Charlotte Water
Interbasin Transfer (IBT) Modification Request

PLEASE WAIT FOR THE MEETING TO BEGIN

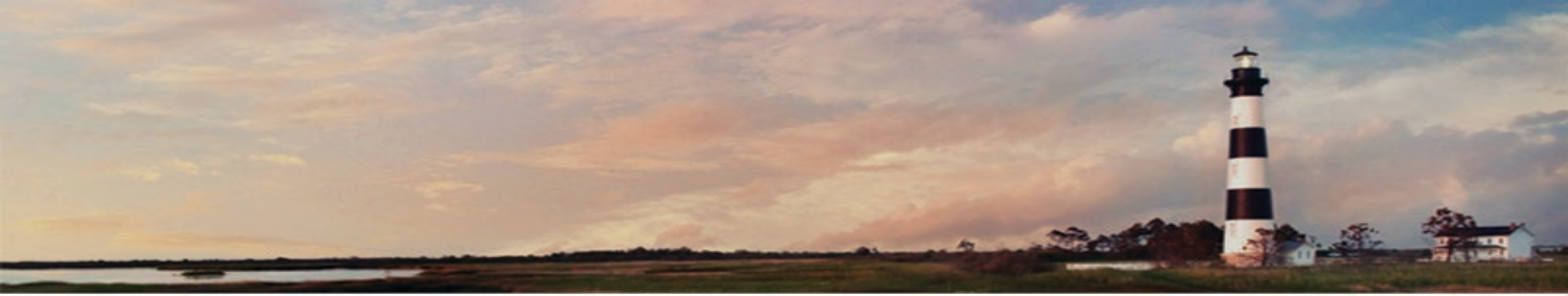
What is this meeting about?

- Charlotte Water is **not** asking for permission to *withdraw* more water from the Catawba River

- We **are** exploring the need to increase the amount of water we are allowed to *transfer* to the Rocky River Basin

Agenda

- **Introductions**
  - Angela Charles, Director Charlotte Water
- **Opening Remarks**
  - Rob Devlin, South Carolina Department of Health & Environmental Control, Bureau of Water
- **IBT Program Overview**
  - Linwood Peele, North Carolina Department of Environmental Quality, Division of Water Resources
- **Charlotte Water IBT Modification Request**
  - Ron Hargrove, Deputy Director Charlotte Water
- **Questions/Comments**



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IBT Program Overview

Public Meetings for

Requested Charlotte Water IBT Modification

May 8, 9,15 / June 25, 27 / July 15, 2024

Linwood Peele, Division of Water Resources

Outline

I. Interbasin Transfer (IBT) Definition

II. Statutory Requirements

III. IBT Process

IV. EMC Decision Considerations

IBT Definition & Purpose

- The withdrawal of *surface water* from one river basin and discharge of all or any part of the water in a river basin different from the origin.

- The purpose of the Interbasin Transfer Law is to ensure it is good public policy to move water from one river basin into another.

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Statutory Thresholds

§ 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.

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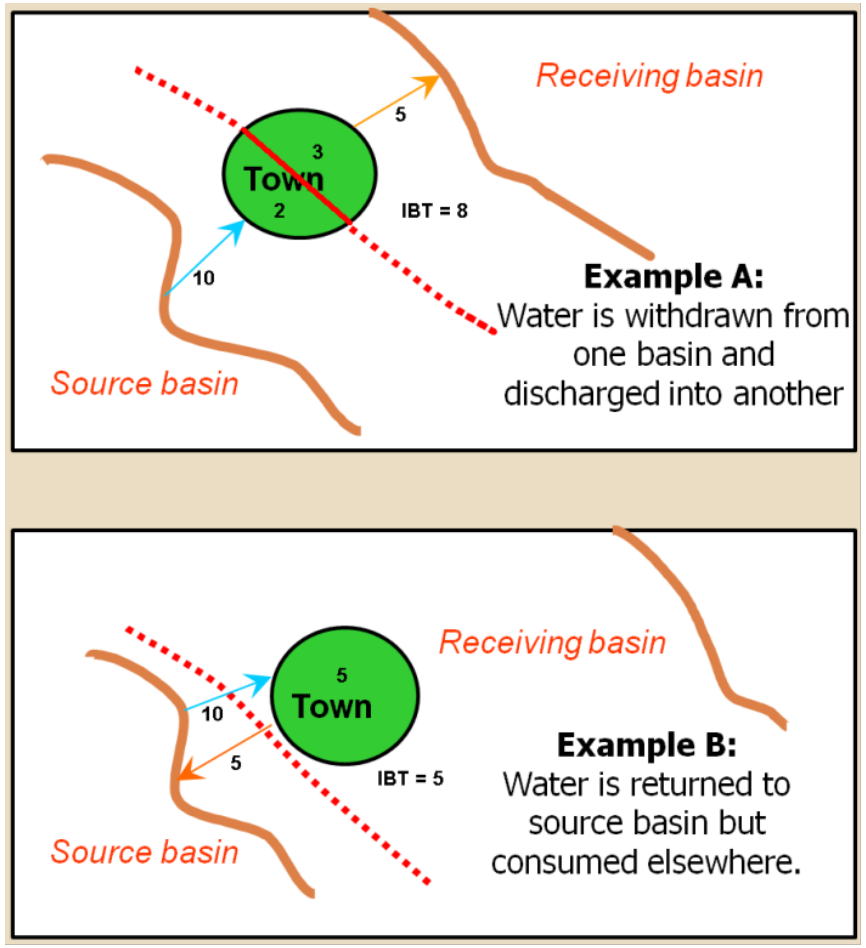
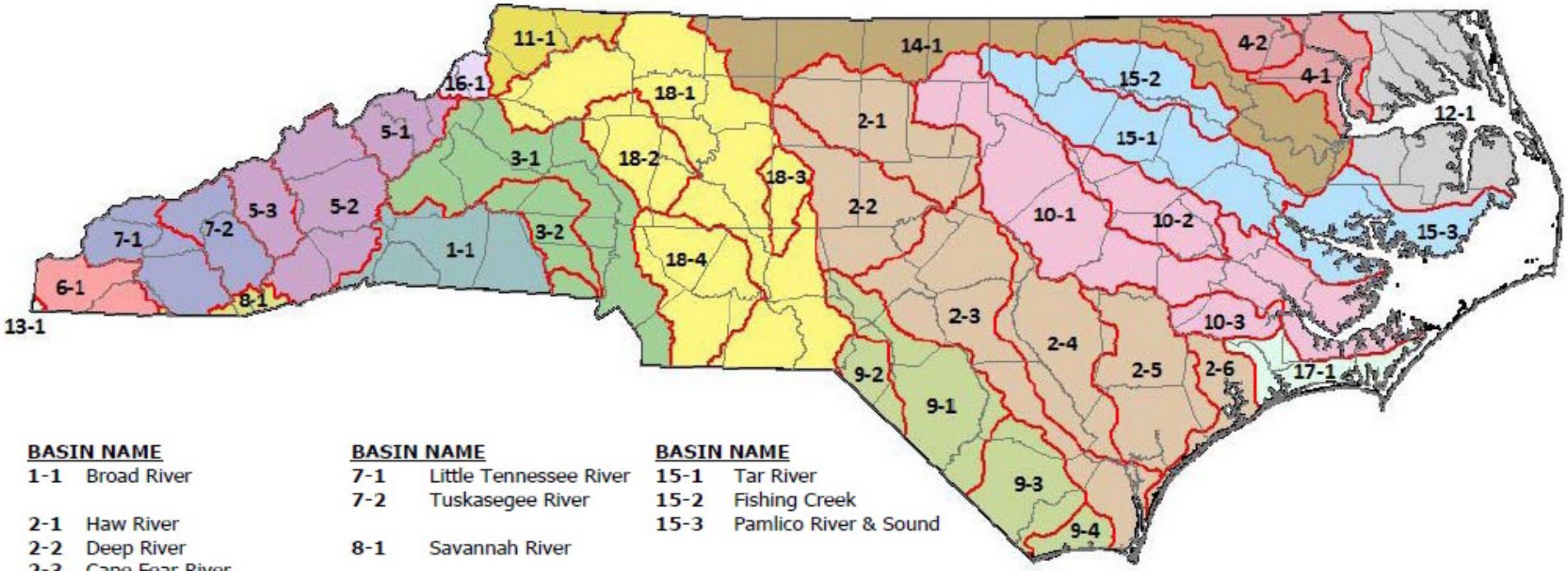
What is an Interbasin Transfer?

- Transfer = Withdrawal – Return
- Net Transfer, Not Gross



The amount of a transfer is determined by the amount of water moved from the source basin to the receiving basin, less the amount of water returned to the source basin and consumptive use in the source basin.

Designated Interbasin Transfer River Basins
As defined in G.S. §143-215.22G



BASIN NAME		BASIN NAME		BASIN NAME	
1-1	Broad River	7-1	Little Tennessee River	15-1	Tar River
		7-2	Tuskasegee River	15-2	Fishing Creek
2-1	Haw River			15-3	Pamlico River & Sound
2-2	Deep River	8-1	Savannah River		
2-3	Cape Fear River				
2-4	South River	9-1	Lumber River	16-1	Watauga River
2-5	Northeast Cape Fear River	9-2	Big Shoe Heel Creek		
2-6	New River	9-3	Waccamaw River	17-1	White Oak River
		9-4	Shallotte River		
3-1	Catawba River			18-1	Yadkin River
3-2	South Fork Catawba River	10-1	Neuse River	18-2	South Yadkin River
		10-2	Contentnea Creek	18-3	Uwharrie River
4-1	Chowan River	10-3	Trent River	18-4	Rocky River
4-2	Meherrin River				
		11-1	New River		
5-1	Nolichucky River				
5-2	French Broad River	12-1	Albemarle Sound		
5-3	Pigeon River				
		13-1	Ocoee River		
6-1	Hiwassee River				
		14-1	Roanoke River		

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Water Transfers in North Carolina

- Over 130 public water systems with surface water transfers
- 80% are under 1 MGD
- Nine IBT Certificates have been issued
- One previous IBT Certificate Modification has been granted
- Grandfathered allowance for systems that were transferring over 2 MGD prior to July 1993
- Handful of water systems transferring between 1-2 MGD

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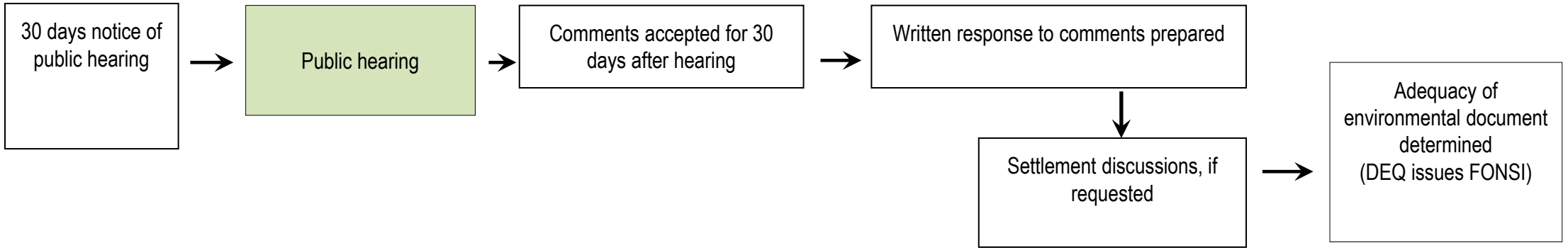
Transfers Regulated by IBT Certificate

	System/Certificate Holder(s)	Year	Amount	Source Basin(s)	Receiving Basin(s)
1.	Piedmont Triad Regional Water Authority	1991	30.5 MGD	Deep River	Haw River, Yadkin River
2.	Charlotte Water	2002	33 MGD	Catawba	Rocky River
3.	Cities of Concord and Kannapolis	2007	10 MGD/ 10 MGD	Catawba/ Yadkin	Rocky River
4.	Greenville Utilities Commission, the Towns of Farmville and Winterville, and Greene Co.	2010	8.3 MGD/ 4.0 MGD	Tar River	Contentnea Creek/ Neuse River
5.	Brunswick County	2013	17 MGD	Cape Fear	Shallotte and Waccamaw
6.	Towns of Cary and Apex	2015	31.0 MGD/ 2.0 MGD	Haw River	Neuse River/ Cape Fear River
7.	Kerr Lake Regional Water System	2015	10.7 MGD/ 1.7 MGD/ 1.8 MGD	Roanoke	Tar River/ Fishing Creek/ Neuse River
8.	Union County and Town of Wingate	2017	23.0 MGD	Yadkin River	Rocky River
9.	Pender County Utilities and Towns of Burgaw, Topsail Beach, Surf City and Wallace and Utilities, Inc.	2018	14.5 MGD	Cape Fear	South River, New River, Northeast Cape Fear

IBT Process § 143-215.22L(v)

I. Applicant submits Notice of Intent to file a request for modification.

II. Applicant submits draft environmental document (EA)



III. EMC issues final determination

EMC Decision Considerations

- The EMC may grant a Petition in whole or in part, or deny it, and may require mitigation measures to minimize detrimental effects.

- In making this determination, the EMC is required to specifically consider:

Findings of Fact - §143-215.22L

The EMC shall specifically consider:

1. The necessity, reasonableness, and proposed uses of water transferred.
2. Present and reasonably foreseeable detrimental effects on the source basin.
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.
4. Present and reasonably foreseeable beneficial and detrimental effects on the receiving basin.
5. The availability of reasonable alternatives to the proposed transfer.
6. Use of impoundment storage capacity, if applicable.
7. Purposes and water storage allocations in a US Army Corps of Engineers multipurpose reservoir.
8. Whether the service area of the applicant is within both the source and receiving basin.
9. Any other facts or circumstances reasonably necessary.

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Conditions/Limitations on IBT Certificate

Specific conditions required by statute:

- Submittal for Division approval
  - Water Conservation Plan
  - Drought Management Plan
  - Compliance and Monitoring Plan
- Quarterly Monitoring Reports
- Ability to reopen, amend, and modify, if necessary
- No selling of transferred water to water systems that are not co-applicants on the Certificate

EMC may impose additional conditions as necessary

Contact Information

Linwood Peele
Division of Water Resources
919-707-9024
linwood.peele@deq.nc.gov

Harold Brady
Division of Water Resources
919-707-9005
harold.m.brady@deq.nc.gov

DWR Charlotte Water IBT website:
https://www.deq.nc.gov/about/divisions/water-resources/water-planning/water-supply-planning/interbasin-transfer-certification/charlotte-water

Charlotte Water
Interbasin Transfer (IBT) Modification Request

PUBLIC MEETINGS, MAY 8, 9, 15 / JUNE 25, 27 / JULY 15, TBD 2024

SUBMIT QUESTIONS & COMMENTS TO: IBTProject@charlottenc.gov

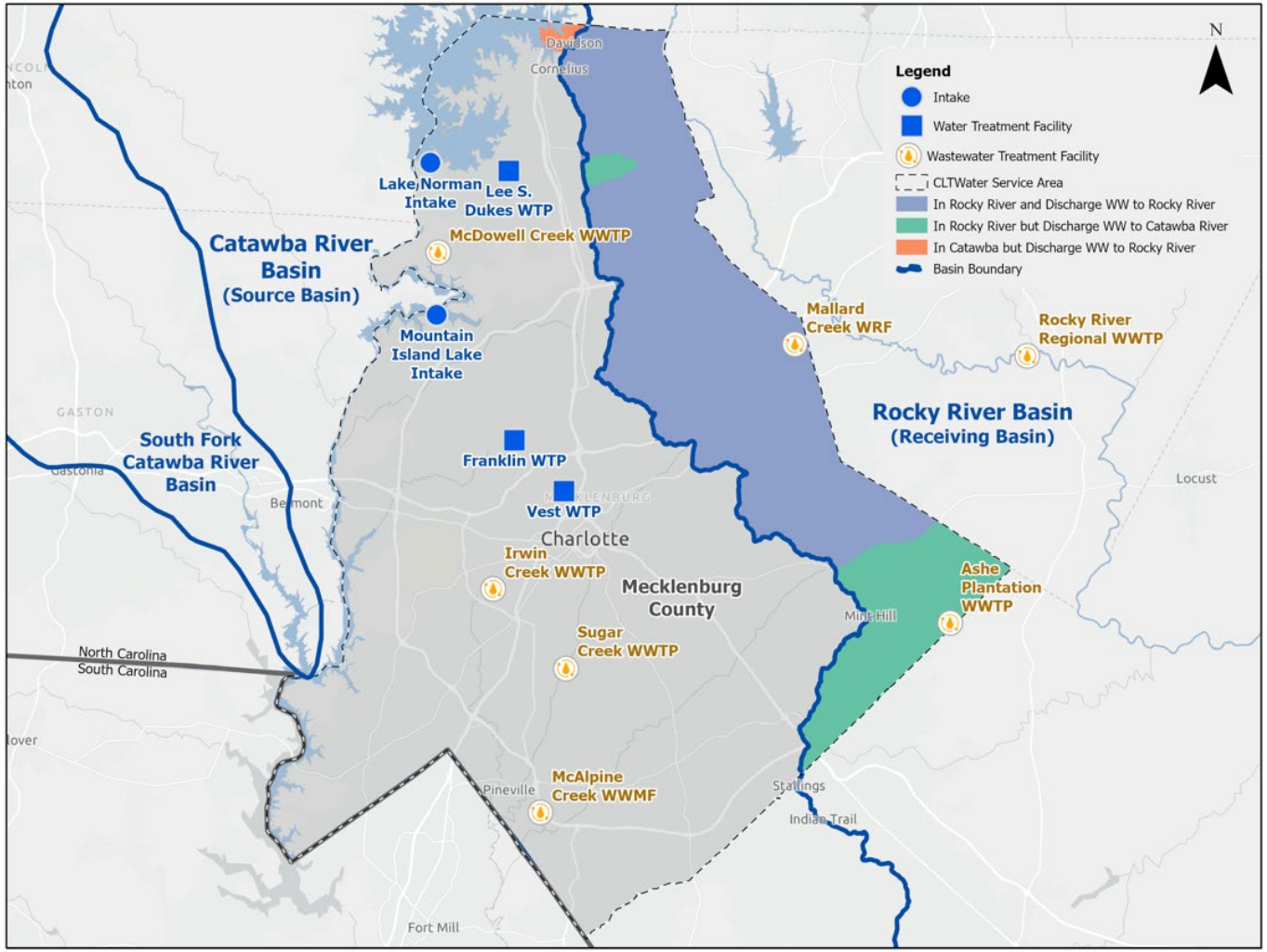
Presentation Outline

- About Charlotte Water
- What is an IBT?
- Why is an IBT modification needed now?
- What is the IBT modification process and schedule?
- What alternatives are being considered?
- How can I comment and participate in the process?
- Questions

About Charlotte Water

About Charlotte Water

- **Service Area includes Mecklenburg County and surrounding counties with customers in both Catawba & Rocky River Basins**
- **Largest public water and wastewater utility in NC**
- **Population Served – 1,145,392**



Proactive Planning

- **2002 – Initial IBT of 33 MGD Peak Day**
- **Now planning for next 30 years before the limit is exceeded**
- **Long-term Partner with Catawba Wateree Water Management Group and Other Stakeholders**
- **Local and Regional Conservation and Drought Planning**

As projected, the original IBT supports Charlotte Water's system through approximately 2030. Additional water through the modification process is timely.

What is an Interbasin Transfer (IBT)?

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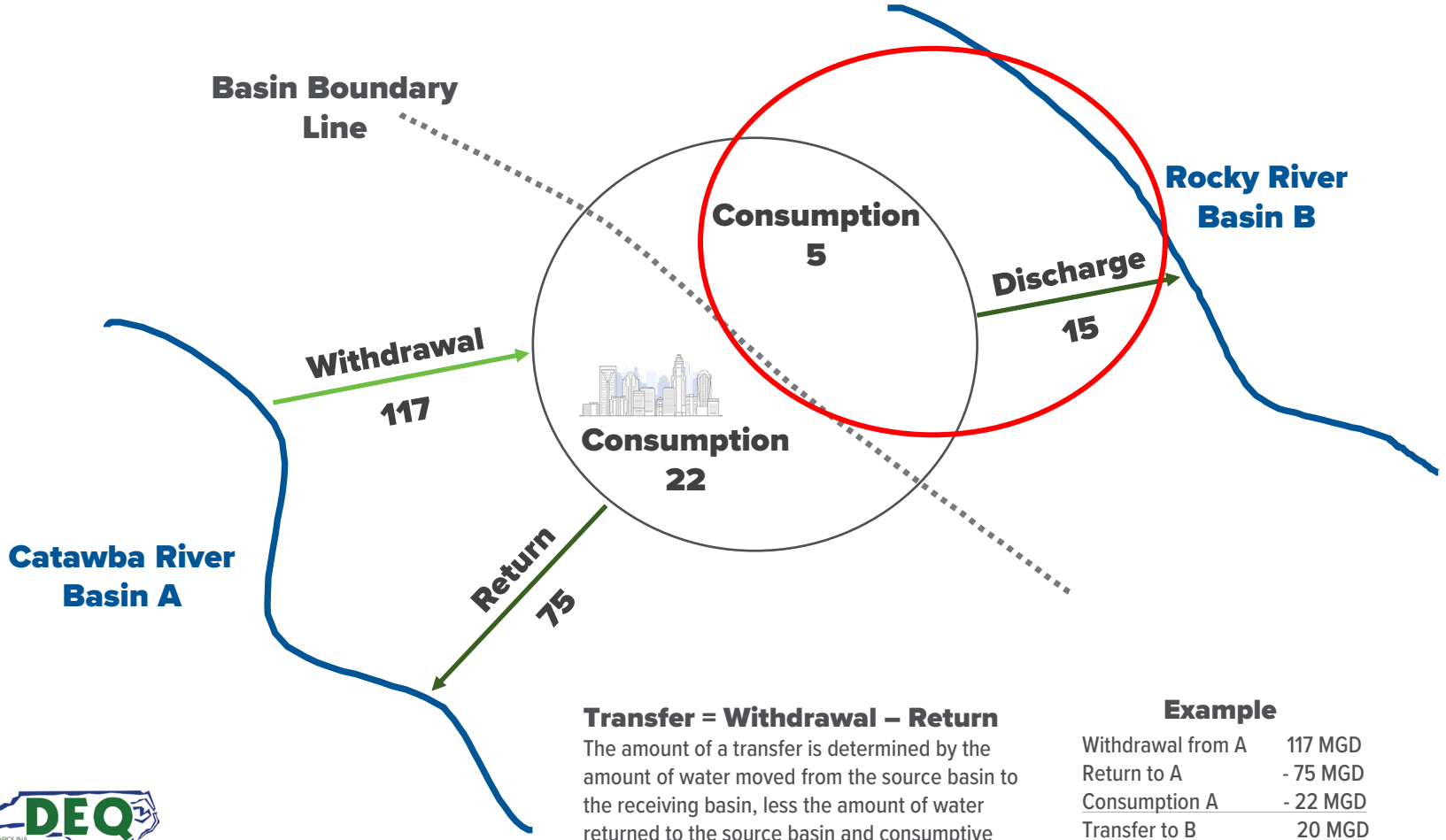


Transfer = Withdrawal – Return

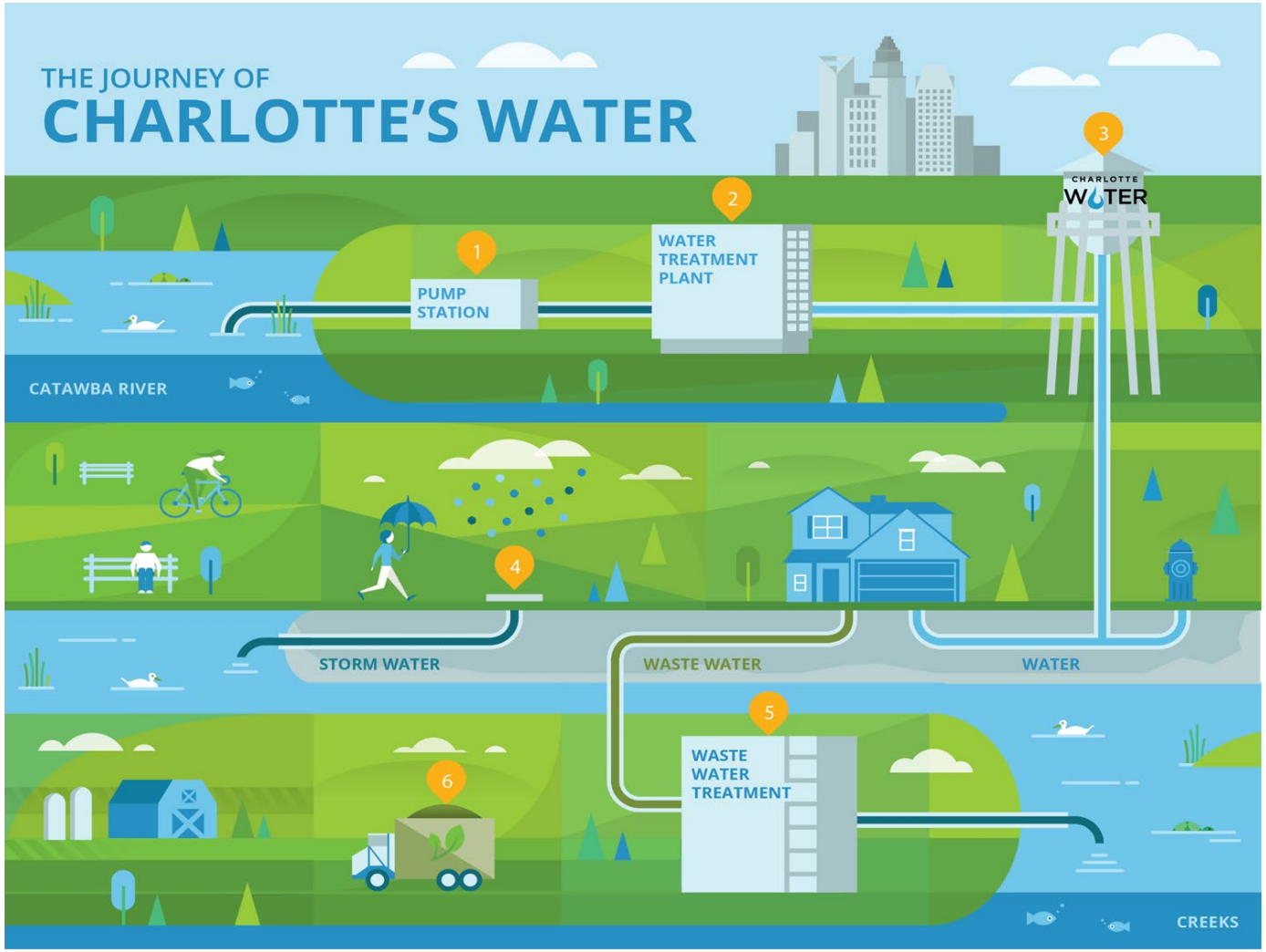
The amount of a transfer is determined by the amount of water moved from the source basin to the receiving basin, less the amount of water returned to the source basin and consumptive use (i.e. irrigation) in the source basin.

Example

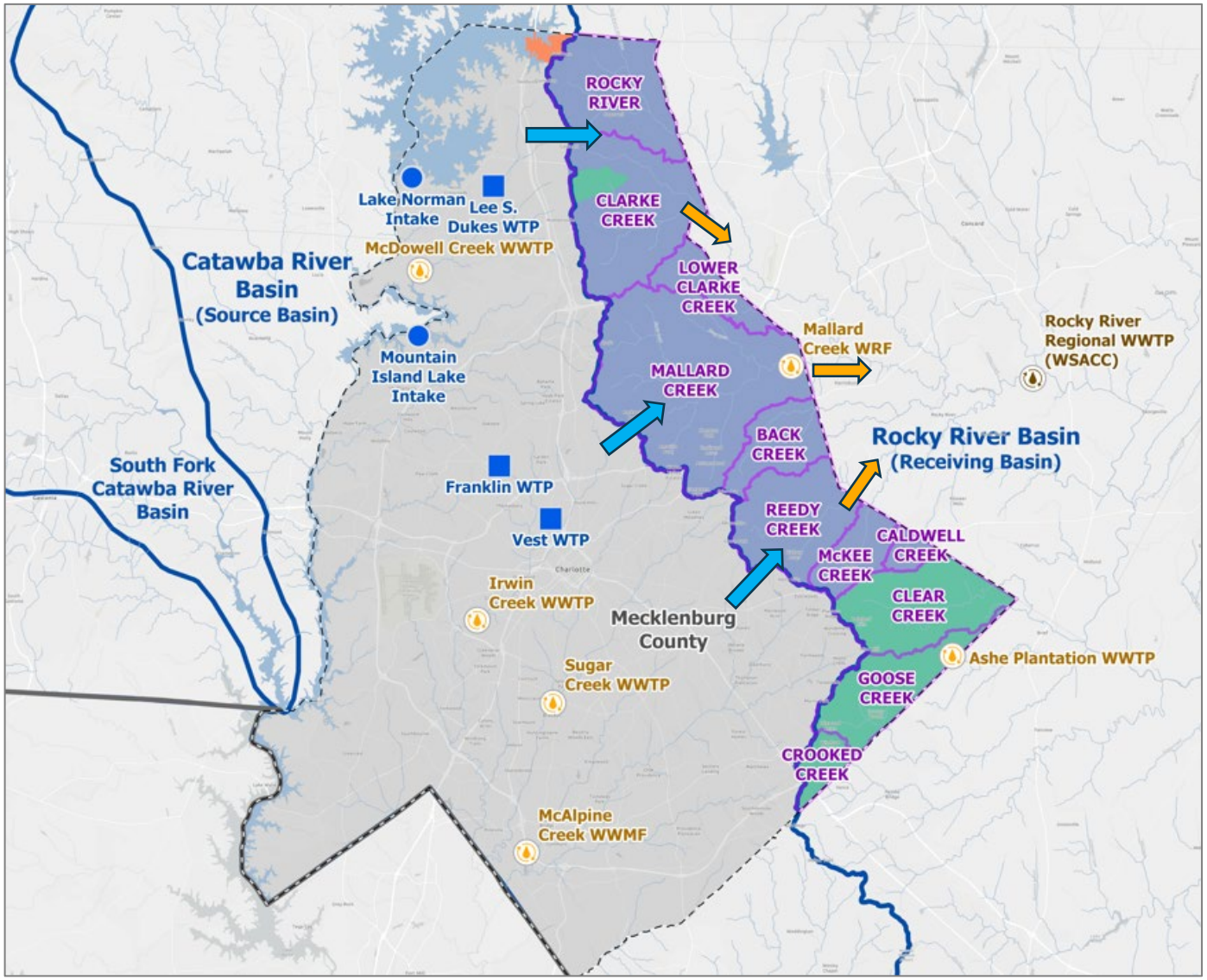
Withdrawal from A	117 MGD
Return to A	- 75 MGD
Consumption A	- 22 MGD
Transfer to B	20 MGD

An IBT is a withdrawal, diversion or pumping of water from one source river basin to another river basin. The water from the source basin is treated and distributed to customers for everyday water usage, then collected and treated at wastewater treatment plants before portions are discharged to the receiving basin, resulting in the interbasin transfer.

Charlotte's Water Cycle



What is an IBT?



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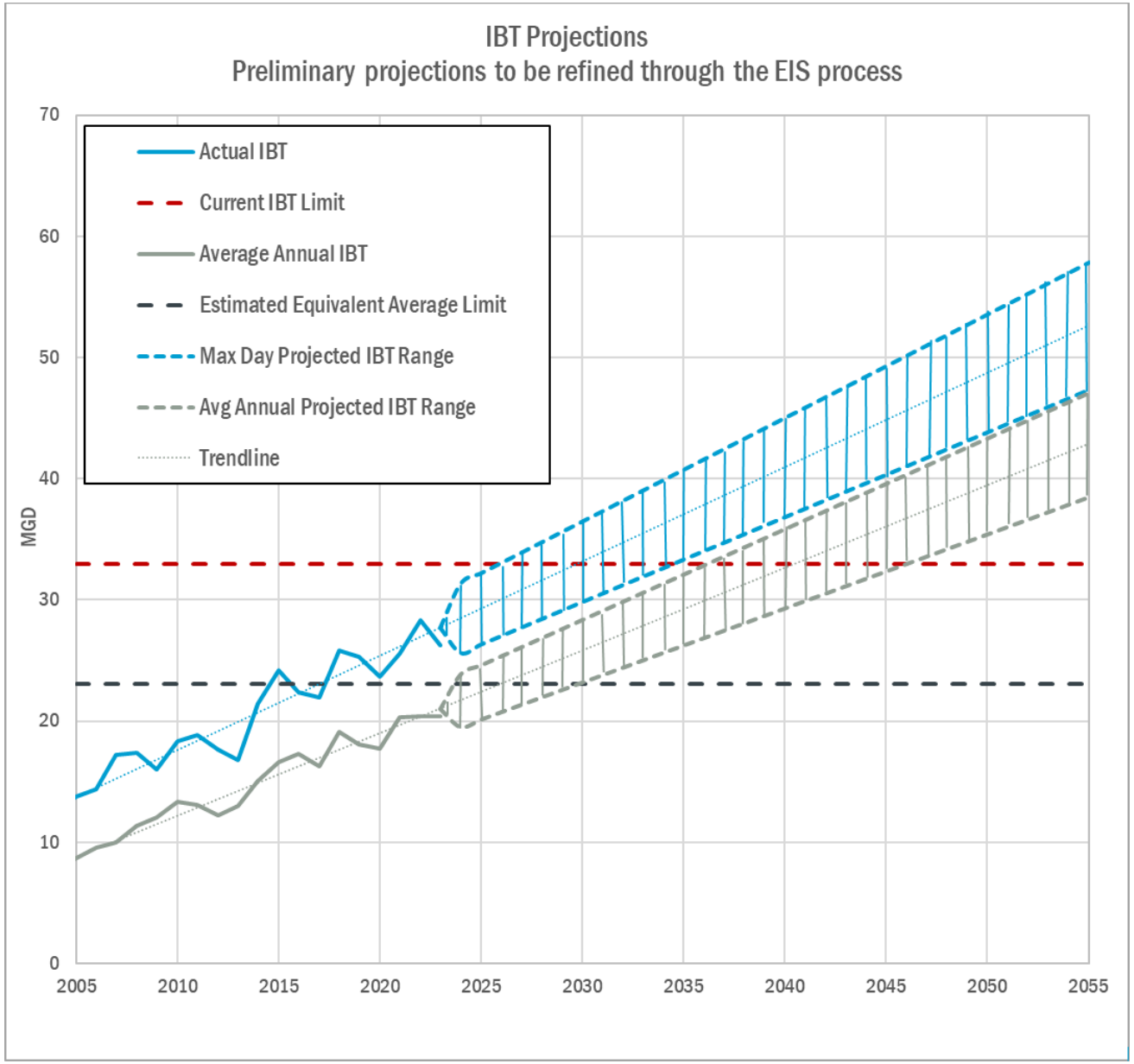
Why is an IBT Modification needed now?

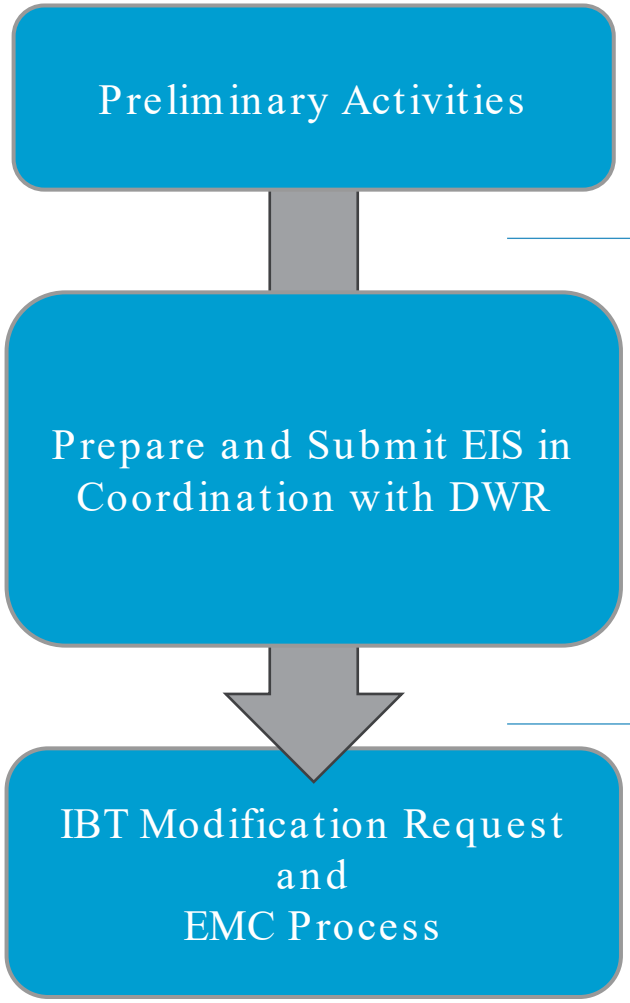
Why is an IBT Needed?

- **2002 IBT Certification limit is 33 MGD Peak Day**
- **Currently at 79% of limit**
- **Based on population projections, current IBT will be exceeded between 2028-2030 as previously planned**



What is the IBT modification process and schedule?

IBT Modification and EIS Development Process



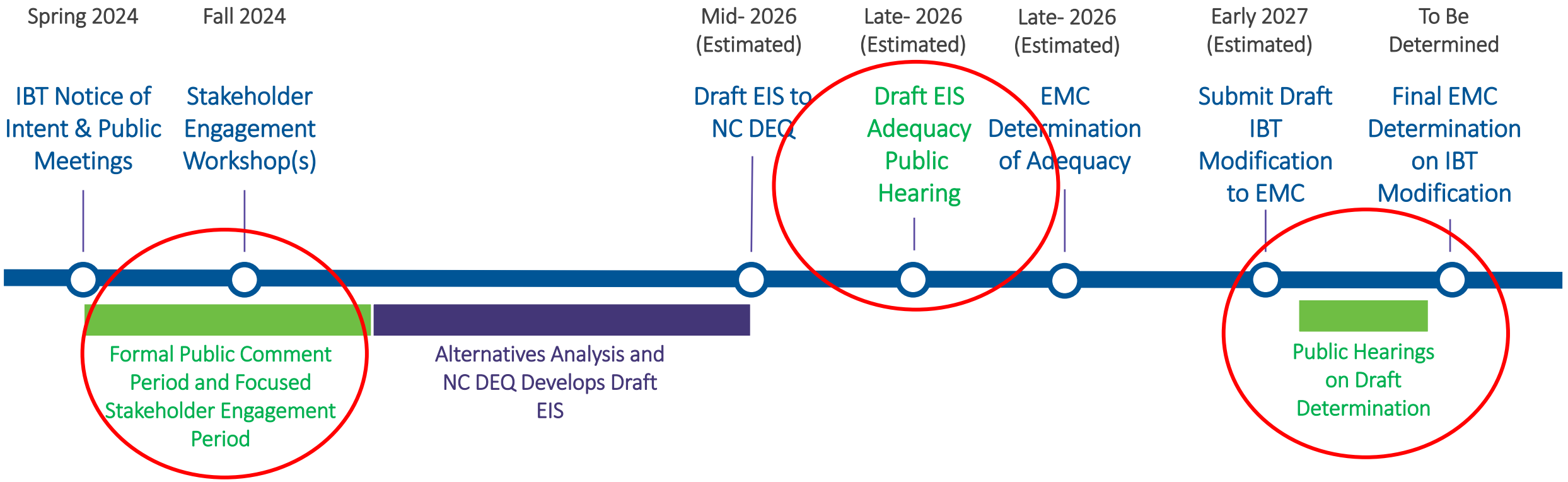
- Notice of Intent and Notification of Public Meetings
- Public Meetings & Comment Period (ends 8/30/24)

Today

- Extended Stakeholder Engagement and Input
  - Including SC Agencies & Stakeholders throughout the process
- Incorporate and address public meetings comments
- Alternatives Analysis
- IBT studies – demand, conservation, drought, monitoring
- NC DEQ Develops Draft Environmental Impact Statement (EIS)
- EMC Public Hearing and determination of adequacy of EIS
- CLT Water Submits IBT Modification Request to NC DEQ

- EMC issues draft determination
- EMC Public Hearing on draft determination
- EMC Issues Final Determination on IBT

IBT Modification Preliminary Schedule*



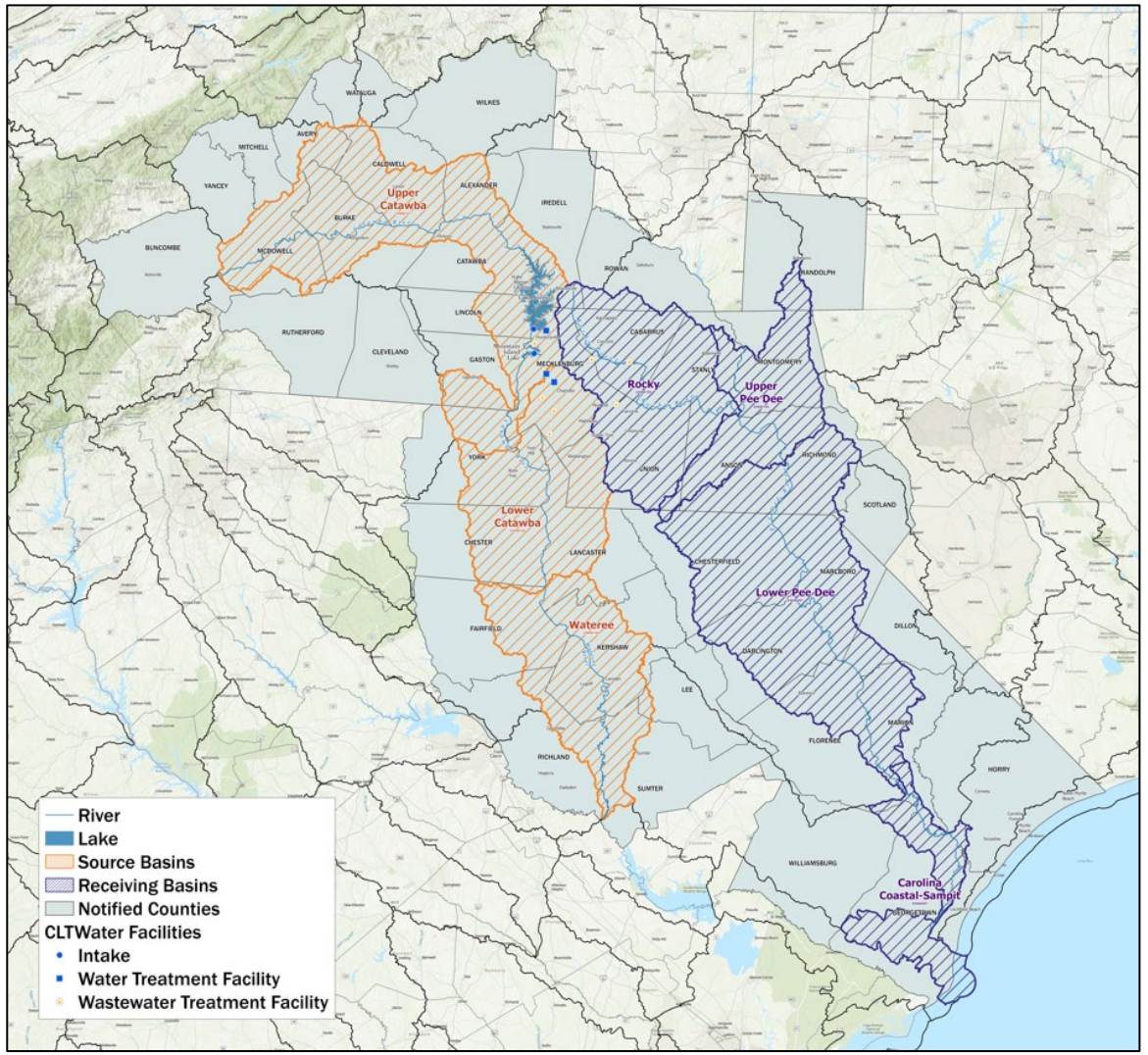
***Coordination with SC DES Throughout**

Acronyms:

EIS – Environmental Impact Statement
IBT – Interbasin Transfer
NC EMC – NC Environmental Management Commission
NC DEQ – NC Department of Environmental Quality

IBT Notification Map

- **Notification Requirements – Counties/Cities in Key HUC8 Watersheds**
  - Governing body of each local government
  - Public water supply systems
  - IBT Certification holders
- **NC-SC Settlement Agreement Notification List**
- **Other Identified Stakeholders**
  - NGOs, Non-Profits, COGs, Tribal Governments, Industries, etc.



What alternatives are being considered?

Preliminary Alternatives

- **Alternative Categories Being Considered**
  - Pump wastewater back to the Catawba Basin
  - Water reuse options
  - New water sources in the Yadkin Basin
  - Increase existing IBT through modification
- **Alternatives Evaluation Criteria**
  - Capital costs
  - Schedule
  - O&M costs
  - Benefits/risks
  - Environmental factors
  - Construction feasibility
- **Actionable alternatives raised during scoping will be considered**
- **Further refinement during EIS**

How can I comment and participate in the process?

Ways you can learn and participate

- **Attend public meetings**
- **To learn more visit: CharlotteWaterIBT.org**
- **Email comments to: IBTProject@CharlotteNC.gov**
- **Comment on the Draft EIS during the public hearing for determination of adequacy by Environmental Management Commission**
- **Comment during the Environmental Management Commission hearing on draft IBT determination**
- **Participate in stakeholder engagement workshops**

Stakeholder Engagement Workshops

- **Goal: Through meaningful stakeholder engagement, identify actionable alternatives to modifying IBT and evaluate such alternatives within the scope of the EIS**
- **Looking for stakeholders to represent key and diverse interests**
- **Stakeholders will have the ability to shape the alternatives that will be considered**
- **Logistics:**
  - Fall 2024
  - Professional facilitation
  - Multiple workshops
  - Meeting format – in-person with virtual option
- **Public outreach/engagement will also occur in parallel with Workshops**
  - Stakeholder workshops will be live streamed
  - Latest information will be shared via IBT website

Public Meetings

For virtual Teams meeting information or to submit a comment/question, visit the Charlotte Water IBT website
CharlotteWaterIBT.org

- **Meeting #1 – Hickory, NC**
  Wednesday, May 8, 5:30-7:00 pm
  Ridgeview Branch Library
  Z. Anne Hoyle Community Room
  706 1st St. SW, Hickory, NC 28602
- **Meeting #2 – Charlotte, NC**
  Thursday, May 9, 6:00-7:30 pm
  Charlotte Water
  4100 W. Tyvola Rd, Charlotte, NC 28208
- **Meeting #3 – Albemarle, NC**
  Wednesday, May 15, 5:30-7:00 pm
  EE Waddell Community Center
  Banquet Room
  621 Wall St., Albemarle, NC 28001
- **Meeting #4 – Camden, SC**
  Tuesday, June 25, 6:00-8:00 pm
  Liberty Hall, Revolutionary War Visitor Center
  212 Broad St., Camden, SC 29020
- **Meeting #5 – Florence, SC**
  Thursday, June 27, 6:00-8:00 pm
  Chapman Auditorium, Francis Marion University
  4800 E. Heyward Dr., Florence, SC 29506
- **Meeting #6 – Hickory/Morganton, NC**
  Monday, July 15, 6:00-8:00 pm
  CoMMA Performing Arts Center
  401 S. College St., Morganton, NC 28655
- **Meeting #7 – Rock Hill, SC**
  TBD

Questions or Comments?

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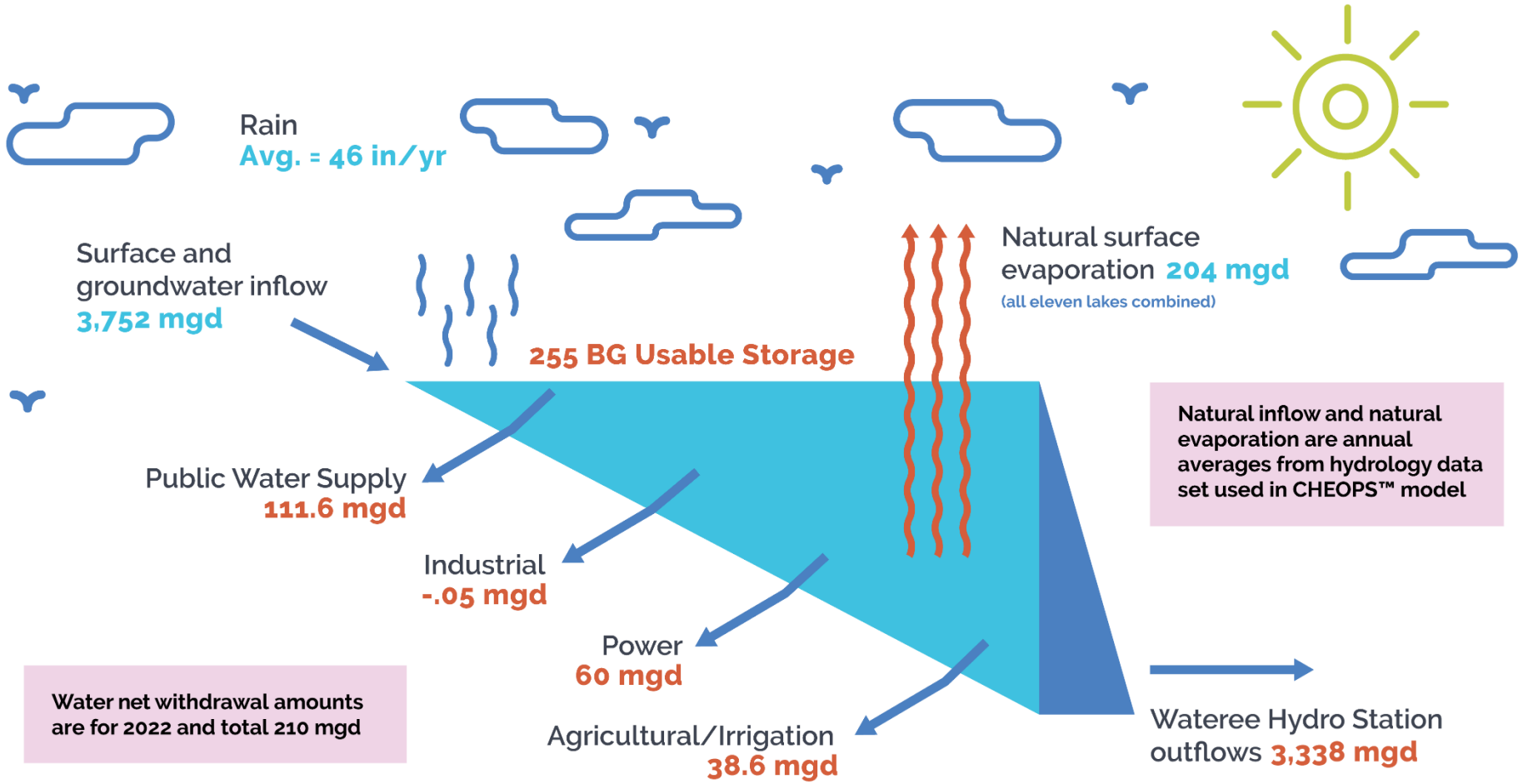
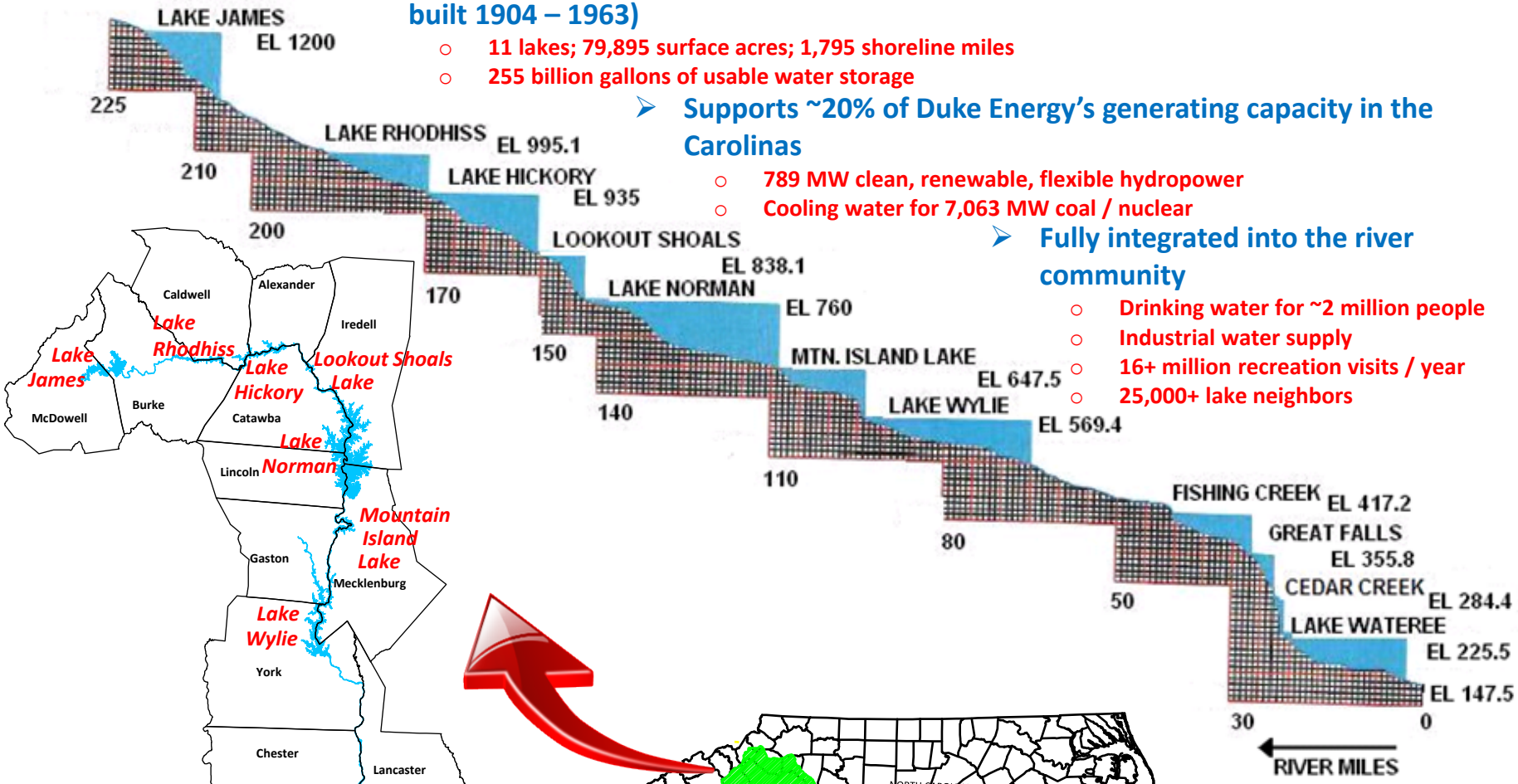
The Lakes and Partnerships Help Rainfall Drive the System



* mgd = million gallons per day; BG = Billion Gallons.

- First river in US comprehensively planned / developed for electricity production (lakes built 1904 – 1963)
  - 11 lakes; 79,895 surface acres; 1,795 shoreline miles
  - 255 billion gallons of usable water storage
- Supports ~20% of Duke Energy's generating capacity in the Carolinas
  - 789 MW clean, renewable, flexible hydropower
  - Cooling water for 7,063 MW coal / nuclear
- Fully integrated into the river community
  - Drinking water for ~2 million people
  - Industrial water supply
  - 16+ million recreation visits / year
  - 25,000+ lake neighbors



* EL = Full Pond Elevation in feet Above Mean Sea Level

DUKE ENERGY®

Catawba-Wateree Hydro Project

A Hardworking River

History:
First river in U.S. planned and developed for electricity production (lakes built 1904-1963)

Capacity:
Supports approximately 20% of Duke Energy's generating capacity in the Carolinas with clean, renewable hydropower and cooling water for nuclear and fossil generation

Usable water:
11 lakes; 255 billion gallons of usable water storage

- Lake Norman and Lake James account for 65% of the usable water storage
- Drinking water for ~ 2 million people
- Industrial water supply
- Over 16 million recreation visits/year
- Over 25,000 lake neighbors

Monitor lake levels:
Duke Energy continually monitors lake levels and manages the lakes to limit the impacts of changing weather conditions

Operated as one system:
Lakes are managed as an integrated system, not for the benefit of a single lake

Shared Resource = Shared Benefits and Shared Responsibility

Length:
Spans more than 225 river miles across nine counties in N.C. and five counties in S.C.

DUKE ENERGY.

https://catawbawatereewmg.org/our-work/water-resources-plan