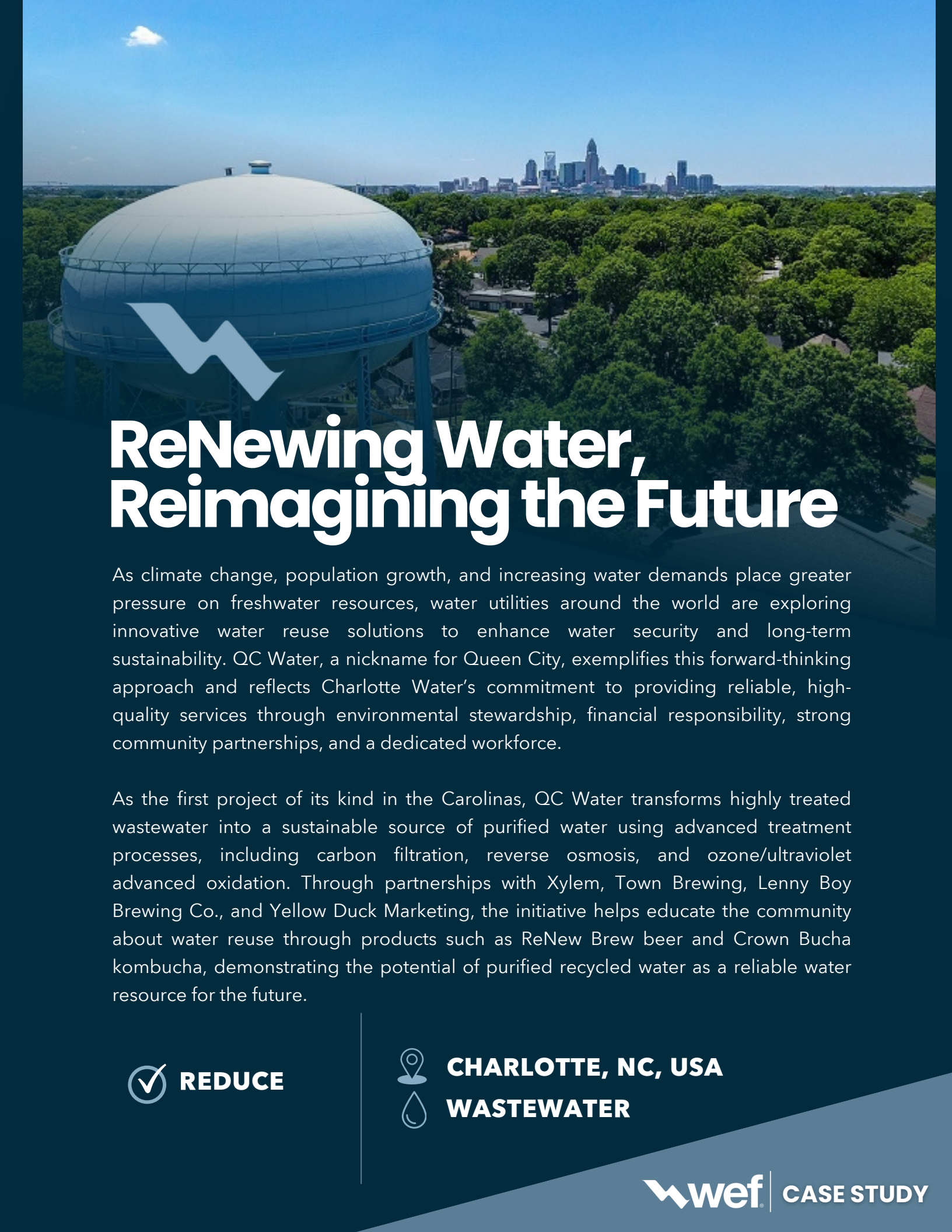




ReNewing Water, Reimagining the Future

As climate change, population growth, and increasing water demands place greater pressure on freshwater resources, water utilities around the world are exploring innovative water reuse solutions to enhance water security and long-term sustainability. QC Water, a nickname for Queen City, exemplifies this forward-thinking approach and reflects Charlotte Water's commitment to providing reliable, high-quality services through environmental stewardship, financial responsibility, strong community partnerships, and a dedicated workforce.

As the first project of its kind in the Carolinas, QC Water transforms highly treated wastewater into a sustainable source of purified water using advanced treatment processes, including carbon filtration, reverse osmosis, and ozone/ultraviolet advanced oxidation. Through partnerships with Xylem, Town Brewing, Lenny Boy Brewing Co., and Yellow Duck Marketing, the initiative helps educate the community about water reuse through products such as ReNew Brew beer and Crown Bucha kombucha, demonstrating the potential of purified recycled water as a reliable water resource for the future.



CHARLOTTE, NC, USA
WASTEWATER



CHALLENGES FACED

A key component of the initiative was developing a compelling public narrative around sustainability, water reuse, and innovative treatment technologies. Charlotte Water collaborated with several partners to help advance the project, engage the community, and promote the end products: Xylem - technology provider for the treatment; Town Brewing - original brewery partner for ReNew Brew; Yellow Duck Marketing - led branding, communications, media outreach, and launch event promotion; Lenny Boy Brewing Co. - kombucha brewer.

TECHNOLOGIES & SOLUTIONS USED

This project used advanced drinking water treatment technology on a pilot skid which consisted of state-of-the-art processes, such as carbon filtering, reverse osmosis, and advanced oxidation (ozone and ultraviolet treatment). Xylem was the lead on process configuration and operation. From there, Charlotte Water tested over 150 contaminants in the treated QC Water to make sure the product met all drinking water standards and was of exceptional quality.

IMPACT & INSIGHTS



Beyond technical performance, the project generated significant public engagement and awareness around water reuse. Through strategic partnerships and outreach efforts, QC Water received more than 100 media placements across local news outlets, PBS, industry publications, and podcasts. The campaign generated over 8.8 million views, reached an estimated audience of 3.6 billion, and resulted in more than 2,000 engagements and 1,000 social media shares, helping build public confidence in water reuse as a sustainable water solution.

LESSONS LEARNED



Two key factors contributed to the success of the project: (1) developing a compelling public narrative around water reuse and the end products, and (2) engaging key staff and partners early in the planning process. Because staff time was the most significant resource required, Charlotte Water recommends early coordination across all stakeholders. Successful implementation relied on collaboration among maintenance, operations, engineering, laboratory, water quality, field operations, and communications teams.

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Crown Bucha was the first kombucha in the United States to be made with recycled water. The QC Water project was showcased through presentations and samples of Renew Brew and Crown Bucha at various national conferences.

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