WELCOME

Yadkin Regional Water Supply Project
Public Meeting

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REGIONAL WATER SUPPLY

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PROJECT HISTORY: STUDIES, RESEARCH AND SOLUTIONS

The need for a new water supply for Union County's Yadkin River Basin service area has been studied since 2004

2004 - 2010	Rocky River Water Supply Feasibility Study	Eastern Water Supply Preliminary Engineering Report	Comperehensive Water and Wastewater Master Plan
2011	Eastern Water Supply Feasibility Study	Project Partner Assessment	
2012 - 2013	Interlocal Intake & Transmittal Agreement signed		
2013-2017	Environmental Impact Statement & Interbasin Transfer process completed		
2017-2019 (We Are Here)	**Design & Permitting underway**		
2019-2021	**Construction phase**		
2022	**New water source comes online for Union County!**		

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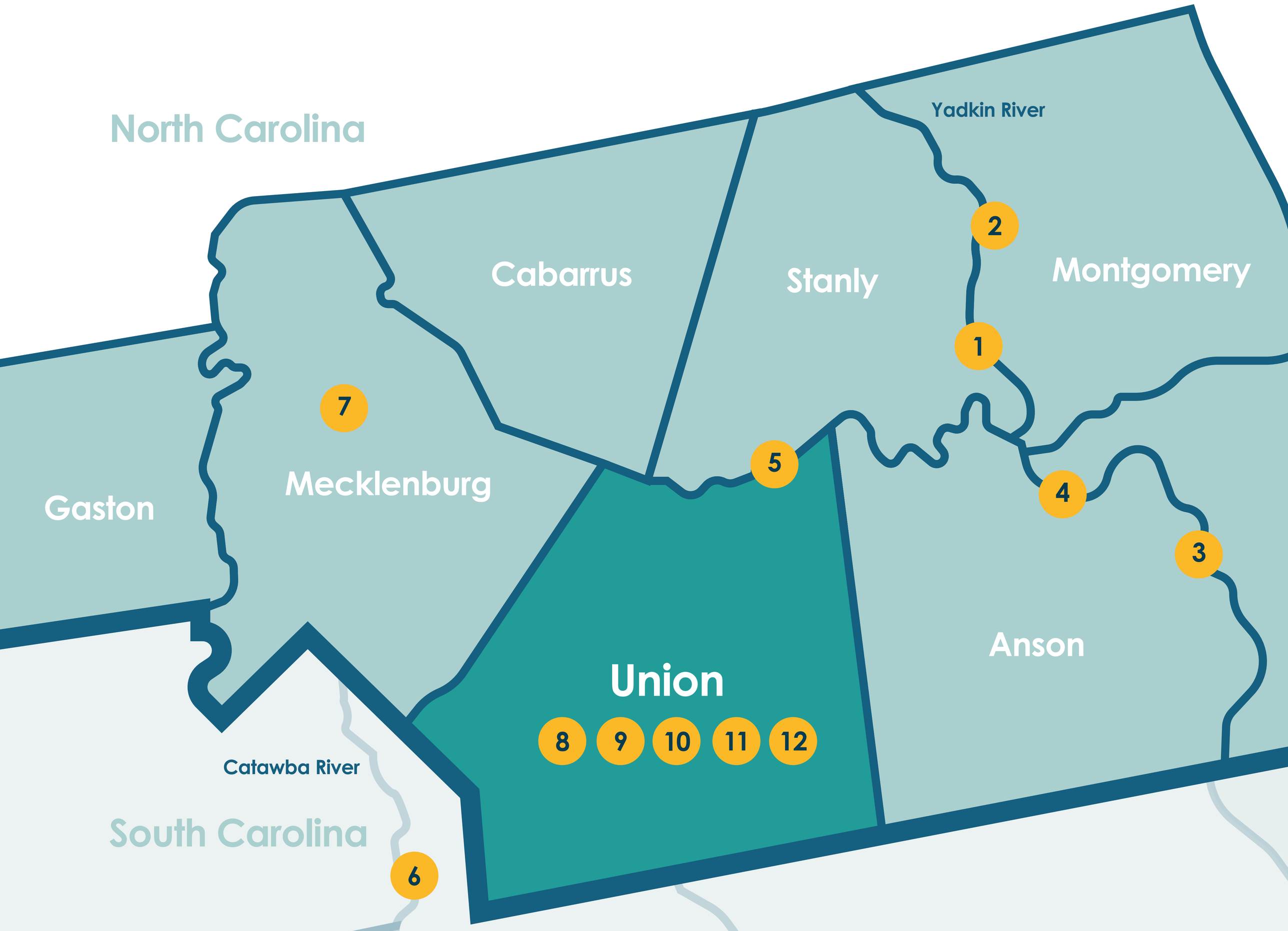
ALTERNATIVES CONSIDERED



1 Lake Tillery IBT

2 Tuckertown Reservoir

3 Blewett Falls Lake IBT

4 Main Stem Yadkin IBT

5 Rocky River withdrawal in Union County

6 Catawba River IBT Increase

7 Catawba River IBT through interconnection with Charlotte Water

8 Groundwater supply

9 Demand management & conservation

10 Direct potable reuse

11 No action

12 Water returns to the Yadkin River

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PREFERRED ALTERNATIVE

Lake Tillery alternative was chosen because this option provided a long term sustainable water source, was less costly, had less of an impact on the environment and had less of an impact on the lake needs such as hydropower, recreation and aesthetics.

WATER SUPPLY

The preferred alternative can supply the necessary water for current and future needs.

COST

The preferred alternative represents one of the lowest cost alternatives and is a financially feasible option for this water supply.

LAKE IMPACTS

The preferred alternative has less impact on lake aesthetics, other water needs, and hydropower than the other alternatives evaluated.

ENVIRONMENTAL

The environmental impacts of the preferred alternative are similar to, or significantly less, than the other alternatives evaluated.

COMMUNITY

The preferred alternative creates a beneficial water supply partnership between the Town of Norwood and Union County

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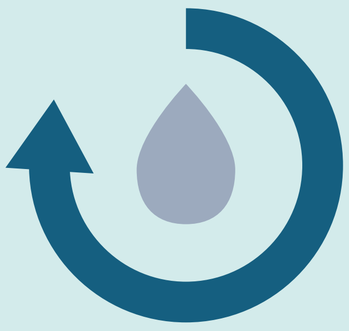
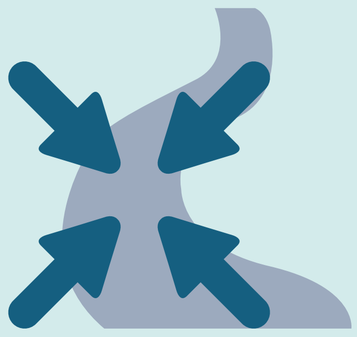
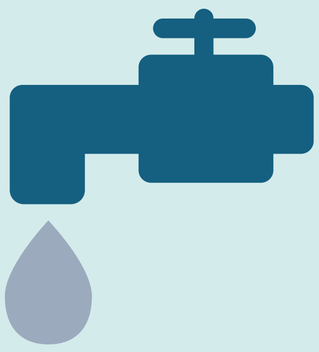
PROJECT BENEFITS



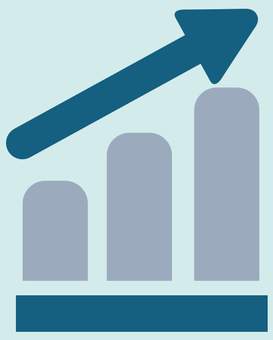
Long-term water supply for residents



Reduced dependency on the Catawba River



Infrastructure funding for Norwood



Support for continued economic growth in Union County and Norwood

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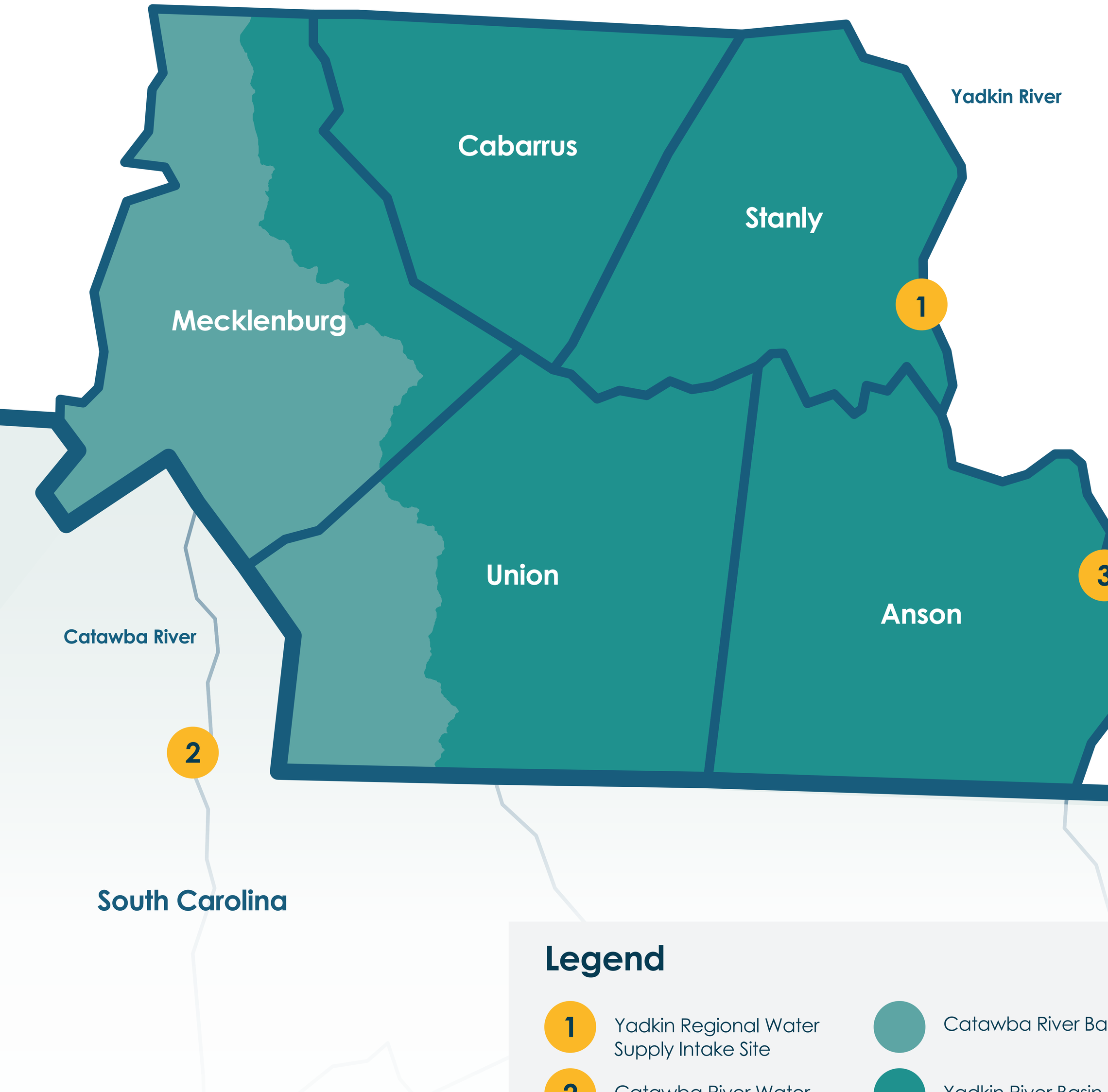
UNION COUNTY WATER SUPPLY



Legend

1 Yadkin Regional Water Supply Intake Site

2 Catawba River Water Treatment Plant

3 Anson County Water Treatment Plant

Catawba River Basin

Yadkin River Basin

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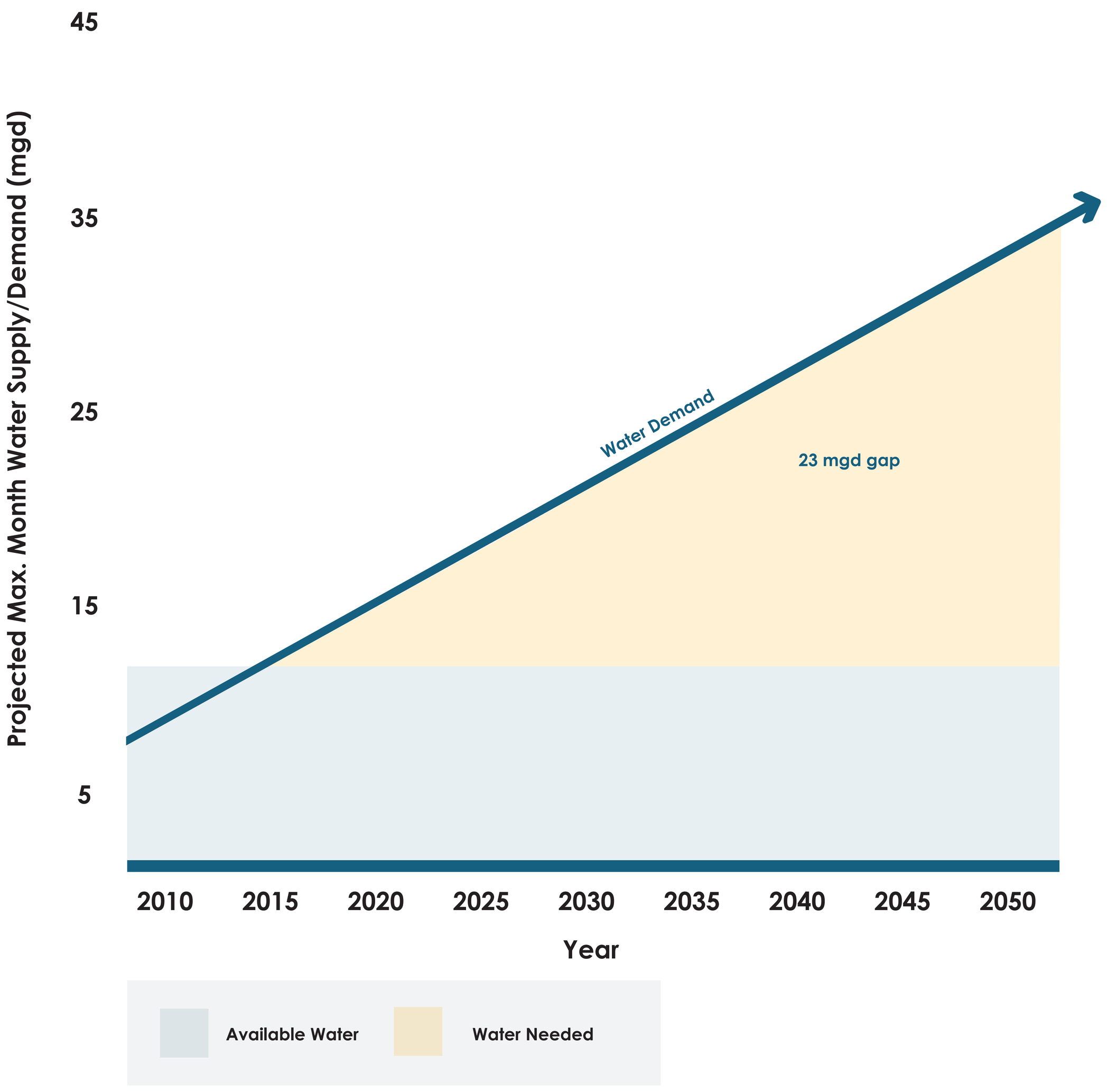
UNION COUNTY IS GROWING

A new raw water supply must be built in time to satisfy the demands of a growing community.

Union County's Total Max Month Average Day Demand
"Gap" = 23 mgd



LAKE TILLERY

The lake levels at Lake Tillery are carefully controlled by Duke Energy as a part of Duke Energy's hydropower operations. Differences in lake levels resulting from the proposed water transfer will be hard to determine with the naked eye.

278' Maximum average lake level

276.95' Lowest modeled lake level resulting from proposed water transfer

276' Minimum average summer lake level for Duke Energy operations

268.2' Public water supply intake

256.2' Hydropower operating limit

244' YRWSP intake location

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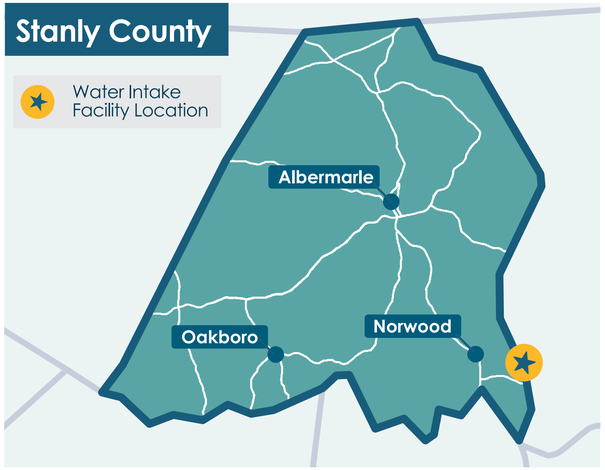
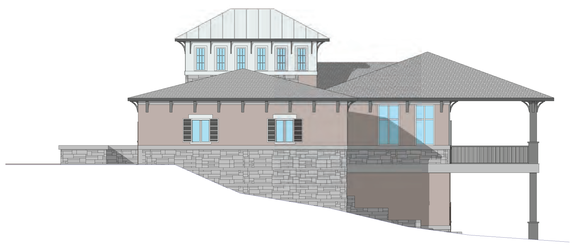
WATER INTAKE FACILITY

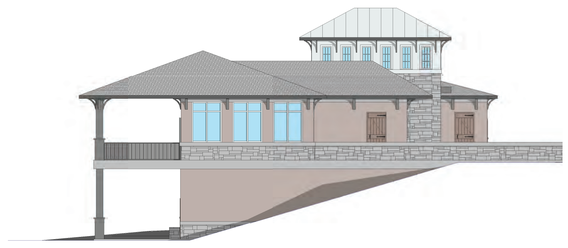
A new intake facility will be built in Norwood. The structure and site have been designed to fit within the residential lakeside neighborhood and will house mechanical and electrical equipment, as well as meeting space.



South Elevation[1]



East Elevation[1]



West Elevation[1]

North Elevation[1]

[1] Preliminary considerations.

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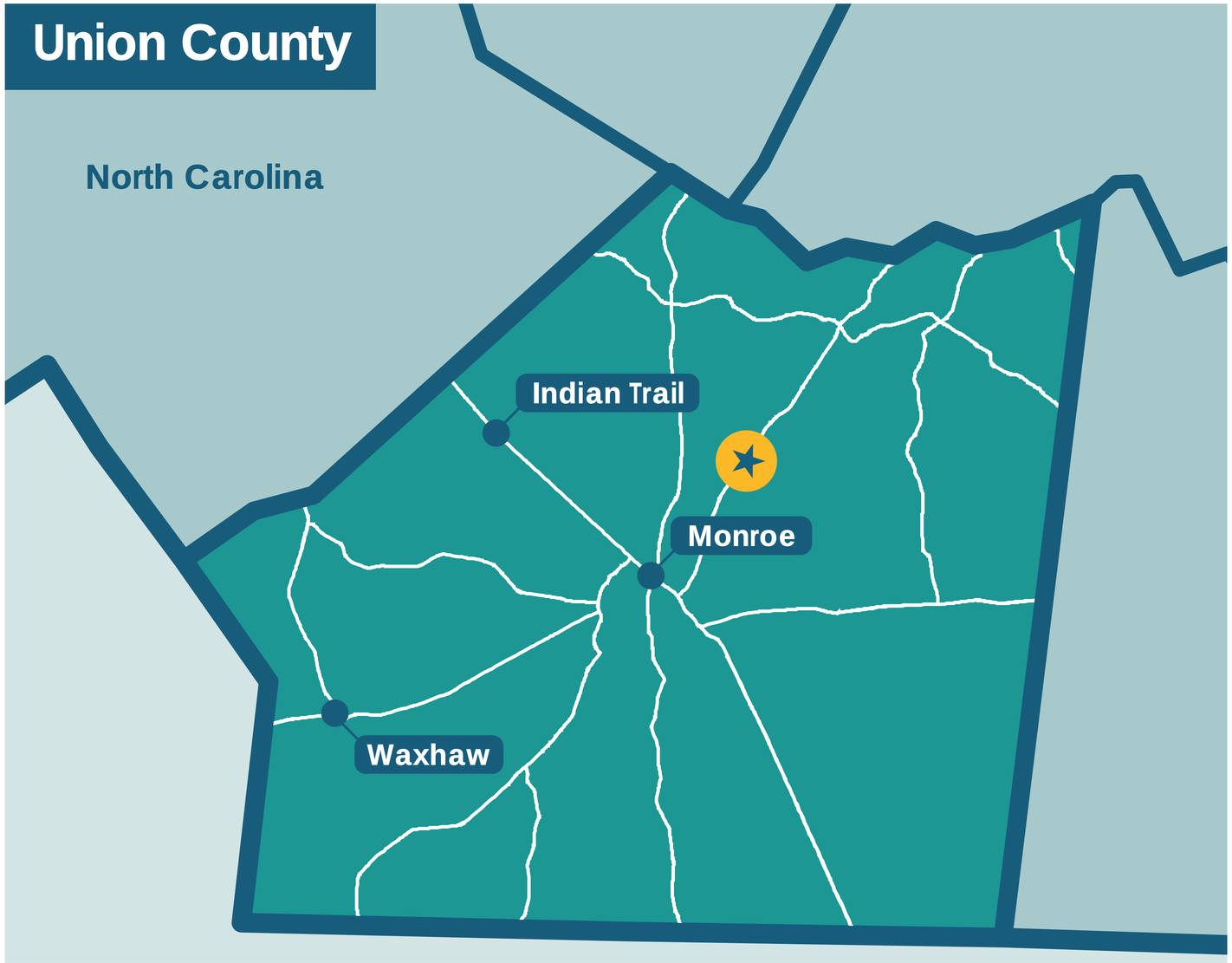
WATER TREATMENT PLANT

Criteria for site selection:

- 'Single' pumping to WTP from Lake Tillery
- Close to center of customer demand
- Near major water lines and power source
- Adjacent to major roads
- Sufficient acreage for long-term expansion needs
- Appropriate topography
- Low environmental impacts



Potential Water Treatment Plant Location

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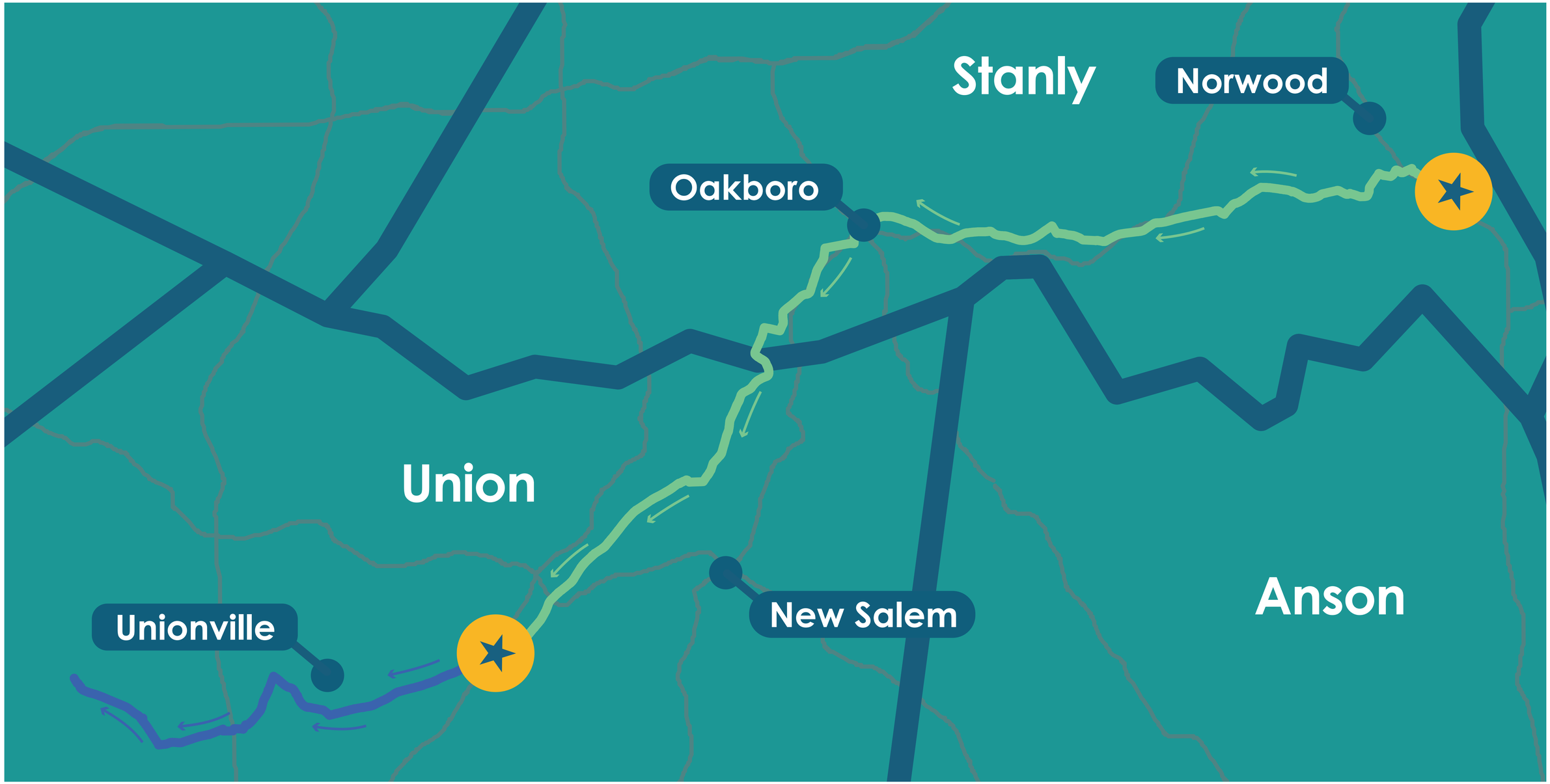
WATER PIPELINE



Finished Water

Raw Water

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STAY INVOLVED

Project Website:
www.yadkinwater.com

Online Meeting:
www.yadkinwater.com/onlinemeeting

Email:
info@yadkinwater.com