



Developing a Yadkin River Water Supply Project to Ensure a Sustainable, Interbasin Transfer for Union County's Yadkin River Basin Service Area

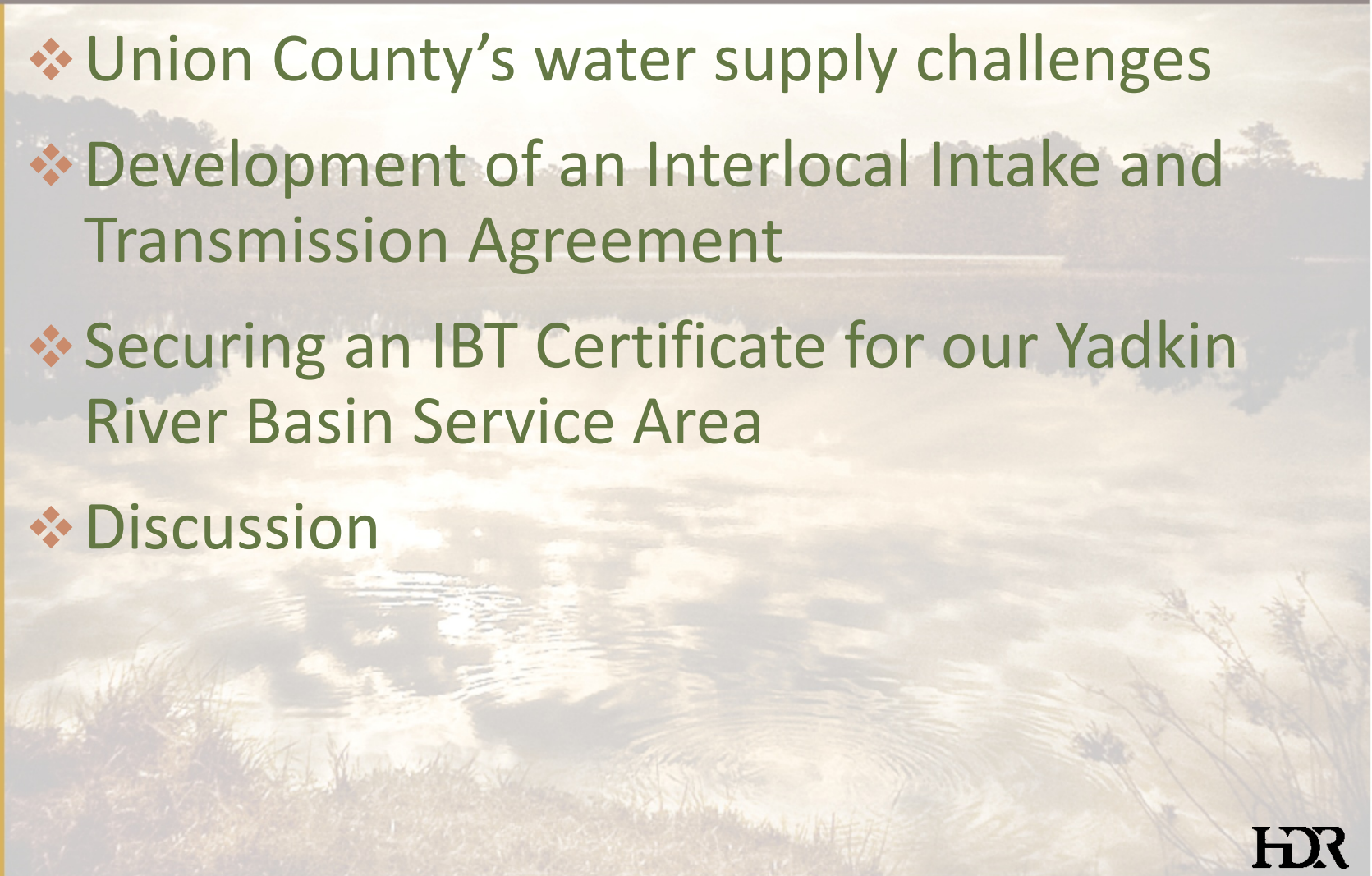
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Presentation Topics

- ❖ Union County's water supply challenges
- ❖ Development of an Interlocal Intake and Transmission Agreement
- ❖ Securing an IBT Certificate for our Yadkin River Basin Service Area
- ❖ Discussion





WATER SUPPLY CHALLENGES

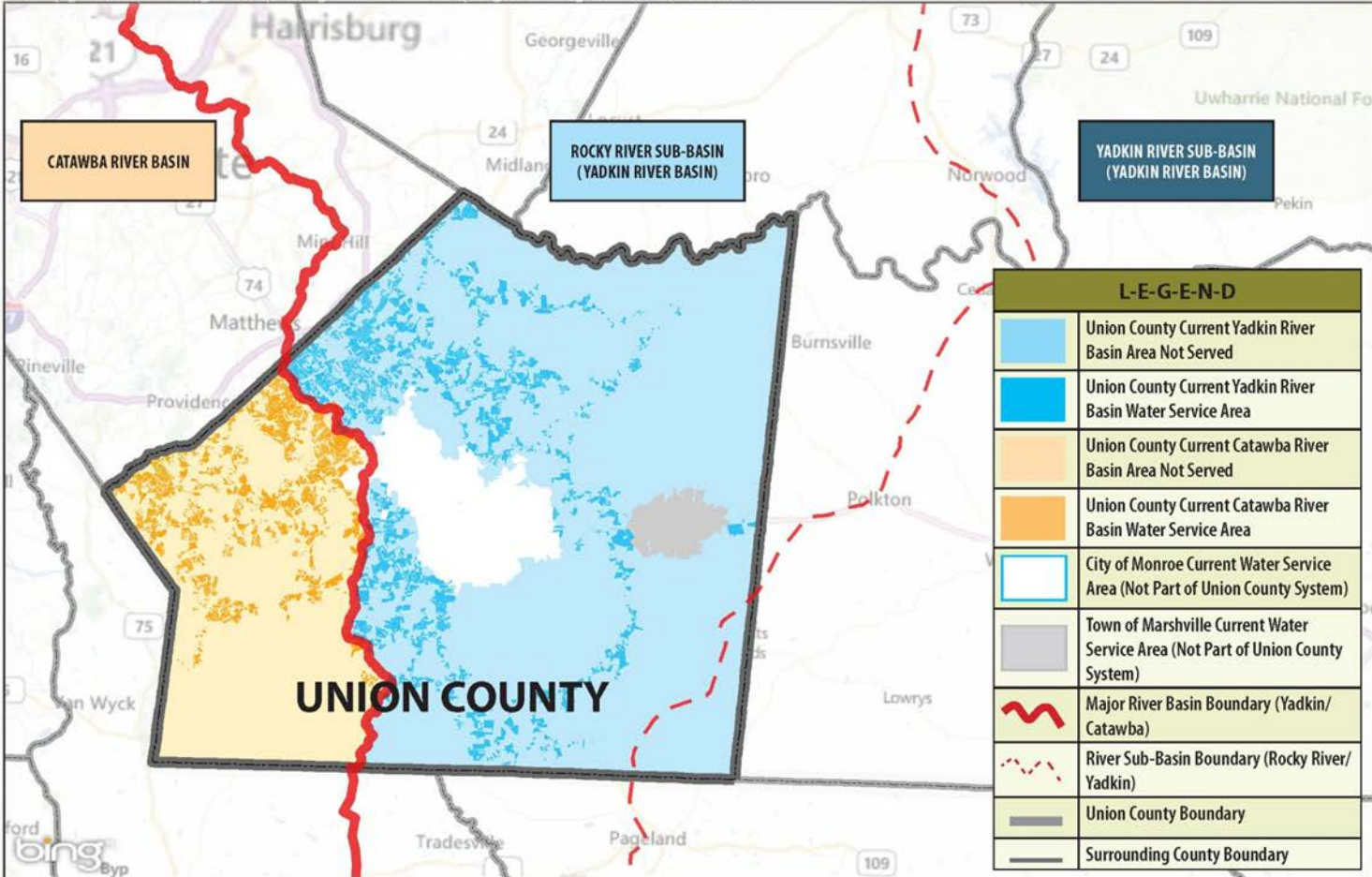


The County has experienced rapid suburban growth over the last 20 years





The County's service areas are not near major river basin water sources





The County currently depends heavily on our Catawba River supply and our 5-mgd 'grandfathered' IBT limit

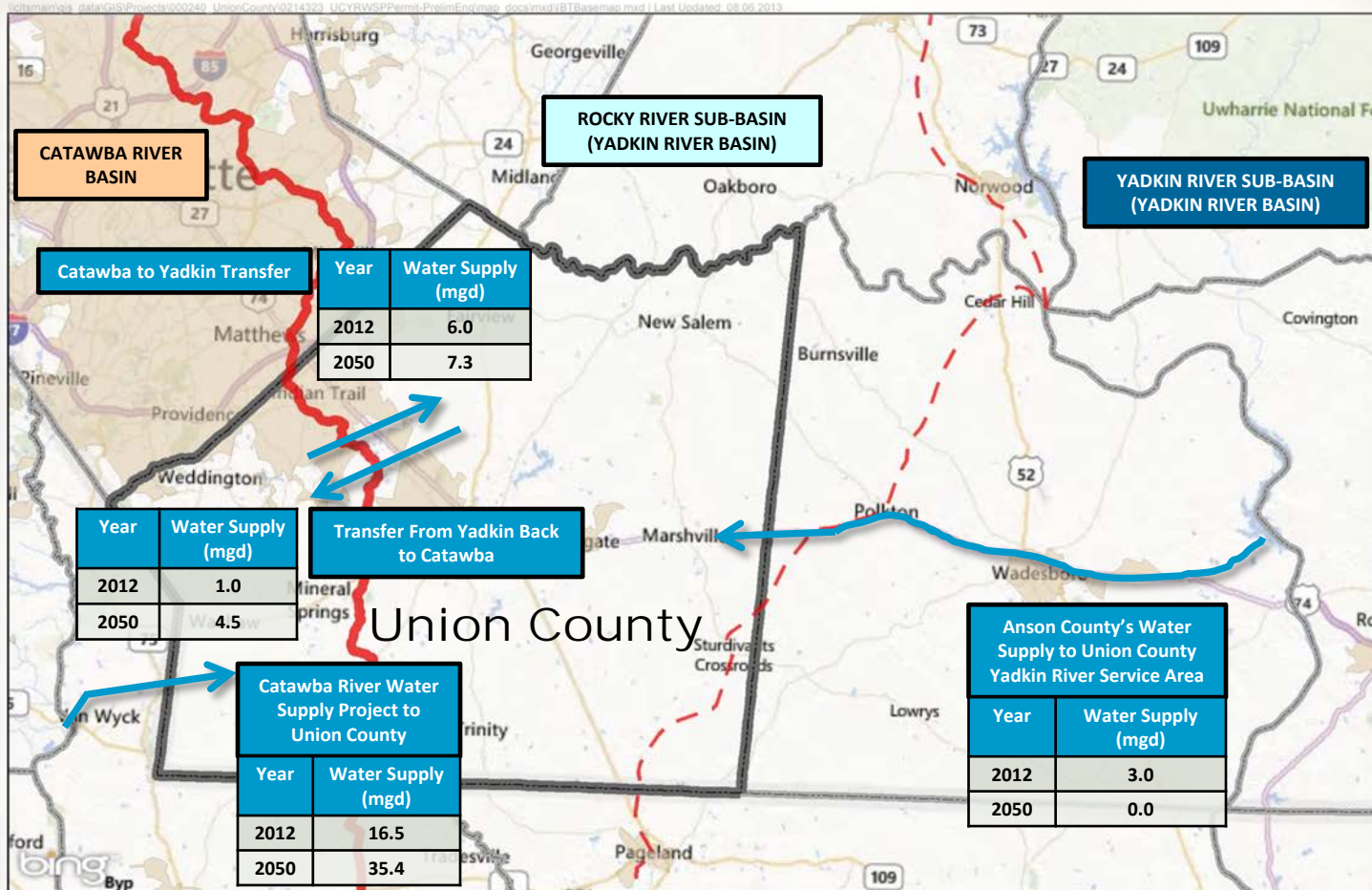


Exhibit 1



Water demands continue to grow in both our Catawba and Yadkin service areas



- County Boundaries
- Roads
- ▭ Subdivisions
- Municipalities
- Fairview
- Hemby Bridge
- Indian Trail
- Lake Park
- Marshville
- Marvin
- Mineral Springs
- Mint Hill
- Monroe
- Stallings
- Unionville
- Waxhaw
- Weddington
- Wesley Chapel
- Wingate
- Union County

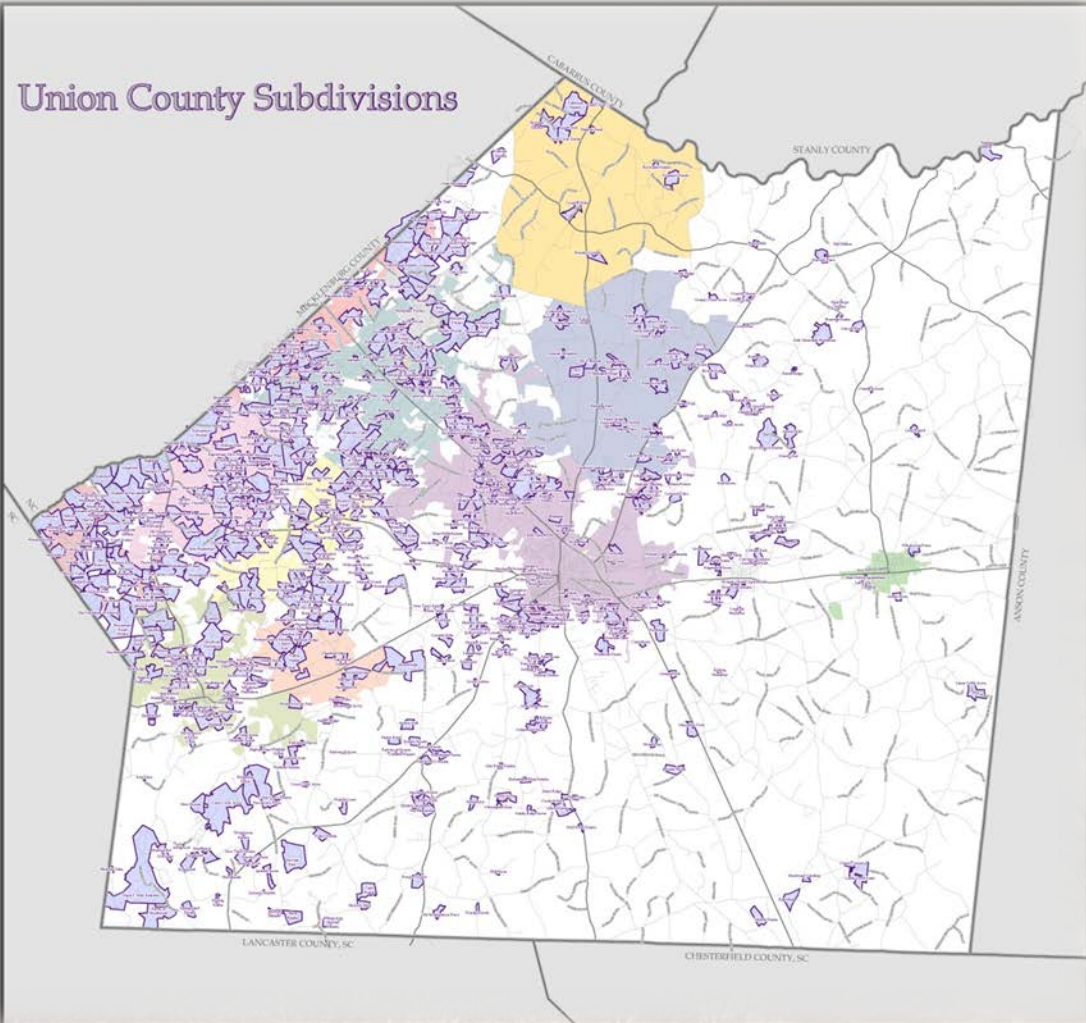
0 1 2 4 6
Miles
1 inch = 1 mile



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Union County Subdivisions

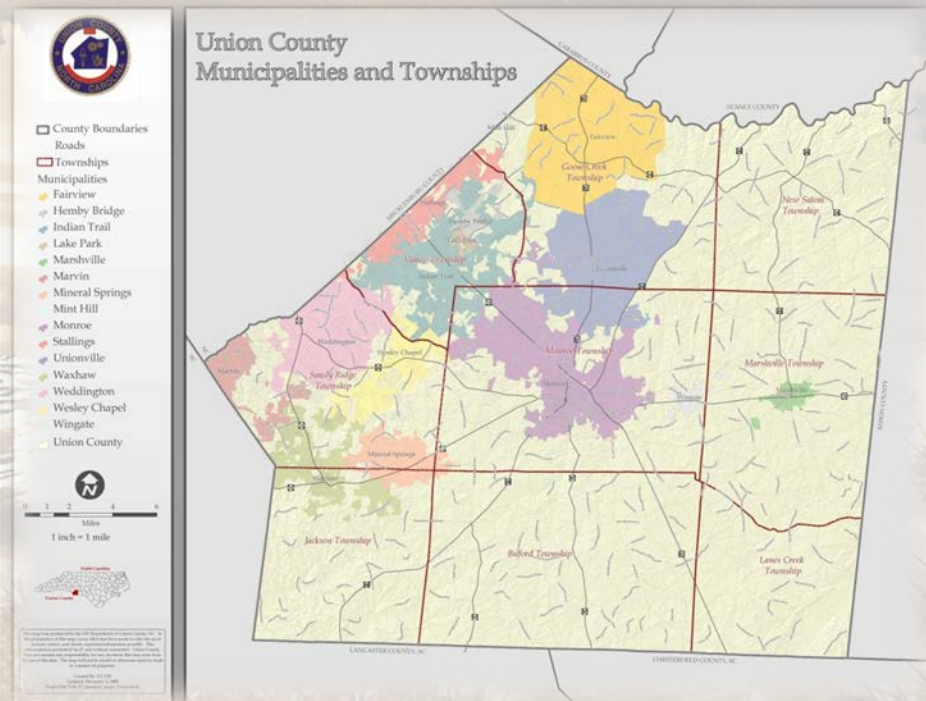




Our communities depend on UCPW for safe drinking water

Incorporated towns and villages:

- Fairview
- Hemby Bridge
- Indian Trail
- Lake Park
- Marshville
- Marvin
- Mineral Springs
- Monroe (County Seat)
- Stallings
- Waxhaw
- Weddington
- Wesley Chapel
- Wingate





Securing a reliable long-term water supply from the Yadkin River Basin is expected to take us nearly 15-years

- ❖ 2007-2008: Drought issues drive mandatory restrictions and limitations on new connections
- ❖ 2009-2010: WTP feasibility study
- ❖ 2010-2011: Comprehensive Water and Wastewater Master Plan
- ❖ 2012-2013: Development of Interlocal Intake and Transmission Agreement with Town of Norwood
- ❖



DEVELOPMENT OF AN INTERLOCAL INTAKE AND TRANSMISSION AGREEMENT (IITA)



The County secured a partner in advance of our IBT pursuit

ESTABLISHED 1842
UNION COUNTY GOVERNMENT
NORTH CAROLINA



INSERT NORWOOD STUFF





The IITA was founded on mutual benefits for both Union County and the Town of Norwood

❖ Town of Norwood

- *New and improved raw water intake*
- *Protection against future regulatory issues impacting intakes*
- *Steady income stream tied to Union County's water use*
- *Shared O&M costs for new, expanded intake*
- *Future potential to buy wholesale water from the County*

❖ Union County

- *Reliable, long term water supply to the County's Yadkin River Basin service area*
- *Reduced Catawba River interbasin transfer*
- *Collaborative partner for design, construction and easement acquisition*



SECURING AN IBT CERTIFICATE FOR OUR YADKIN RIVER BASIN SERVICE AREA

The County submitted a Notice of Intent for IBT in August 2013

❖ Purpose:

- *Union County is requesting an Interbasin Transfer (IBT) for a maximum daily amount of 28 million gallons per day (mgd) from the Yadkin River Sub-Basin to the Rocky River Sub-Basin, both of which are part of the Yadkin River Basin.*

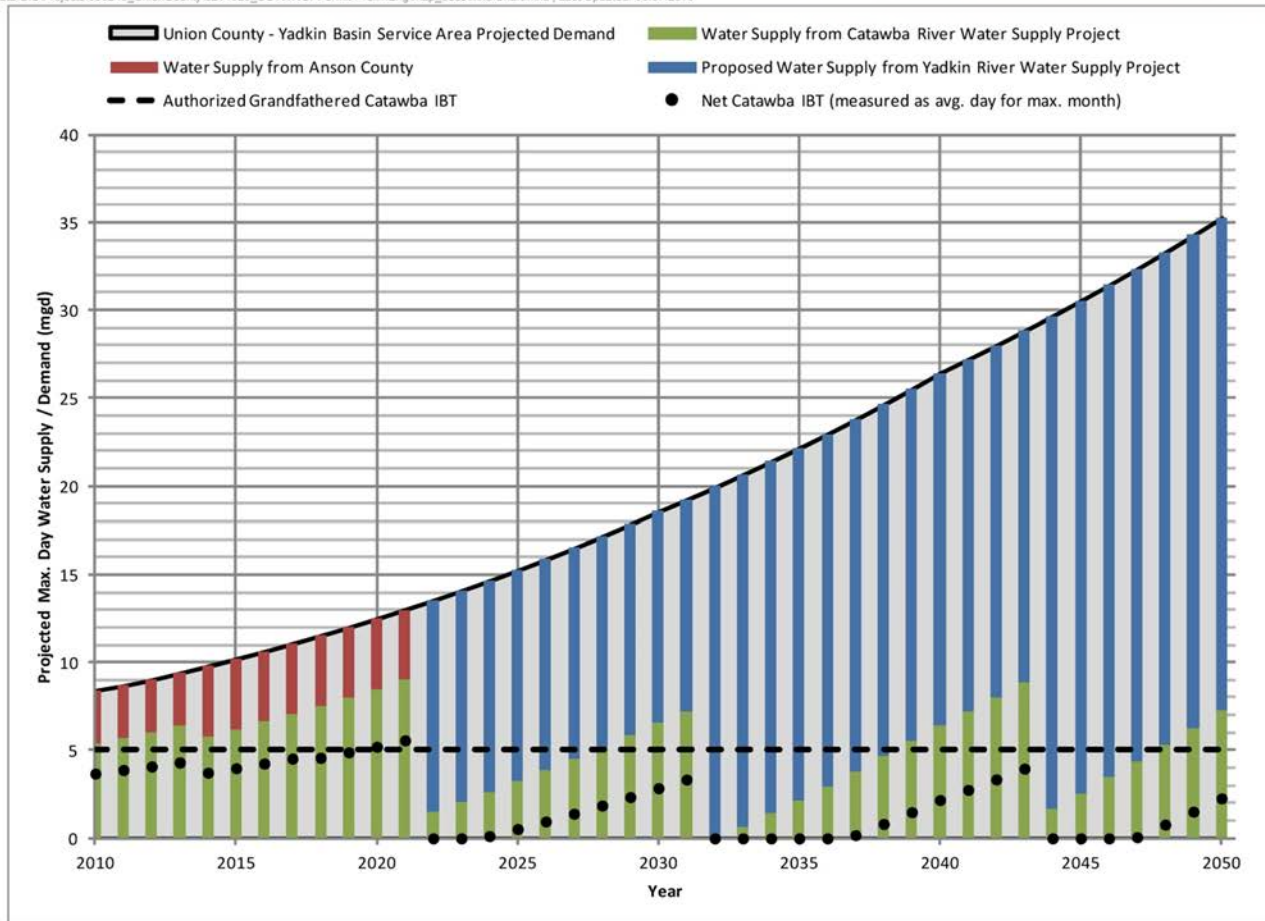
❖ Need:

- *The requested amount is based on 2050 water demand projections in the County's Yadkin River Basin service area.*



Yadkin River service area demands will reach 35 MGD by 2050 and must be met by a new raw water supply source

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The County's proposed solution is to secure water from Lake Tillery

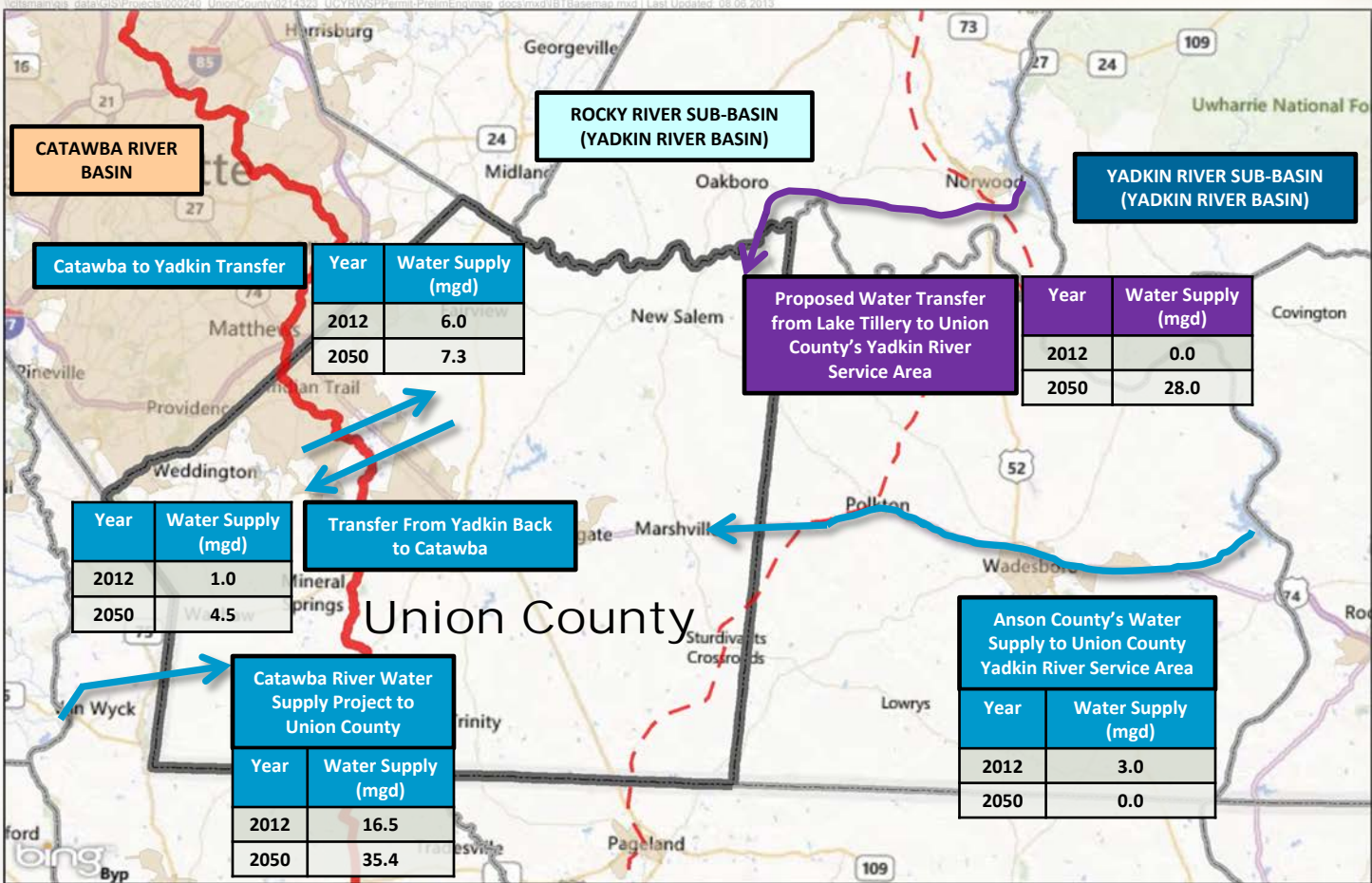


Exhibit 1

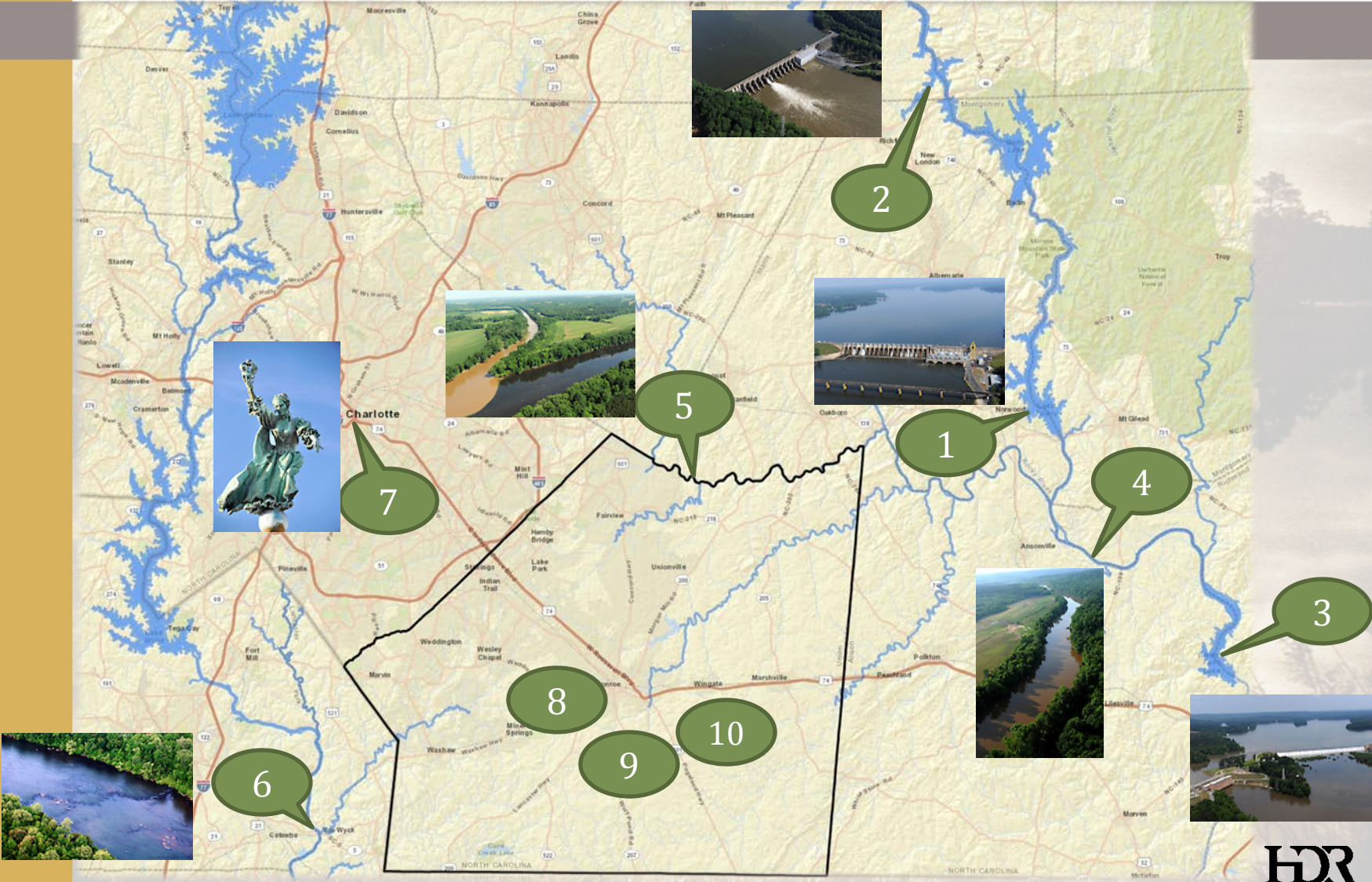


The EIS for the IBT Certificate is evaluating numerous alternatives

- 1) Lake Tillery IBT to UC
- 2) Tuckertown Reservoir IBT to UC (via Albemarle)
- 3) Blewett Falls Lake IBT to UC (via Anson County)
- 4) Main Stem Yadkin River IBT to UC
- 5) Rocky River Withdrawal in UC
- 6) Catawba River Water Supply Project Expansion
- 7) Interconnection with CMUD
- 8) Groundwater Supply
- 9) Demand Management/Conservation
- 10) Direct Potable Reuse
- 11) No Action
- 12) Water returns to the Yadkin Basin (must be evaluated)



The alternatives evaluation considers financial, environmental, and other impacts





Securing a reliable long-term water supply from the Yadkin River Basin is expected to take us nearly 15-years

- ❖from 2007 water use restrictions
- ❖ Draft EIS submitted to NC-DWR in January 2015
- ❖ 2013-2016: Securing IBT Certificate and Duke Energy Lake Use Permit
- ❖ 2016-2021: Design, Permitting, Land Acquisition, Construction, Start-Up of YRWSP

DISCUSSION

