Rural America contains approximately 80% of the water sector infrastructure while servicing less than 20% of the population. Small to medium-sized rural water and wastewater utilities are faced with difficult decisions of customer affordability relative to replacing and upgrading aging infrastructure. The water and wastewater sector is a very capital-intensive business.

Customer rates should cover operation, maintenance, debt service and reserve funds to replace assets. However, financial management in the rural water sector does not usually work that way. Some believe that all infrastructure improvements should be paid by only those who directly benefit but because we all share in the general wellbeing and good health of our communities, federal and state loans and grants are available to moderate utilities’ financial gaps and dampen user-rate shock.

Community income surveys are a basic service provided by RCAP Solutions. Census data may not truly reflect a utility’s service area and also has a very high margin of error. Consequently, a targeted survey of the utility’s customers is necessary. Survey results reveal the median household income of the project area and help the utility to qualify for federal and state low-interest loans and grants; it also reveals what upgrades the utility can afford. Grant and principal forgiveness funding can save the utility and its users millions of dollars over the life of the loans.

RCAP was contacted by the Richmond, Maine Utilities District superintendent to conduct an income survey for a projected upgrade to their 1965-vintage sewer treatment plant. The Utility District provides sewage collection through 4,600
feet of pipe serving 566 customers. In 1989, the plant was upgraded for secondary treatment. During peak wet weather, flows are often greater than the plant’s design capacity. Inadequate sizing of various processes poses challenges to the treatment plant to transform sewage into clean effluent for discharge into the Kennebec River. Various alternatives were studied and the District decided upon $10.3 million in improvements.

RCAP trained District volunteers to collect surveys and RCAP processed the returns, analyzed the results and submitted the final reports to the three major funders: USDA’s Rural Development, Maine DEP’s State Revolving Fund (SRF), and HUD’s Community Development Block Grant Program (CDBG). Confidentiality was preserved throughout the process.

The system was unable to receive the required return rate on the surveys, so RCAP suggested that the District negotiate a contract with Maine Rural Water (MRW) to complete the needed door-to-door follow up. RCAP and MRW coordinated to finalize the work. RCAP facilitated report communications between the engineers, the District and funders to realize survey approval from Rural Development, Maine DEP and CDBG which qualified the District for 75% grant from Rural Development, SRF principal forgiveness and up to $1M in grant funds from CDBG. Funding awards should be announced for the 2018 construction season.

Working together, the District, RCAP and MRW, with funding from USDA Technitrain, produced success for this important project to move forward to meet environmental compliance in the most affordable manner for the customers.