESS ENERGY CO INC
SCE&G
FLORENCE COUNTRY CLUB
ROCKTENN CP LLC
DUNES GOLF & BEACH CLUB
NATIONAL GOLF MANAGEMENT LLC
GGG OF MYRTLE BEACH LLC
BURROUGHS & CHAPIN COMPANY INC
MYRTLE BEACH FARMS
RIVER HILLS GOLF & COUNTRY CLUB
RIVER OAKS GOLF PLANTATION LLC
SHAFTESBURY GLEN GOLF AND FISH CLUB
GGG OF MYRTLE BEACH LLC
NATIONAL GOLF MANAGEMENT LLC
ARROWHEAD COUNTRY CLUB
SIGNATURE GOLF LLC
BRCG LLC
FIFE GOLF MGMT LLC
NATIONAL GOLF MANAGEMENT LLC
SANTEE COOPER
GRAND STRAND WATER & SEWER AUTHORITY
GRAND STRAND WATER & SEWER AUTHORITY
THE MEMBERS CLUB AT WOODCREEK AND WILDEWOOD
MARTIN MARIETTA MATERIALS INC
UNIMIN CORP
CAMDEN CITY OF
SPRINGS GLOBAL US INC

LANCASTER COUNTY WATER & SEWER DISTRICT
DOMTAR PAPER COMPANY LLC
HANSON AGGREGATES SOUTHEAST LLC
FOREST LAKE CLUB INC
INTERNATIONAL PAPER COMPANY EASTOVER MILL
SCE&G
COLUMBIA CITY OF
TEGA CAY CITY OF
RIVER HILLS COUNTRY CLUB
NATION FORD CHEMICAL CO
RESOLUTE FP US INC
DUKE ENERGY CAROLINAS LLC
YORK CITY OF
Larry South
Andrew Griffin
Andrew Newsom
Beth Dirks, County Manager
Brady Hill
Lissara Partners LLC
Brantley Price
Bryan Edwards
Chris B Robbins
Christine W Bralley, Manager Town
Clyde Robbins
Coleman M Keeter, Director Executive
D E Hightower
DANIEL CABEZA
Danny Long
Danny R Shaw
David Robinson
David Matthew Robinette
David W Treme, City Manager
Douglas Anderson
Ed Nance
Edward F Burchins, City Manager
Ezra Johnson
Fred Richardson
Gary S Earnhardt
Greg Zephir, MANAGER TOWN
Gregory E Young
Griggs McCorkle
Harry McPherson, President Vice
Henry Moree
J Anderson
J Covington
J L Grazier, Mayor
Jack L Gardin, Manager Town
JAMES EWART

James F Crump
Jason Wilkie
Jay Wiese
Jay Poston
Jeffrey Goodman, President
Jerry Myers
Joe Commander
John Steele, Jr, Mayor
John N Ogburn, III
Joyce Rogers, Mayor
Ken Laster
Kevin Griggs
Kimberly Davis
L Weaver
Larry Ettel, Manager Terminal
Lee Rollins, Manager Town
Lee T Huffman
Leonard Cottom
LON KIRVEN
Marchell Adams David
Mark Harrill
Mary Johnson
MICHAEL GIPKO
Michael Todd Tillis
Mike Cool
Monty R Crump
Morris M Trammel, Jr
Nelson Evans
Olivia Webb
R FINKLEA
Radford L Thomas, Director Public Utilities
Ricky Ingram
Ron Barnhill
Scott Hildebran, Manager Town
Scott Morris, Mayor
Sidney Wallace
Susan P Eggleston
THOMAS COSGROVE
Tim Dickerson
TIM EUBANKS
Todd Douthit
Tony Griffin
Trent McKenzie
Bryan Bowles, Administrator Town
Wesley Miles
William Crompton
Robert Snyder
Stephanie Graham
Joe Bennett

Public Notice for Public Meetings Held in October 2013 for NOI - Persons Contacted via Email:

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Public Notice for Public Hearing Held in September 2015 for Draft EIS -Persons Contacted via First-class Mail:

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Kenneth R. Robinette
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Robert Archie Scott
Elista Smith
Larry Adams
Town of Ellerbe Mayor
Victor Varela
James Misenheimer
Antonio Blue
Anthony Lowe
Richard Allen
Bill Thacker
Michael Criscoe
James Lawrence
Beauford Taylor
Ann S. Taylor
Barbara Ann Hopkins
Tim Barnett
Lovith Anderson Jr
Wayne D. Rhodes
Nancy Galloway
T. Ashby Gregg Jr
Henry Furr
John Campolong
Houston Pratt
Lyndell Ingram
William R. Reynolds
Terry Knotts
Keith Bailey
Valencia S. Thomas
John H. Douglas
Alexander Boyd
John Steele
Darrick Jackson
Glenn C. Davis
Mark Holloway
Dianne Thomas
James Furr
Grady Richardson
Town of Norman Mayor
Pat McCrory
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Bob McDonnell
Nikki Haley
Frontier Natural Gas
Tim Brown
Joel Clark
Bruce T. Haas
Paul Smart
CHEMTRADE PERFORMANCE CHEMICALS US LLC
CHESTER METROPOLITAN DISTRICT
SOUTH CAROLINA DEPARTMENT OF PARKS
RECREATION & TOURISM
WHITE PLAINS COUNTRY CLUB
HANSON AGGREGATES SOUTHEAST LLC
HANSON AGGREGATES SOUTHEAST LLC
GALEY & LORD INDUSTRIES LLC
SONOCO PRODUCTS COMPANY
NUCOR CORPORATION
PROGRESS ENERGY CO INC
SCE&G
FLORENCE COUNTRY CLUB
ROCKTENN CP LLC
DUNES GOLF & BEACH CLUB
NATIONAL GOLF MANAGEMENT LLC
GGG OF MYRTLE BEACH LLC
BURROUGHS & CHAPIN COMPANY INC
MYRTLE BEACH FARMS
RIVER HILLS GOLF & COUNTRY CLUB
RIVER OAKS GOLF PLANTATION LLC
SHAFTESBURY GLEN GOLF AND FISH CLUB
GGG OF MYRTLE BEACH LLC
NATIONAL GOLF MANAGEMENT LLC
SIGNATURE GOLF LLC
BRCG LLC FIFE GOLF MGMT LLC
NATIONAL GOLF MANAGEMENT LLC
SANTEE COOPER
GRAND STRAND WATER & SEWER AUTHORITY
GRAND STRAND WATER & SEWER AUTHORITY
THE MEMBERS CLUB AT WOODCREEK AND
MARTIN MARIETTA MATERIALS INC
LANCASTER COUNTY WATER & SEWER DISTRICT
DOMTAR PAPER COMPANY LLC
HANSON AGGREGATES SOUTHEAST LLC
FOREST LAKE CLUB INC
INTERNATIONAL PAPER COMPANY EASTOVER MILL

SCE&G
COLUMBIA CITY OF
NATION FORD CHEMICAL CO
RESOLUTE FP US INC
DUKE ENERGY CAROLINAS LLC
YORK CITY OF
Larry South
Andrew Griffin
Andrew Newsom
Beth Dirks, County Manager
Brady Hill
Lissara Partners LLC
Brantley Price
Bryan Edwards
Chris B Robbins
Christine W Bralley, Manager Town
Clyde Robbins
Coleman M Keeter, Director Executive
D E Hightower
DANIEL CABEZA
Danny Long
Danny R Shaw
David Matthew Robinette
David W Treme, City Manager
Douglas Anderson
Ed Nance
Edward F Burchins, City Manager
Ezra Johnson
Fred Richardson
Gary S Earnhardt
Greg Zephir, MANAGER TOWN
Gregory E Young
Griggs McCorkle
Harry McPherson, President Vice
Henry Moree
J Anderson
J Covington
J L Grazier, Mayor
Jack L Gardin, Manager Town
James F Crump
Jason Wilkie
Jay Wiese
Jay Poston
Jerry Myers
Joe Commander
John Steele, Jr, Mayor
John N Ogburn, III
Joyce Rogers, Mayor
Ken Laster

Kevin Griggs
Kimberly Davis
L Weaver
Larry Ettel, Manager Terminal
Lee Rollins, Manager Town
Lee T Huffman
Leonard Cottom
LON KIRVEN
Marchell Adams David
Mark Harrill
Mary Johnson
MICHAEL GIPKO
Michael Todd Tillis
Mike Cool
Monty R Crump
Morris M Trammel, Jr
Nelson Evans
Olivia Webb
Radford L Thomas, Director Public Utilities
Ricky Ingram
Ron Barnhill
Scott Hildebran, Manager Town
Scott Morris, Mayor
Sidney Wallace
Susan P Eggleston
THOMAS COSGROVE
Tim Dickerson
TIM EUBANKS
Todd Douthit
Tony Griffin
Trent McKenzie
Bryan Bowles, Administrator Town
Wesley Miles
William Crompton
Robert Snyder
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Amanda	Reid
Andre Laws	
Andrew Griffin	
Andrew Newsom	
Ann S. Taylor	
Archie B. Hicks	
Barbara	Jones
Barbara Ann Hopkins	
Beauford Taylor	
Beth Dirks, County Manager	
Bill Thacker	
Billy Cassidy	
Bob McDonnell	
Bobby Hudson	
Brady Hill	
Brantley Price	
BRCG LLC	
Bruce	Cox
Bruce T. Haas	
Bryan Edwards	
Bryan Bowles, Town Administrator	
Bucky R. Jernigan	
Buddy Collins	
BURROUGHS & CHAPIN COMPANY INC	
CAMDEN CITY OF	
Charles	Newsome
Charles McCoy	
CHEMTRADE PERFORMANCE CHEMICALS US LLC	
CHESTER METROPOLITAN DISTRICT	
Chris	Hildreth
Chris B Robbins	
Christine W Bralley, Manager Town	
Clint	Rivers
Clyde Robbins	
Coleman M Keeter, Director Executive	
COLUMBIA CITY OF	
COLUMBIA COUNTRY CLUB	
D E Hightower	
DANIEL CABEZA	
Danny	Settle
Danny Long	

Danny Gabriel Danny R Shaw Darrick Jackson David David Matthew Robinette David R. Plyler David W Treme, City Manager Diane Timmons	Robinson
Dianne Thomas DOMTAR PAPER COMPANY LLC Donald Donald Doug Douglas Anderson DUKE ENERGY CAROLINAS LLC DUNES GOLF & BEACH CLUB	Williams Peterson Carter
Ed Nance Eddie	Lanier
Eddie Settle Edward F Burchins, City Manager Eric Ezra Johnson	Rogers
FIFE GOLF MGMT LLC FLORENCE COUNTRY CLUB Floyd Wilson FOREST LAKE CLUB INC Forrest Fred Richardson Frontier Natural Gas GALEY & LORD INDUSTRIES LLC Gary S Earnhardt GGG OF MYRTLE BEACH LLC GGG OF MYRTLE BEACH LLC Grady Richardson GRAND STRAND WATER & SEWER AUTHORITY GRAND STRAND WATER & SEWER AUTHORITY Greg Greg Zephir, MANAGER TOWN Gregory E Young Griggs McCorkle HANSON AGGREGATES SOUTHEAST LLC	Stevenson
HANSON AGGREGATES SOUTHEAST LLC HANSON AGGREGATES SOUTHEAST LLC Harry McPherson, President Vice Henry Moree Houston Pratt INTERNATIONAL PAPER COMPANY EASTOVER MILL	

Jay PostonEdmondsJeffreyGoodmanJerry MyersJordanJewellJordanJewellJordanJillNormanJIMMYMCCUTCHEONJimmy MasonJoe BennettJoe BennettJoe CommanderJoe EstridgeJoe BennettJoe CommanderCaterJoen CarkJordanJohnCaterDanny Gabriel, MayorJohnJohn CampolongJoyce Rogers, MayorJoyce Rogers, MayorKarenKarenWielandKeith BaileyKennethKennethBroadwayKenneth R. RobinetteNolandKevin GriggsPeeleKimberly DavisLiwaverLANCASTER COUNTY WATER & SEWER DISTRICT	J Anderson J Covington J L Grazier, Mayor Jack L Gardin, Manager Town James JAMES James E. Blake James F Crump James Lawrence Jason Wilkie Jay Wiese	Crump EWART
JeffreyGoodmanJerry MyersJordanJewellJordanJewellJordanJillNormanJIIMMYMCCUTCHEONJimmy MasonMCCUTCHEONJoe BennettJoe BennettJoe CommanderJoe EstridgeJoe EstridgeJoe EstridgeJoel ClarkJohnJohn N Ogburn, IIICaterJohn CampolongSmithJoyce Rogers, MayorKarenKarenWielandKeith BaileyCraverKellyCraverKennethBroadwayKenneth R. RobinetteKevin GriggsKimberly DavisLL WeaverLANCASTER COUNTY WATER & SEWER DISTRICT	-	Edmonds
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Keith Bailey Kelly Craver Ken Laster Kenneth Kenneth R. Robinette Kevin Kevin Griggs Kimberly Davis L Weaver LANCASTER COUNTY WATER & SEWER DISTRICT	K. Thomas Bradshaw	
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Kevin Griggs Kimberly Davis L Weaver LANCASTER COUNTY WATER & SEWER DISTRICT		
Kimberly Davis L Weaver LANCASTER COUNTY WATER & SEWER DISTRICT	Kevin	Peele
L Weaver LANCASTER COUNTY WATER & SEWER DISTRICT		
LANCASTER COUNTY WATER & SEWER DISTRICT	•	
Larry Pressley		Pressley
Larry Pressley	-	•
Larry Ettel, Manager Terminal	-	
Larry South		

Lauren Lee Lee Rollins, Manager Town Lee T Huffman	Faulkner Capps
Leonard Cottom Lissara Partners LLC LON KIRVEN Lovith Anderson Jr	
Lyndell Marchell Adams David Mark Harrill Mark Dorman	Ingram
Marlon MARTIN MARIETTA MATERIALS INC Mary Johnson	Weaver
Michael Michael MICHAEL GIPKO	Rattler Ruhe
Michael Todd Tillis Mike Mike Cool Mike Mahaley Minnie Staton	Leonas
Monty Monty R Crump Morris M Trammel, Jr MYRTLE BEACH FARMS NATION FORD CHEMICAL CO NATIONAL GOLF MANAGEMENT LLC NATIONAL GOLF MANAGEMENT LLC NATIONAL GOLF MANAGEMENT LLC NATIONAL GOLF MANAGEMENT LLC Nelson Evans	Crump
Nicole Nikki Haley NUCOR CORPORATION Olivia Webb Pat McCrory Paul Smart	Johnston
Perry Phillip PROGRESS ENERGY CO INC R	Williams Rahn FINKLEA
Radford L Thomas, Director Public Utilities Raymond RESOLUTE FP US INC Richard Richard Allen	Allen Moore

RIVER HILLS GOLF & COUNTRY CLUB RIVER OAKS GOLF PLANTATION LLC	
Robert	Fariole
Robert Snyder	
ROCKTENN CP LLC	
Ron	Sink
Ron Barnhill	
Roy Lee Berry III	
Ryan	Rase
Sam	Stewart
SANTEE COOPER	
SCE&G	
SCE&G	
Scott	Buffkin
Scott	Taylor
Scott Hildebran, Manager Town	
Scott Morris, Mayor	
Scotty	Perry
SHAFTESBURY GLEN GOLF AND FISH CLUB	
Shane	Staples
Sidney Wallace	
SIGNATURE GOLF LLC	
SONOCO PRODUCTS COMPANY	
SOUTH CAROLINA DEPARTMENT OF PARKS RECREAT	ION & TOURISM
Steve Jarvis	
Steve L. Nolan	
Steve L. Nolan Susan P Eggleston	
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Susan P Eggleston T. Ashby Gregg Jr	Houk
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Susan P Eggleston T. Ashby Gregg Jr T.F. Finklea Terry Terry Knotts THE MEMBERS CLUB AT WOODCREEK AND WILDEWO Theodore THOMAS COSGROVE Tim Brown Tim Dickerson TIM EUBANKS Todd Douthit Tony Griffin Trent McKenzie UNIMIN CORP Victor Varela W Brock Wesley Miles WHITE PLAINS COUNTRY CLUB	OD Carr Conrad
Susan P Eggleston T. Ashby Gregg Jr T.F. Finklea Terry Terry Knotts THE MEMBERS CLUB AT WOODCREEK AND WILDEWO Theodore THOMAS COSGROVE Tim Brown Tim Dickerson TIM EUBANKS Todd Douthit Tony Griffin Trent McKenzie UNIMIN CORP Victor Varela W Brock Wesley Miles	OD Carr

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Public Notice for Public Hearings Held in August and September 2016 for Draft Determination -Persons Contacted via Email:

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Appendix C

NC Statutes and Administrative Rules for Water Transfers

§ 143-215.22L. Regulation of surface water transfers.

(a) Certificate Required. – No person, without first obtaining a certificate from the Commission, may:

- (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.
- (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.

(b) Exception. – Notwithstanding the provisions of subsection (a) of this section, a 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 one basin to another if the facility was in existence or under construction on 1 July 1993.

(c)Notice of Intent to File a Petition. - An applicant shall prepare a notice of intent to file a petition that includes a nontechnical description of the applicant's request and an identification of the proposed water source. Within 90 days after the applicant files a notice of intent to file a petition, the applicant shall hold at least one public meeting in the source river basin upstream from the proposed point of withdrawal, at least one public meeting in the source river basin downstream from the proposed point of withdrawal, and at least one public meeting in the receiving river basin to provide information to interested parties and the public regarding the nature and extent of the proposed transfer and to receive comment on the scope of the environmental documents. Written notice of the public meetings shall be provided at least 30 days before the public meetings. At the time the applicant gives notice of the public meetings, the applicant shall request comment on the alternatives and issues that should be addressed in the environmental documents required by this section. The applicant shall accept written comment on the scope of the environmental documents for a minimum of 30 days following the last public meeting. Notice of the public meetings and opportunity to comment on the scope of the environmental documents shall be provided as follows:

- (1) By publishing notice in the North Carolina Register.
- (2) By publishing notice in a newspaper of general circulation in:
 - a. Each county in this State located in whole or in part of the area of the source river basin upstream from the proposed point of withdrawal.
 - b. Each city or county located in a state located in whole or in part of the surface drainage basin area of the source river basin that also falls within, in whole or in part, the area denoted by one of the following eight-digit cataloging units as organized by the United States Geological Survey:

03050105 (Broad River: NC and SC); 03050106 (Broad River: SC); 03050107 (Broad River: SC); 03050108 (Broad River: SC); 05050001 (New River: NC and VA); 05050002 (New River: VA and WV); 03050101 (Catawba River: NC and SC); 03050103 (Catawba River: NC and SC); 03050104 (Catawba River: SC); 03010203 (Chowan River: NC and VA); 03010204 (Chowan River: NC and VA); 06010105 (French Broad River: NC and TN); 06010106 (French Broad River: NC and TN); 06010107 (French Broad River: TN); 06010108 (French Broad River: NC and TN); 06020001 (Hiwassee River: AL, GA, TN); 06020002 (Hiwassee River: GA, NC, TN); 06010201 (Little Tennessee River: TN); 06010202 (Little Tennessee River: TN, GA, and NC); 06010204 (Little Tennessee River: NC and TN); 03060101 (Savannah River: NC and SC): 03060102 (Savannah River: GA, NC, and SC); 03060103 (Savannah River: GA and SC); 03060104 (Savannah River: GA); 03060105 (Savannah River: GA); 03040203 (Lumber River: NC and SC); 03040204 (Lumber River: NC and SC); 03040206 (Lumber River: NC and SC); 03040207 (Lumber River: NC and SC); 03010205 (Albemarle Sound: NC and VA); 06020003 (Ocoee River: GA, NC, and TN); 03010101 (Roanoke River: VA); 03010102 (Roanoke River: NC and VA); 03010103 (Roanoke River: NC and VA); 03010104 (Roanoke River: NC and VA); 03010105 (Roanoke River: VA); 03010106 (Roanoke River: NC and VA); 06010102 (Watauga River: TN and VA); 06010103 (Watauga River: NC and TN); 03040101 (Yadkin River: VA and NC); 03040104 (Yadkin River: NC and SC); 03040105 (Yadkin River: NC and SC); 03040201 (Yadkin River: NC and SC); 03040202 (Yadkin River: NC and SC).

- c. Each county in this State located in whole or in part of the area of the source river basin downstream from the proposed point of withdrawal.
- d. Any area in the State in a river basin for which the source river basin has been identified as a future source of water in a local water supply plan prepared pursuant to G.S. 143-355(l).
- e. Each county in the State located in whole or in part of the receiving river basin.
- (3) By giving notice by first-class mail or electronic mail to each of the following:
 - a. The board of commissioners of each county in this State or the governing body of any county or city that is politically independent of a county in any state that is located entirely or partially within the

source river basin of the proposed transfer and that also falls within, in whole or in part, the area denoted by one of the eight-digit cataloging units listed in sub-subdivision b. of subdivision (2) of this subsection.

- b. The board of commissioners of each county in this State or the governing body of any county or city that is politically independent of a county in any state that is located entirely or partially within the receiving river basin of the proposed transfer and that also falls within, in whole or in part, the area denoted by one of the eight-digit cataloging units listed in sub-subdivision b. of subdivision (2) of this subsection.
- c. The governing body of any public water system that withdraws water upstream or downstream from the withdrawal point of the proposed transfer.
- d. If any portion of the source or receiving river basins is located in another state, all state water management or use agencies, environmental protection agencies, and the office of the governor in that state upstream or downstream from the withdrawal point of the proposed transfer.
- e. All persons who have registered a water withdrawal or transfer from the proposed source river basin under this Part or under similar law in an another state.
- f. All persons who hold a certificate for a transfer of water from the proposed source river basin under this Part or under similar law in an another state.
- g. All persons who hold a National Pollutant Discharge Elimination System (NPDES) wastewater discharge permit for a discharge of 100,000 gallons per day or more upstream or downstream from the proposed point of withdrawal.
- h. To any other person who submits to the applicant a written request to receive all notices relating to the petition.

(d) Environmental Documents. – The definitions set out in G.S. 113A-9 apply to this section. The Department shall conduct a study of the environmental impacts of any proposed transfer of water for which a certificate is required under this section. The study shall meet all of the requirements set forth in G.S. 113A-4 and rules adopted pursuant to G.S. 113A-4. An environmental assessment shall be prepared for any petition for a certificate under this section. The determination of whether an environmental impact statement shall also be required shall be made in accordance with the provisions of Article 1 of Chapter 113A of the General Statutes; except that an environmental impact statement shall be prepared for every proposed transfer of water from one major river basin to another for which a certificate under this section shall pay the cost of special studies necessary to comply with Article 1 of Chapter 113A of the General Statutes. An environmental impact statement prepared pursuant to this subsection shall include all of the following:

- (1) A comprehensive analysis of the impacts that would occur in the source river basin and the receiving river basin if the petition for a certificate is granted.
- (2) An evaluation of alternatives to the proposed interbasin transfer, including water supply sources that do not require an interbasin transfer and use of water conservation measures.

(3) A description of measures to mitigate any adverse impacts that may arise from the proposed interbasin transfer.

(e) Public Hearing on the Draft Environmental Document. – The Commission shall hold a public hearing on the draft environmental document for a proposed interbasin transfer after giving at least 30 days' written notice of the hearing in the Environmental Bulletin and as provided in subdivisions (2) and (3) of subsection (c) of this section. The notice shall indicate where a copy of the environmental document can be reviewed and the procedure to be followed by anyone wishing to submit written comments and questions on the environmental document. The Commission shall prepare a record of all comments and written responses to questions posed in writing. The record shall include complete copies of scientific or technical comments related to the potential impact of the interbasin transfer. The Commission shall accept written comment on the draft environmental document for a minimum of 30 days following the last public hearing. The applicant who petitions the Commission for a certificate under this section shall pay the costs associated with the notice and public hearing on the draft environmental document.

(f) Determination of Adequacy of Environmental Document. – The Commission shall not act on any petition for an interbasin transfer until the Commission has determined that the environmental document is complete and adequate. A decision on the adequacy of the environmental document is subject to review in a contested case on the decision of the Commission to issue or deny a certificate under this section.

(g) Petition. – An applicant for a certificate shall petition the Commission for the certificate. The petition shall be in writing and shall include all of the following:

- (1) A general description of the facilities to be used to transfer the water, including current and projected areas to be served by the transfer, current and projected capacities of intakes, and other relevant facilities.
- (2) A description of all the proposed consumptive and nonconsumptive uses of the water to be transferred.
- (3) A description of the water quality of the source river and receiving river, including information on aquatic habitat for rare, threatened, and endangered species; in-stream flow data for segments of the source and receiving rivers that may be affected by the transfer; and any waters that are impaired pursuant to section 303(d) of the federal Clean Water Act (33 U.S.C. § 1313(d)).
- (4) A description of the water conservation measures used by the applicant at the time of the petition and any additional water conservation measures that the applicant will implement if the certificate is granted.
- (5) A description of all sources of water within the receiving river basin, including surface water impoundments, groundwater wells, reinjection storage, and purchase of water from another source within the river basin, that is a practicable alternative to the proposed transfer that would meet the applicant's water supply needs. The description of water sources shall include sources available at the time of the petition for a certificate and any planned or potential water sources.
- (6) A description of water transfers and withdrawals registered under G.S. 143-215.22H or included in a local water supply plan prepared pursuant to G.S. 143-355(1) from the source river basin, including transfers and withdrawals at the time of the petition for a certificate and any planned or reasonably foreseeable transfers or withdrawals by a public water system with service area located within the source river basin.

- (7)A demonstration that the proposed transfer, if added to all other transfers and withdrawals required to be registered under G.S. 143-215.22H or included in any local water supply plan prepared by a public water system with service area located within the source basin pursuant to G.S. 143-355(1) from the source river basin at the time of the petition for a certificate, would not reduce the amount of water available for use in the source river basin to a degree that would impair existing uses, pursuant to the antidegradation policy set out in 40 Code of Federal Regulation § 131.12 (Antidegradation Policy) (1 July 2006 Edition) and the statewide antidegradation policy adopted pursuant thereto, or existing and planned consumptive and nonconsumptive uses of the water in the source river basin. If the proposed transfer would impact a reservoir within the source river basin, the demonstration must include a finding that the transfer would not result in a water level in the reservoir that is inadequate to support existing uses of the reservoir, including recreational uses.
- (8) The applicant's future water supply needs and the present and reasonably foreseeable future water supply needs for public water systems with service area located within the source river basin. The analysis of future water supply needs shall include agricultural, recreational, and industrial uses, and electric power generation. Local water supply plans prepared pursuant to G.S. 143-355(1) for water systems with service area located within the source river basin shall be used to evaluate the projected future water needs in the source river basin that will be met by public water systems.
- (9) The applicant's water supply plan prepared pursuant to G.S. 143-355(l). If the applicant's water supply plan is more than two years old at the time of the petition, then the applicant shall include with the petition an updated water supply plan.
- (10) Any other information deemed necessary by the Commission for review of the proposed water transfer.

(h) Settlement Discussions. – Upon the request of the applicant, any interested party, or the Department, or upon its own motion, the Commission may appoint a mediation officer. The mediation officer may be a member of the Commission, an employee of the Department, or a neutral third party but shall not be a hearing officer under subsections (e) or (j) of this section. The mediation officer shall make a reasonable effort to initiate settlement discussions between the applicant and all other interested parties. Evidence of statements made and conduct that occurs in a settlement discussion conducted under this subsection, whether attributable to a party, a mediation officer, or other person shall not be subject to discovery and shall be inadmissible in any subsequent proceeding on the petition for a certificate. The Commission may adopt rules to govern the conduct of the mediation process.

(i) Draft Determination. – Within 90 days after the Commission determines that the environmental document prepared in accordance with subsection (d) of this section is adequate or the applicant submits its petition for a certificate, whichever occurs later, the Commission shall issue a draft determination on whether to grant the certificate. The draft determination shall be based on the criteria set out in this section and shall include the conditions and limitations, findings of fact, and conclusions of law that would be required in a final determination. Notice of the draft determination shall be given as provided in subsection (c) of this section.

(j) Public Hearing on the Draft Determination. – Within 60 days of the issuance of the draft determination as provided in subsection (i) of this section, the Commission shall hold

public hearings on the draft determination. At least one hearing shall be held in the affected area of the source river basin, and at least one hearing shall be held in the affected area of the receiving river basin. In determining whether more than one public hearing should be held within either the source or receiving river basins, the Commission shall consider the differing or conflicting interests that may exist within the river basins, including the interests of both upstream and downstream parties potentially affected by the proposed transfer. The public hearings shall be conducted by one or more hearing officers appointed by the Chair of the Commission. The hearing officers may be members of the Commission or employees of the Department. The Commission shall give at least 30 days' written notice of the public hearing as provided in subsection (c) of this section. The Commission shall accept written comment on the draft determination for a minimum of 30 days following the last public hearing. The Commission shall prepare a record of all comments and written responses to questions posed in writing. The record shall include complete copies of scientific or technical comments related to the potential impact of the interbasin transfer. The applicant who petitions the Commission for a certificate under this section shall pay the costs associated with the notice and public hearing on the draft determination.

(k) Final Determination: Factors to be Considered. – In determining whether a certificate may be issued for the transfer, the Commission shall specifically consider each of the following items and state in writing its findings of fact and conclusions of law with regard to each item:

- (1) The necessity and reasonableness of the amount of surface water proposed to be transferred and its proposed uses.
- (2) The present and reasonably foreseeable future detrimental effects on the source river basin, including present and future effects on public, industrial, economic, recreational, and agricultural water supply needs, wastewater assimilation, water quality, fish and wildlife habitat, electric power generation, navigation, and recreation. Local water supply plans for public water systems with service area located within the source river basin prepared pursuant to G.S. 143-355(1) shall be used to evaluate the projected future water needs in the source river basin that will be met by public water systems. Information on projected future water needs for public water systems with service area located within the source river basin that is more recent than the local water supply plans may be used if the Commission finds the information to be reliable. The determination shall include a specific finding as to measures that are necessary or advisable to mitigate or avoid detrimental impacts on the source river basin.
- (3) The cumulative effect on the source major river basin of any water transfer or consumptive water use that, at the time the Commission considers the petition for a certificate is occurring, is authorized under this section, or is projected in any local water supply plan for public water systems with service area located within the source river basin that has been submitted to the Department in accordance with G.S. 143-355(l).
- (4) The present and reasonably foreseeable future beneficial and detrimental effects on the receiving river basin, including present and future effects on public, industrial, economic, recreational, and agricultural water supply needs, wastewater assimilation, water quality, fish and wildlife habitat, electric power generation, navigation, and recreation. Local water supply plans prepared pursuant to G.S. 143-355(l) that affect the receiving river basin shall be used to evaluate the projected future water needs in the

receiving river basin that will be met by public water systems. Information on projected future water needs that is more recent than the local water supply plans may be used if the Commission finds the information to be reliable. The determination shall include a specific finding as to measures that are necessary or advisable to mitigate or avoid detrimental impacts on the receiving river basin.

- The availability of reasonable alternatives to the proposed transfer, including (5)the potential capacity of alternative sources of water, the potential of each alternative to reduce the amount of or avoid the proposed transfer, probable costs, and environmental impacts. In considering alternatives, the Commission is not limited to consideration of alternatives that have been proposed, studied, or considered by the applicant. The determination shall include a specific finding as to why the applicant's need for water cannot be satisfied by alternatives within the receiving basin, including unused capacity under a transfer for which a certificate is in effect or that is otherwise authorized by law at the time the applicant submits the petition. The determination shall consider the extent to which access to potential sources of surface water or groundwater within the receiving river basin is no longer available due to depletion, contamination, or the declaration of a capacity use area under Part 2 of Article 21 of Chapter 143 of the General Statutes. The determination shall consider the feasibility of the applicant's purchase of water from other water suppliers within the receiving basin and of the transfer of water from another sub-basin within the receiving major river basin. Except in circumstances of technical or economic infeasibility or adverse environmental impact, the Commission's determination as to reasonable alternatives shall give preference to alternatives that would involve a transfer from one sub-basin to another within the major receiving river basin over alternatives that would involve a transfer from one major river basin to another major river basin.
- (6) If applicable to the proposed project, the applicant's present and proposed use of impoundment storage capacity to store water during high-flow periods for use during low-flow periods and the applicant's right of withdrawal under G.S. 143-215.44 through G.S. 143-215.50.
- (7) If the water to be withdrawn or transferred is stored in a multipurpose reservoir constructed by the United States Army Corps of Engineers, the purposes and water storage allocations established for the reservoir at the time the reservoir was authorized by the Congress of the United States.
- (8) Whether the service area of the applicant is located in both the source river basin and the receiving river basin.
- (9) Any other facts and circumstances that are reasonably necessary to carry out the purposes of this Part.

(l) Final Determination: Information to be Considered. – In determining whether a certificate may be issued for the transfer, the Commission shall consider all of the following sources of information:

- (1) The petition.
- (2) The environmental document prepared pursuant to subsection (d) of this section.
- (3) All oral and written comment and all accompanying materials or evidence submitted pursuant to subsections (e) and (j) of this section.

- (4) Information developed by or available to the Department on the water quality of the source river basin and the receiving river basin, including waters that are identified as impaired pursuant to section 303(d) of the federal Clean Water Act (33 U.S.C. § 1313(d)), that are subject to a total maximum daily load (TMDL) limit under subsections (d) and (e) of section 303 of the federal Clean Water Act, or that would have their assimilative capacity impaired if the certificate is issued.
- (5) Any other information that the Commission determines to be relevant and useful.

(m) Final Determination: Burden and Standard of Proof; Specific Findings. – The Commission shall grant a certificate for a water transfer if the Commission finds that the applicant has established by a preponderance of the evidence all of the following:

- (1) The benefits of the proposed transfer outweigh the detriments of the proposed transfer. In making this determination, the Commission shall be guided by the approved environmental document and the policy set out in subsection (t) of this section.
- (2) The detriments have been or will be mitigated to the maximum degree practicable.
- (3) The amount of the transfer does not exceed the amount of the projected shortfall under the applicant's water supply plan after first taking into account all other sources of water that are available to the applicant.
- (4) There are no reasonable alternatives to the proposed transfer.

(n) Final Determination: Certificate Conditions and Limitations. – The Commission may grant the certificate in whole or in part, or deny the certificate. The Commission may impose any conditions or limitations on a certificate that the Commission finds necessary to achieve the purposes of this Part including a limit on the period for which the certificate is valid. The conditions and limitations shall include any mitigation measures proposed by the applicant to minimize any detrimental effects within the source and receiving river basins. In addition, the certificate shall require all of the following conditions and limitations:

- (1) A water conservation plan that specifies the water conservation measures that will be implemented by the applicant in the receiving river basin to ensure the efficient use of the transferred water. Except in circumstances of technical or economic infeasibility or adverse environmental impact, the water conservation plan shall provide for the mandatory implementation of water conservation measures by the applicant that equal or exceed the most stringent water conservation plan implemented by a public water system that withdraws water from the source river basin.
- (2) A drought management plan that specifies how the transfer shall be managed to protect the source river basin during drought conditions or other emergencies that occur within the source river basin. Except in circumstances of technical or economic infeasibility or adverse environmental impact, this drought management plan shall include mandatory reductions in the permitted amount of the transfer based on the severity and duration of a drought occurring within the source river basin and shall provide for the mandatory implementation of a drought management plan by the applicant that equals or exceeds the most stringent water conservation plan implemented by a public water system that withdraws water from the source river basin.

- (3) The maximum amount of water that may be transferred, calculated as a daily average of a calendar month, and methods or devices required to be installed and operated that measure the amount of water that is transferred.
- (4) A provision that the Commission may amend a certificate to reduce the maximum amount of water authorized to be transferred whenever it appears that an alternative source of water is available to the certificate holder from within the receiving river basin, including, but not limited to, the purchase of water from another water supplier within the receiving basin or to the transfer of water from another sub-basin within the receiving major river basin.
- (5) A provision that the Commission shall amend the certificate to reduce the maximum amount of water authorized to be transferred if the Commission finds that the applicant's current projected water needs are significantly less than the applicant's projected water needs at the time the certificate was granted.
- (6) A requirement that the certificate holder report the quantity of water transferred during each calendar quarter. The report required by this subdivision shall be submitted to the Commission no later than 30 days after the end of the quarter.
- (7) Except as provided in this subdivision, a provision that the applicant will not resell the water that would be transferred pursuant to the certificate to another public water system. This limitation shall not apply in the case of a proposed resale or transfer among public water systems within the receiving river basin as part of an interlocal agreement or other regional water supply arrangement, provided that each participant in the interlocal agreement or regional water supply arrangement is a co-applicant for the certificate and will be subject to all the terms, conditions, and limitations made applicable to any lead or primary applicant.

(o) Administrative and Judicial Review. – Administrative and judicial review of a final decision on a petition for a certificate under this section shall be governed by Chapter 150B of the General Statutes.

(p) Certain Preexisting Transfers. – In cases where an applicant requests approval to increase a transfer that existed on 1 July 1993, the Commission may approve or disapprove only the amount of the increase. If the Commission approves the increase, the certificate shall be issued for the amount of the preexisting transfer plus any increase approved by the Commission. A certificate for a transfer approved by the Commission under G.S. 162A-7 shall remain in effect as approved by the Commission and shall have the same effect as a certificate issued under this Part. A certificate for the increase of a preexisting transfer shall contain all of the conditions and limitations required by subsection (m) of this section.

(q) Emergency Transfers. – In the case of water supply problems caused by drought, a pollution incident, temporary failure of a water plant, or any other temporary condition in which the public health, safety, or welfare requires a transfer of water, the Secretary of Environment and Natural Resources may grant approval for a temporary transfer. Prior to approving a temporary transfer, the Secretary shall consult with those parties listed in subdivision (3) of subsection (c) of this section that are likely to be affected by the proposed transfer. However, the Secretary shall not be required to satisfy the public notice requirements of this section or make written findings of fact and conclusions of law in approving a temporary transfer under this subsection. If the Secretary approves a temporary transfer under this subsection, the Secretary shall specify conditions to protect other water users. A temporary

transfer shall not exceed six months in duration, but the approval may be renewed for a period of six months by the Secretary based on demonstrated need as set forth in this subsection.

(r) Relationship to Federal Law. – The substantive restrictions, conditions, and limitations upon surface water transfers authorized in this section may be imposed pursuant to any federal law that permits the State to certify, restrict, or condition any new or continuing transfers or related activities licensed, relicensed, or otherwise authorized by the federal government. This section shall govern the transfer of water from one river basin to another unless preempted by federal law.

(s) Planning Requirements. – When any transfer for which a certificate was issued under this section equals or exceeds eighty percent (80%) of the maximum amount authorized in the certificate, the applicant shall submit to the Department a detailed plan that specifies how the applicant intends to address future foreseeable water needs. If the applicant is required to have a local water supply plan, then this plan shall be an amendment to the local water supply plan required by G.S.143-355(l). When the transfer equals or exceeds ninety percent (90%) of the maximum amount authorized in the certificate, the applicant shall begin implementation of the plan submitted to the Department.

(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.

(u) Repealed by Session Laws 2013-388, s. 2, effective August 23, 2013.

(v) Modification of Certificate. – A certificate may be modified as provided in this subsection:

- (1) The Commission or the Department may make any of the following modifications to a certificate after providing electronic notice to persons who have identified themselves in writing as interested parties:
 - a. Correction of typographical errors.
 - b. Clarification of existing conditions or language.
 - c. Updates, requested by the certificate holder, to a conservation plan, drought management plan, or compliance and monitoring plan.
 - d. Modifications requested by the certificate holder to reflect altered requirements due to the amendment of this section.
- (2) A person who holds a certificate for an interbasin transfer of water may request that the Commission modify the certificate. The request shall be considered and a determination made according to the following procedures:
 - a. The certificate must have been issued pursuant to G.S. 162A-7, 143-215.22I, or 143-215.22L and the certificate holder must be in substantial compliance with the certificate.
 - b. The certificate holder shall file a notice of intent to file a request for modification that includes a nontechnical description of the certificate holder's request and identification of the proposed water source.
 - c. The certificate holder shall prepare an environmental document pursuant to subsection (d) of this section, except that an

environmental impact statement shall not be required for the modification of a certificate unless it would otherwise be required by Article 1 of Chapter 113A of the General Statutes.

- d. Upon determining that the documentation submitted by the certificate holder is adequate to satisfy the requirements of this subsection, the Department shall publish a notice of the request for modification in the North Carolina Register and shall hold a public hearing at a location convenient to both the source and receiving river basins. The Department shall provide written notice of the request for the modification and the public hearing in the Environmental Bulletin, a newspaper of general circulation in the source river basin, an anewspaper of general circulation in the receiving river basin, and as provided in subdivision (3) of subsection (c) of this section. The certificate holder who petitions the Commission for a modification under this subdivision shall pay the costs associated with the notice and public hearing.
- e. The Department shall accept comments on the requested modification for a minimum of 30 days following the public hearing.
- f. The Commission or the Department may require the certificate holder to provide any additional information or documentation it deems reasonably necessary in order to make a final determination.
- g. The Commission shall make a final determination whether to grant the requested modification based on the factors set out in subsection (k) of this section, information provided by the certificate holder, and any other information the Commission deems relevant. The Commission shall state in writing its findings of fact and conclusions of law with regard to each factor.
- h. The Commission shall grant the requested modification if it finds that the certificate holder has established by a preponderance of the evidence that the requested modification satisfies the requirements of subsection (m) of this section. The Commission may grant the requested modification in whole or in part, or deny the request, and may impose such limitations and conditions on the modified certificate as it deems necessary and relevant to the modification.
- i. The Commission shall not grant a request for modification if the modification would result in the transfer of water to an additional major river basin.
- j. The Commission shall not grant a request for modification if the modification would be inconsistent with the December 3, 2010 Settlement Agreement entered into between the State of North Carolina, the State of South Carolina, Duke Energy Carolinas, and the Catawba River Water Supply Project.

(w) Requirements for Coastal Counties and Reservoirs Constructed by the United States Army Corps of Engineers. – A petition for a certificate (i) to transfer surface water to supplement ground water supplies in the 15 counties designated as the Central Capacity Use Area under 15A NCAC 2E.0501, (ii) to transfer surface water withdrawn from the mainstem of a river to provide service to one of the coastal area counties designated pursuant to G.S. 113A-103, or (iii) to withdraw or transfer water stored in any multipurpose reservoir constructed by the United States Army Corps of Engineers and partially located in a state adjacent to North Carolina, provided the United States Army Corps of Engineers approved the withdrawal or transfer on or before July 1, 2014, shall be considered and a determination made according to the following procedures:

- (1) The applicant shall file a notice of intent that includes a nontechnical description of the applicant's request and identification of the proposed water source.
- (2) The applicant shall prepare an environmental document pursuant to subsection (d) of this section, except that an environmental impact statement shall not be required unless it would otherwise be required by Article 1 of Chapter 113A of the General Statutes.
- (3) Upon determining that the documentation submitted by the applicant is adequate to satisfy the requirements of this subsection, the Department shall publish a notice of the petition in the North Carolina Register and shall hold a public hearing at a location convenient to both the source and receiving river basins. The Department shall provide written notice of the petition and the public hearing in the Environmental Bulletin, a newspaper of general circulation in the source river basin, a newspaper of general circulation in the receiving river basin, and as provided in subdivision (3) of subsection (c) of this section. The applicant who petitions the Commission for a certificate under this subdivision shall pay the costs associated with the notice and public hearing.
- (4) The Department shall accept comments on the petition for a minimum of 30 days following the public hearing.
- (5) The Commission or the Department may require the applicant to provide any additional information or documentation it deems reasonably necessary in order to make a final determination.
- (6) The Commission shall make a final determination whether to grant the certificate based on the factors set out in subsection (k) of this section, information provided by the applicant, and any other information the Commission deems relevant. The Commission shall state in writing its findings of fact and conclusions of law with regard to each factor.
- (7) The Commission shall grant the certificate if it finds that the applicant has established by a preponderance of the evidence that the petition satisfies the requirements of subsection (m) of this section. The Commission may grant the certificate in whole or in part, or deny the request, and may impose such limitations and conditions on the certificate as it deems necessary and relevant. (1993, c. 348, s. 1; 1997-443, ss. 11A.119(a), 15.48(c); 1997-524, s. 1; 1998-168, s. 4; 2001-474, s. 28; 2007-484, s. 43.7C; 2007-518, s. 3; 2008-125, s. 1; 2008-198, s. 11.5; 2010-155, ss. 2, 3; 2011-398, s. 50; 2013-388, s. 2; 2014-120, s. 37.)

SECTION .0400 - REGULATION OF SURFACE WATER TRANSFERS

15A NCAC 02E .0401 APPLICABILITY

(a) Pursuant to G.S. 143-215.22G(3), the amount of a transfer shall be determined by the amount of water moved from the source basin to the receiving basin, less the amount of the water returned to the source basin.

(b) Pursuant to G.S. 143-215.22G(3)(a) and 143-215.22G(3)(b), and notwithstanding the definition of basin in G.S. 143-215.22G(1), the following are not transfers:

- (1) The discharge point is situated upstream of the withdrawal point such that the water discharged will naturally flow past the withdrawal point.
- (2) The discharge point is situated downstream of the withdrawal point such that water flowing past the withdrawal point will naturally flow past the discharge point.

(c) The withdrawal of surface water from one river basin by one person and the purchase of all or any part of this water by another party, resulting in a discharge to another river basin, shall be considered a transfer. The person owning the pipe or other conveyance that carries the water across the basin boundary shall be responsible for obtaining a certificate from the Commission. Another person involved in the transfer may assume responsibility for obtaining the certificate, subject to approval by the Division of Water Resources.

(d) Under G.S. 143-215.22I(b), a certificate is not required to transfer water from one river basin to another up to the full capacity of a facility to transfer water from one basin to another if the facility was existing or under construction on July 1, 1993. The full capacity of a facility to transfer water shall be determined as the capacity of the combined system of withdrawal, treatment, transmission, and discharge of water, limited by the element of this system with the least capacity as existing or under construction on July 1, 1993.

History Note: Authority G.S. 143-215.22G; 143-215.22I; 143B-282(a)(2); Eff. September 1, 1994.