Refinancing Utility Loans

Alfred Water District serves about 700 people in Alfred Maine. Their approximate revenue is $530K with $130K from public fire protection. Their total annual debt payment is $222K.

The Need and RCAP’s Assistance

In 2000 customers of a private water system created the Alfred Water District as the previous system owner created an unsustainable situation for the rate payers. Many line breaks endangered the health of the town and experienced lack of fire pressure at the hydrants. Over the past nineteen years, the District has been re-piped with in-line gate valves for flow control and installation of a new storage tank.

RCAP assisted the District in digitally mapping their system, creating a capital improvement plan, and restructuring their user rates.

During a user rate adjustment, RCAP noticed that six of their nine loans were over 4% interest rate. Staff facilitated restructuring their loans which realized a lower interest rate and provided a windfall of escrow funds.

Results

Because of RCAP’s assistance, the District refinanced 8 loans and is realizing about $160K of refunded escrow funds and an annual loan payment savings of $9,500. These funds are being put toward 1) finding another groundwater source, 2) contributing to capital reserves and 3) increasing their operator/superintendent income to better compete with surrounding larger water utilities. The District increased their sustainability.
Creating a plan to improve infrastructure

Aqua Vista Association was facing a difficult new requirement, in developing a long-term Asset Plan to focus on further system needs and upgrades. RCAP staff was able to train volunteers and develop an Asset Management Plan, satisfying both a requirement and future sustainable capacity.

The Need and RCAP’s Assistance

A new requirement in Connecticut for small Public Water Systems has pushed infrastructure plans to the forefront in optimizing sustainability and fiscal responsibilities. For many small communities, it has been simple accounting for many years, but with increased requirements and extra layers of detail, operations and maintenance are no longer simple.

For volunteers of an association completing most tasks takes incredibly long. In addition, producing a document that provides the coverage of detail and components is time consuming. RCAP has been a leader in resources, guidance, and experience in developing asset management and capital improvement plans. Through federal funding, these services are provided with no cost to the community.

Results

Because of RCAP’s assistance – Helping Aqua Vista develop an Asset Management and Capital Improvement plan not only satisfies the coming requirement but also increases managerial and financial capacity for the community and provides a platform to continue the plan for years to come.
The Clearfield Municipal Authority was a recipient of the USDA Rural Community Development Initiative grant awarded to RCAP. The authority recently completed a significant water line extension project and lacked accurate GIS maps of their water distribution system.

The Need and RCAP’s Assistance

RCAP staff identified Clearfield Municipal Authority as a potential recipient for its RCDI grant application. The Authority management team wanted to update their system maps and conduct a complete GPS inventory. The existing water system maps at the authority were mostly outdated or incomplete, and they recently had several experienced and knowledgeable water operators retire, leaving significant challenges for the remaining field and office staff. Recognizing the importance and value of accurate GIS mapping for rural water and wastewater utilities, RCAP included Clearfield Municipal Authority among several other recipients in their successful grant application.

Results

RCAP worked with the system to conduct a complete GPS inventory of the water distribution system. Accurate and up-to-date GIS maps were created to allow the field and office staff to better manage the water distribution system. RCAP was then able to utilize the authorities existing GIS software to create online web maps of the water system, assisting them with common issues such as resolving main breaks and fulfilling one call requests.

“RCAP has been an invaluable resource in helping the authority implement our new GIS program. The online web apps give us instant access to reliable and accurate system maps, significantly improving our efficiency in the field.”

- Andrew Haney, CMA
Cuttyhunk Island, Gosnold, MA

Cuttyhunk Island’s public water system has an antiquated well field with vacuum prime pumping and a distribution system of asbestos cement pipes. RCAP assisted the community with this project to secure $1,312,000 in grant and $1,648,000 in low interest loans for the needed improvements. These funds will enable the water system to continue serving the community while protecting the public health and the environment of the island.

The Need and RCAP’s Assistance

The Town of Gosnold, located on Cuttyhunk Island, is the island outermost of the Elizabeth Islands in MA. Located between Buzzards Bay and Martha’s Vineyard, Cuttyhunk has a year-round population of 75 residents. The transient summer population, that come to enjoy the warmer months, is also impacted by the water quality.

The water system, constructed in the 1960’s, is a series of small diameter wells with a vacuum prime system. It is at the end of its useful life. The solution is a new well field with a submersible pump system in addition to the replacement of distribution system water mains.

Results

With the assistance of RCAP – helping the community to identify and secure funding and guiding them through the process, the residents will have safe, clean, potable water and can continue to be a popular tourism destination, resuming business as usual on Cuttyhunk Island!
The Downingtown Municipal Water Authority (DMWA) was a referral to RCAP from the EPA Region III office after requesting technical assistance for GIS mapping. New funding from the USDA is allowing RCAP to help implement a modern GIS program with the water authority.

The Need and RCAP’s Assistance

The Downingtown Municipal Water Authority reached out to the Philadelphia EPA Region III office inquiring about potential GIS mapping technical assistance that would be available to the authority. The EPA Office of Infrastructure and Assistance connected DMWA with RCAP’s technical assistance providers to see how RCAP could help. The Downingtown Municipal Water Authority was looking to update their collection of outdated and incomplete water distribution maps. The authority employs several water operators with an extensive background in technology and strong desire to implement a modern GIS program.

Results

RCAP is working with the system to complete a GPS inventory of the water distribution system. RCAP will provide the authority with a cutting-edge GIS program where they will be capable of viewing and editing their water system maps on any smart phone or mobile device utilizing the ESRI GIS platform. The water operators, field staff, and management at the authority will soon be able to fully leverage a modern and secure GIS solution.
East Thetford Water Company

East Thetford Water Company provides drinking water to a village in the Connecticut River Valley of rural Vermont. In 2019, the village experienced an emergency water shortage after their primary well failed. RCAP worked with the volunteer water board to ensure they obtained financing for a replacement well.

The Need and RCAP’s Assistance

East Thetford Water Company found themselves without a reliable source of water when their primary well suddenly stopped producing enough water to serve their 42 connections. Businesses and homes in the village were severely impacted. The system operator temporarily gained control of the situation by activating an emergency spring and repairing a leak in the system. With the help of the state’s primacy agency, an engineer, and RCAP, system managers were able to navigate a boil water order, identify potential long-term solutions, and document income in the community to ensure that a more permanent solution could be found.

Due to the small size of the village, documenting income proved to be a significant hurdle; regulations require a response rate in excess of 90% to achieve a valid survey. As with any critical infrastructure effort, community outreach can make the difference between a successful project and a frustrating roadblock. RCAP’s efforts to educate the community about the project ensured successful completion of the income survey to secure critical funding.

Results

Less than a year after running dry, residents and business owners in the village are relieved to have a new bedrock well to rely on. RCAP helped the system achieve a timely solution to a problem that threatened public health.
Emerald Lake Village District, NH

Providing training and support to build the institutional capacity of the Emerald Lake Village District.

The Need and RCAP’s Assistance

Build in 1965, the Emerald Lake Village District (ELVD) water system has undergone several short-term and long-term challenges. The short-term problems in recent years occurred in the distribution system experiencing major main breaks. These unplanned events forced the district to heavily invest in fixing numerous leaks and other emergencies. Long-term issues are related to the system’s eleven wells that are not producing enough water to keep up with the growing population in the area.

The New Hampshire Department of Environmental Services (NHDES) asked RCAP to help develop the systems first asset management plan to help deal with the District’s multiple challenges.

Results

Initially RCAP helped the system access a $20,000 asset management grant from the NHDES in 2018. Then, in collaboration with the District and Wright-Pierce Engineers and NHDES, RCAP supported the completion of the system’s inventory, assessment of infrastructure condition, and estimate replacement cost. RCAP also developed a ten-year budget, installed CUPSS, and trained the manager as well as Board members to create the system’s asset management plan. The first draft was completed by the end of 2019.

By December 2019, ELVD was approved by NHDES to receive a $350,000 loan from the State Revolving Fund program. ELVD will need to enter into a loan agreement by May of 2020 in order to lock in the current low rates (1.704% for 20 years). The funding will be used for a water main improvement project that will prevent leaks and increase efficiency.
Gilberton Borough Sewer Department Sees Cost Savings with RCAP Technical Assistance

RCAP staff delivered an intensive suite of services to this small rural Schuylkill county community that has struggled economically with industry collapse, a declining population and a devastating flood that forced the demolition of more than 20 homes.

The Need and RCAP’s Assistance

The Gilberton Borough Sewer Department walks a fine line to avoid default on their USDA debt service as a result of rising treatment and maintenance costs at the plant, an eroding customer base and chronic customer delinquency issue. The aging infrastructure of the system poses a challenge as many of the Board members have expressed concern over the design and installation of the system. The USDA referred RCAP originally to the Borough over concerns that the system might default on their debt service obligations. In past years, the Borough received substantial technical assistance and training in the managerial and financial areas to avoid default. Within the past year, RCAP staff assisted the Borough with review of sewer costs, budgeting, review of energy bills to assist with energy efficiency, GIS utility mapping and asset management. Through the RCAP program, this board receives regular support and training to develop a better understanding of their wastewater system and Sustainable Management Techniques.

Results

Through RCAP’s assistance, this small rural utility manages their debt and costs in a financially sustainable manner. The Board also has a greater understanding of the assets they manage as well and can effectively manage these assets.
Communities governed by volunteer board members address needs after the struggle of not having electric power for a year due to damages left by Hurricane Maria. The technical assistance provided by RCAP was important to help receive USDA Disaster Assistance Grant Funds.

The Need and RCAP’s Assistance

The Acueductos Barrio Guayabota Yabucoa, Inc. is in Yabucoa, PR and is a well-organized rural community water system. The system supplies 14 sectors of Guayabota ward for 667 residents. The community was severely affected by the impact of Hurricane Maria and damage was so bad that for almost a year they were without power due to a lack of generators.

With the assistance of RCAP’s technical assistance provider (TAP) the community applied to USDA disaster assistance funding. To receive funds, the community had to comply with a list of requirements and submit an online application using the RD Apply platform. The funds will provide for generators and monitoring equipment required to comply with the SDWA regulations.

Results

With RCAP’s assistance the community requested the funds and were awarded by USDA with $58,699 to replace damaged equipment and acquire needed power generators. The generators and lab equipment will analyze water quality and protect and ensure good public health and increase compliance with the SDWA. The improvements provide the community with a robust, sustainable aqueduct and help to prepare to manage another possible emergency.

Acueductos Bo. Guayabota, Yabucoa, PR
Population: 2,268
Service area: 667
Median Household Income: $16,308

Josefa Torres
District III Director-PR & USVI
RCAP Solutions, the Northeast RCAP Services
RD Apply-Grant Application Workshop in a Box Training RTCR Sampling Plan

Funding Source
USDA

Congressional District
At large Gonzalez

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Financing Wastewater System Upgrades

Houlton Water Company owns and maintains the sewer pump stations that serve the Houlton Band of Maliseet Indians, but they need an upgrade. Financing options thru Indian Set Aside Programs and system ownership are being negotiated.

The Need and RCAP’s Assistance
The Houlton Water Company sewer extension that serves Houlton Band of Maliseet Indians needs an upgrade. Approximately twenty new connections have been added to the system which is taxing the current design capacity. The lift station pumps began failing before the expected end of life. Overflows at the lift stations created a public health hazard. The failures also created an increase in operational costs to maintain the system.

Houlton Water Co. and the tribe work to develop a plan to upgrade the system to eliminate overflow events and increase capacity for the rising population on the reservation.

To access funding sources available to Native Americans, Houlton Water Co. and Houlton Band of Maliseet conscripted RCAP to determine if an ownership transfer must occur to be eligible for the best funding package. If so, then RCAP could assist on the funding application process. RCAP is currently coordinating efforts between Indian Health Services, Maine Department of Environmental Protection, and US Department of Agriculture to meet the eligibility requirements for the project. If necessary, RCAP will work to transfer ownership rights to meet those eligibility requirements.

Results
Negotiations are ongoing for funding, but construction is expected to begin in the Fall of 2020. Should the ownership need to be transferred to the Houlton Band of Maliseet Indians for them to take advantage of funding opportunities, new oversight of the wastewater system must be established to ensure its financial and operational sustainability. RCAP is prepared to use their experience in developing committees to create a path forward for budget, maintenance/repair, and oversight/planning.
Jasper Sewer District, NY

Shortcomings exist with the Town of Jasper's existing wastewater collection system and wastewater treatment plant (WWTP) that conspire to degrade the performance of the Town’s WWTP, resulting in periodic effluent violations. RCAP’s assistance will ensure the system is operating consistent with state discharge limits to meet the goal of being protective of public health and the environment.

The Need and RCAP’s Assistance

This project includes improvements to the wastewater treatment plant which will address US EPA Notice of Significant Non-compliance, NYS Department of Environmental Conservation (DEC) permit non-compliance, NYS DEC Requirement to Disinfect the effluent, and known inflow and infiltration in the collection system.

RCAP guided the town through the income survey process and assisted with door-to-door surveying in order to meet the required response rate. RCAP prepared the income survey report that was submitted with the application for funding. Following the funding award, RCAP assisted with preparation of a Request for Qualifications for engineering design and construction services.

Results

Because of RCAP’s assistance – completing the income survey in order to determine eligibility for a Community Development Block Grant (CDBG), the town was awarded the grant which helps to reduce the financial burden to this very low-income community.
Lee Oak Cooperative - Barrington, NH

The Need and RCAP’s Assistance
Lee Oak’s water system relies on an old system with several design issues that might compromise operability and water quality. Features include the proximity of the dug well to an active leach field, a very small underground pump house that prohibits adequate maintenance, and a 47-year-old hydro-pneumatic tank with extensive rust. Additionally, leaks in the distribution system are difficult to locate due to very porous soil of the site. These are all significant deficiencies identified by NH Department of Environmental Services (NHDES) that pose a risk to public health and safety.

The project engineer estimated the total project cost, which requires extensive infrastructure replacement from source to distribution, to be approximately $1,800,000. Too costly for a small, low income community. NHDES asked RCAP Solutions to help Lee Oak with funding options and assistance applications.

Results
Initially, RCAP completed an income survey essential to determine funding eligibility and submitted an SRF loan pre-application. NHDES selected the project as the top priority among all applications state-wide, resulting with the approval of a $1,000,000 SRF loan, expected to be awarded in the spring of 2020. RCAP then submitted a Drinking Water and Groundwater Trust Fund (DWGTF) grant pre-application which might be eligible for $435,000 grant. RCAP coordinated enlisting an engineering firm and a grant administrator to assist with the final applications.

RCAP also helped Lee Oak apply for a Community Development Block Grant (CDBG), expected to be awarded in 2020, provided on-site training to board members, and helped them complete its Emergency Plan and Vulnerability Assessment. It is expected that the leveraged funding if awarded will cover then entire cost of the project.
Los Baldíos Community, located at the north-east side of the town of Cayey, have a well serving the needs of its 60 residents. The system was not registered with the Puerto Rico Health Departments (PRDoH), thus not complying with the Safe Drinking Water Act. The PRDoH asked RCAP to help the community to install the equipment and provide procedures to bring the system into compliance.

The Need and RCAP’s Assistance

After Hurricane María, the community realized that in order to access donations and other benefits from government, non-profits and federal agencies, they needed to register with the PRDoH and commenced complying with the requirements of the SDWA.

PRDoH referred the system to RCAP to help them get a donation from Rotary International in San Juan. RCAP helped the community to get quotations for a required flow meter for their well and present the quotation for buying and installing the equipment.

The Community Board got the donation of a tablet chlorinator from the municipality of Cayey, and with their own money paid for the installation of the chlorinator. RCAP donated the equipment for performing the free chlorine tests and trained community personnel on how to conduct the testing and control the chlorine application. Assistance was provided to get the services of sample collection and analysis for total coliforms and E. coli.

Results

Because of RCAP’s assistance, this community was able to access funds to buy and install the required equipment to disinfect their water and learn the basic operations to ensure compliance with the SDWA. The assistance enables the community to commence their bacteriological monitoring to comply with the regulatory requirements. The continued assistance provided training to other people in the community, enabling them to be part of the operation of the system.
Volunteer board members for a small rural system, were able to improve their capacity to properly manage their water resource through RCAP assistance and USDA grant funds.

The Need and RCAP’s Assistance

Los Quemados I Sector Los Ortiz, a small water system, is struggling to properly manage their water production. The drinking water source is a well. They are in the process to obtain a franchise for the operation of the well from the Department of Natural and Environmental Resources (DNER). Certain information needs to be gathered, including the monthly amount of water extracted from the well, as a requirement of this process.

The water meter installed few years ago was missing the instructions on how to properly obtain the readings. The Board of Directors have been forced to deny new petitions for service in part because of the lack of information about how much water it produces. This fact may be worsened in the dry season or drought events. The Board of Directors is composed of seven residents, who are trying their best, but know little about the installed flow meter.

After an evaluation and a gap analysis with RCAP’s Technical, Managerial, and Financial (TMF) Assessment tool, it was identified that there were areas of opportunities to improve the system operations and how the board of directors could enhance their capacity utilizing RCAP’s assistance. Through the RCAP USDA Technitrain project, this board received a Standard Operating Procedure to properly assess flow meter readings.

Results

Because of RCAP’s assistance, and board-specific training, this small rural water community now has the necessary capacity to determine how much drinking water is extracted both monthly and annually. The board also has adequate knowledge to grant new water connection petitions as well as other necessities.
Midland Water and Sewer Authority

Midland is a small town located in Beaver County, PA. The town has their own water and sewer treatment plants. Midland Water Authority stared operations in 1907. Midland mill began operating as a stainless-steel facility the following year. The mill closed in 2016. Today the Authority services Midland Borough, Shippingport Borough and small industries with water and sewer.

The Need and RCAP’s Assistance

Midland Borough is having financial issues. Since the mill closed operations the plant is oversized in relation to the amount of water it treats. There is concern about depreciation and state of deterioration on the part of Midland Water and Sewer. The borough needs to replace all the electrical wires/panels and bar screen. Also, they wanted to close some dead ends in the distribution system to improve the quality of the water. The maps were very old and hard to read and understand.

RCAP assisted enrolling Midland in the RD Apply system, followed the application process, and provided long distance assistance to the borough. In addition, RCAP provided GIS mapping for the distribution system. Since the borough is going to make updates at the water system and the supervisor is retiring in less than a year it was very important that the system have updated maps. Such maps include a booster of a new section of the distribution system, pump stations and Shippingport line. RCAP was able to verify and confirm the locations of the assets with the operator.

Results

Midland Water Authority received assistance with USDA application, which should increase the financial and managerial capacity. The borough has new and accurate maps with information about hydrants, hydrants valves, booster house, water feed stations and water valves in the main line. Clear pictures tell a better story of the system status.
Water Operators Needed!

Monroe Water District does not have a licensed drinking water operator; RCAP is training a local resident to pass the exam and operate the plant to ensure the community can continue operating while protecting public and environmental health.

The Need and RCAP’s Assistance

Due to aging workforce and lack of interest, the town of Monroe Bridge, MA has not been able to fill the position of Certified Primary Drinking Water Operator since December of 2017, when the previous operator retired. They were administered a consent order for not having an operator. Since then, the Select Board and Town Clerk have taken over the daily duties of an operator. The Town was granted Temporary Certifications that have since expired, and again have no current certified operator.

Many rural towns in the area are facing the same problem. They are in remote areas and are finding it near impossible to find someone within a reasonable driving distance with certification to work a 2-hour shift. A Circuit Rider Program is needed in rural areas like this.

Results

RCAP is currently tutoring a resident of the Town and preparing her to take the drinking water exam. RCAP hopes to tutor more locals to supply operators into the workforce. RCAP will be offering a “Basic Math for Operators” course in MA, CT and RI in order to spark interest about water operators since so many are needed throughout the region.

Monroe Bridge, MA
Population: 121
Median Household Income: $30,833

Rebekah Novak
RCAP Solutions, the Northeast RCAP

Services
Drinking Water Regulatory Compliance

Funding Source
EPA1

Congressional District
1st

“It is extremely difficult to find a licensed operator to travel our challenging roads to work a 1-2 hour shift.”

- Lucy Passardi, Monroe Water District

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Monson ME Utility District

RCAP was instrumental in assisting the Monson Utility District in reviewing changes to the sewer permit and implementing processes and procedures to resolve needs for operation and maintenance, collection of data for pumping reporting and operator training.

The Need and RCAP’s Assistance

The Monson Utility District Sewer had deficiencies with a system inspection and were in the process of receiving a new permit that required reviewing the policies, procedures and methods for reporting of the pumping volumes and septic tank inspections. The district required a method to calibrate the pumping rates to meet the permit reporting regulations. The system has one operator and needed a second operator to assure coverage for vacations, emergencies and support sustainability. Operator training and resources are costly and beyond the financial capabilities of the District whose repairs often exceeded revenues.

Results

RCAP provided technical assistance and training on policies and procedures and assisted in the development of a Standard Operating Procedures for the pumping calibration to verify pumping rates for permit reporting and documentation for all septic tank inspections. Operator training and resources were provided to support securing a second operator for coverage of emergencies and plan for succession. RCAP provided a Vulnerability Assessment to identify the vulnerabilities that increase risks and to help prepare for and respond to system failure. This assistance improved the efficiency and operation of sewer district with sustainable solutions for compliance with State and Federal Regulations.
Newport Center Water System

The Town of Newport was awarded USDA financing for almost $700,000 in drinking water improvements to address water quality and quantity issues. RCAP is helping them to meet their loan requirements and address financial sustainability.

The Need and RCAP’s Assistance

The Town of Newport has experienced source water capacity issues for years, necessitating the hauling of water from neighboring communities at great expense. USDA financing enabled the drilling of two new wells and the installation of treatment to address health and sanitary issues. RCAP met with town staff and the water system operator to facilitate a Vulnerability Assessment with the water system, documenting existing vulnerabilities and the need to consider future security improvements. During an overall assessment of the system, RCAP identified an opportunity for the Town to apply for an asset management grant through the state to better manage critical system components and promote financial sustainability. Next on RCAP’s list is to provide guidance for a transition from a flat-rate billing structure to one that incorporates the recently installed meters in the water system.

Results

Newport contacted RCAP to assist with an immediate need, ensuring compliance with USDA loan covenants for the financing of major water system improvements. RCAP worked quickly and cooperatively with the Town to secure the funding; in the process identifying additional opportunities to ensure effective system management into the future.

Newport Center, VT
Population: 330
Median Household Income: $54,732

Mark Johnson
RCAP Solutions, the Northeast RCAP

Services
Drinking Water
Facilities Development
Emergency Planning

Funding Source
USDA

“RCAP has been very helpful with our Vulnerability Assessment and preparing an asset management grant application. We are also planning on RCAP services to help us with a rate structure for our water system.”

- Denise Daigle, Town Clerk

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Parcelas Nuevas Canaboncito, Caguas, PR

Parcelas Nuevas Canaboncito had Lead and Copper sampling results above the Action Levels regulated by EPA. According to regulations, they need to comply with an evaluation study. RCAP assisted them with that study and submitted the report to the Primacy Agency for the compliance of the community.

The Need and RCAP’s Assistance

On December 12, 2018 the results of the Lead and Copper samplings from Parcelas Nuevas Canaboncito were above the Action Levels established by the EPA. The results above the Action Levels required, as established by the federal regulations of EPA, an evaluation known as Desktop Evaluation for Lead and Copper to be submitted to the Primacy Agency, in this case the Department of Health. The community failed to do this and was running out of time to comply. The primacy agency asked RCAP to complete the evaluation. The evaluation required the sampling of a list of physical parameters. Until the results of the physical parameters were included, the report could not be completed. A meeting was coordinated with the Board president and the Desktop Evaluation for Lead and Copper from Parcelas Nuevas Canaboncito was started in late November. The report was completed a month later. The final report was sent by mail and an electronic version was also sent to both the community and the Primacy Agency a few days later.

Results

RCAP completed the Lead and Copper Desktop Evaluation within the time requested by the Primacy Agency and the community complied with the EPA regulation regarding Lead and Copper. In addition, the community received guidance and educational information about health effects and protection from Lead and Copper in the drinking water.
Pine Plains Decentralized Wastewater Exploration

The economic growth and residential expansion of the Town is limited by small lots served by individual septic systems. RCAP helped secure $50,500 in State and County grants for a Preliminary Engineering Report and Environmental Report to explore community wastewater treatment options.

The Need and RCAP’s Assistance

Businesses and residences in the central hamlet are located on small lots that rely on individual septic systems. Inadequate space for system expansion has prevented businesses from locating there or expanding. It is also limiting the development of residential units including affordable housing. The Town asked RCAP to help them explore community wastewater collection and treatment options and to determine funding availability for a proposed municipal wastewater project.

Results

RCAP helped obtain planning grants to complete a Preliminary Engineering Report and an Environmental Report. These studies are fundamental to understanding alternatives and associated costs. They are also required by funders such as USDA, the State Revolving Loan fund, and others to determine funding eligibility. RCAP assisted with a Request for Proposals for engineering services, and with a design for a community survey to assess interest and help define project boundaries. To help the town expand their knowledge, RCAP facilitated a tour of four small community systems, three of which incorporate elements of decentralized wastewater systems.
Santa Rita Community Wastewater Assistance

This community was referred by USEPA-CEPD for assistance. For the last 20 years they have been struggling with their sewer system. Due to the remote location of the community when constructed, the developer included their own sewer collection system and a treatment plant. From the beginning, the collection system had shown problems, and the POTW also had issues ranging from infrastructure to operation and maintenance. Main issues include need to improve organization, evaluate the best way to connect to the water utility.

The Need and RCAP’s Assistance

The community needed assistance in the process of organizing, evaluating possible options to solve their wastewater problem and managing the steps to be taken. Sewer collection system and POTW have constant spills which become potential health problems, environmental issues and/or diminish quality of life in the community.

This is an ongoing project. RCAP provided technical assistance and helped the community with project planning and basic administrative requirements. RCAP began collecting data and information. Based on available data and considering that the community does not have the resources nor the knowledge to operate and maintain their own sewer system, connection to the water utility seems to be the best solution. Staff are working on an action plan with the community to pursue this option.

Results

Santa Rita Community is on its way to a solution, including a preliminary action plan. Improvements in the organization have allowed a more efficient and focused process. Even though the problem has not been resolved, the community has better enthusiasm. Upcoming tasks will focus on connection planning, determining who and how to pay for the project, and then implementation.
This workshop was part of an outreach effort, educating communities, territory government agencies, and professionals on septic systems. The workshop covered impact in communities that might result in health, water quality and/or environmental problems.

The Need and RCAP’s Assistance

It is well documented that septic systems are one of the main contamination sources in the US Virgin Islands and Puerto Rico. The impact on the environment for this type of non-point sources clearly manifested during hurricanes Irma and María. The main reasons include poor design and construction, poor operation and maintenance practices, and using them as a universal disposal method. Under this scenario, education and outreach play a significant role.

RCAP provided a series of workshops in the USVI including the following topics: “Septic Systems Impact on the Environment”; “Regulations, Construction Codes and Permits”; “Septic Systems Operation & Maintenance”; and the “Caribbean Septic System Working Group and Other Resources”.

Results

Over twenty-five (25) participants from St. Croix; representing communities, territory government agencies, operators and other wastewater treatment professionals, learned and reviewed basic theories to recommended installation, construction, operation and maintenance, all under USVI permits and regulations. The feedback from participants described satisfaction with the workshop, a better understanding of the septic system issues, and necessary information to start working toward solutions.
ST. Clairsville Non-profit Water System

St. Clairsville is a small town located in Bedford County, PA. The town has their own water treatment plant and distribution system. St. Clairsville Water Company is a non-profit system. The water system started operations in 1949. St. Clairsville, like many rural communities across the nation face aging infrastructure, operational, technical, managerial and financial issues.

The Need and RCAP's Assistance

St Clairsville Water Authority's site visit and inspection from Pennsylvania Department of Environmental Protection (PA DEP) triggered their request for help. Issues included: GIS mapping, training for the operators, main line exposure, no asset inventory, no Emergency Response (ERP) and no Operational and Maintenance(O&M) plans. Additionally, they have an aging infrastructure, insufficient managerial capacity and lack of funds. This situation raised a red flag for DEP and the community took positive action to remedy the situation.

The community started to work with RCAP. RCAP immediately went to work mediating between the state’s Department of Environmental Quality (DEQ), Department of Health and Human Services (DHHS), and town leadership to find a solution. Technical assistance providers performed GPS mapping and an asset inventory for the treatment plant and distribution system. In addition, RCAP staff and plant staff completed an ERP and are actively working with a new O&M.

The main line exposure and compliance with new and future rules are issues that must still be resolved by the community. Due to a lack of funds for engineering services, RCAP made a referral to Community Engineering Corps as a part of project development work.

Results

The community has new and accurate maps and a list of their inventory with future cost of replacement. In addition, the Emergency Response Plan is intended to ensure that the system is prepared to manage a crisis. The O&M is intended to have information about the source, treatment, storage, distribution, routine operation and maintenance procedures for the system.

RCAP’s goal is to help the community through the process of the main line repair, increase the financial and managerial capacity, and develop a more sustainable system.
Stillwater Water District #1, NJ

Volunteer board members for a system designed for vacationers, not year-round residents, were able to build their capacity to properly manage their system through RCAP assistance and USDA grant funds.

The Need and RCAP’s Assistance

The Paulinskill Lake Community’s Stillwater Water District #1, a small water system designed for seasonal use, is facing new challenges as seasonal dwellings have become year-round residences. The District is managed by a small group of consumer-based volunteers, local homeowners, who were trying their best but knew little about the water business.

After a consultation and a gap analysis with RCAP’s Technical, Managerial, and Financial (TMF) Assessment tool, the system identified how the water board could build capacity utilizing RCAP’s assistance. Through the RCAP USDA Technitrain project, this board received regular support and hands on training to developing a better understanding of their water system and Sustainable Management Techniques.

Results

Because of RCAP’s assistance, this small rural water company will have gained the necessary capacity to standardize their processes through board-specific training, creating an operations and maintenance manual, and beginning an effective asset management program. With new structures in place, volunteers are now on the path to future sustainability and have helped ensure the success of future volunteer-run boards.

Stillwater Township, NJ

Population: 4,066
Service area: 493 households
Median Household Income: $49,223

Michael Cohrs
RCAP Solutions, the Northeast RCAP

Services

Board Training
System Operations Strategies
Increased Managerial Capacity

www.rcap.org
(202) 408-1273
1701 K St. NW, Suite 700
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Recovering to reduce waste stream in PR

Toa Baja Composting Plant in Puerto Rico is closed due to the damages caused by hurricanes Irma and Maria in 2017. The condition of the landfills and limited resources for final disposition of Solid Waste on the island makes this plant an important asset for Toa Baja and the SW industry for the organics diversion.

The Need and RCAP’s Assistance

The facility was severely damaged by the storm’s gusts and winds. It was used for the collection of organic materials after the catastrophes but couldn’t process the material due to its condition. The PR Natural Resources and Environmental Department was in transition to a new structure, assuming the Solid Waste Authority and was short in resources to move ahead the recovery of the facility and asked for help from USDA.

RCAP was contacted by the PR USDA State Director to assist with the assessments of eight solid waste facilities affected by the hurricanes. The RCAP TAP designed and conducted a series of assessments to DRNA Solid Waste Facilities to assist them in the recovery process. Thanks to RCAP, the facilities were evaluated and presented to USDA for grant assistance including the Toa Baja Composting Plant.

Results

Thanks to RCAP’s Assistance – The facilities evaluated are prompt to apply for USDA assistance and initiate the process of recovery. The PR Solid Waste Management will be able to promote the diversion of organic materials to the composting facilities and contribute to reducing the solid waste stream in PR.
Developing the learning base on ISWMS

The United States Virgin Islands has confronted Solid Waste Issues for several years; RCAP Initiated a series of trainings about Integrated Solid Waste Management System (ISWMS) to create the base learning for a coordinated effort to become compliant.

The Need and RCAP’s Assistance

The USVI territory has two landfills for the three islands. The territory extension and economical restraints have created challenges in the final disposal and the system was designed many decades ago. The Bovoni landfill in St. Thomas exceeds its capacity and the Anguilla Landfill in St. Croix has been facing regular problems with fires. RCAP conducted a training about Integrated Solid Waste Management Systems for the Department of Planning and Natural Resources, the Virgin Island Waste Management Authority, the stakeholders, and general public to disseminate the information about what is required to create an integrated system according to their special needs.

The inclusion of the Characterization process according to the guides and its impact on planning will provide them the opportunity to design according to their special needs.

Results

Thanks to RCAP’s Assistance – The USVI community has more knowledge about the process they will be part of during the design of a reliable system to manage and dispose of their waste materials. The Staff involved in the process will consider all the elements associated with the development of an Integrated Solid Waste Management System.
In Conjunction with the Rhode Island Department of Health, RCAP assisted a family with young children that had E Coli present in their private well water.

The Need and RCAP’s Assistance

A family with young children in Tiverton Rhode Island contacted the Rhode Island Department of Health (RI DOH) after their well water tested positive for E Coli bacterial.

RI DOH referred RCAP to the family to perform an EPA funded well assessment to identify the cause of the E Coli issue and give technical assistance on how to abate the cause.

Results

RCAP’s Sanitarian performed a well assessment and made several recommendations on possible causes of the E Coli contamination and corrective actions to abate those causes.

The homeowner made those corrections yet there was still some contamination. To fully abate the bacterial issue, and working in conjunction with RI DOH, further technical assistance advice was given to the homeowner and the E Coli issue was finally abated. Today the family’s well is much better protected against further contamination of their family’s drinking water supply.
Trainings Promote Water Safety & Compliance

Addressing the need for improving knowledge and assistance in drinking water regulations and compliance in the U.S. Virgin Islands.

The Need and RCAP’s Assistance

The U.S. Virgin Islands are comprised of the islands of Saint Thomas, Saint John and Saint Croix, and are territories of the USA. They have an estimated population of just over 100,000 people in the three islands. As part of the USA they are required to comply with the same regulations as the mainland, and the Safe Drinking Water Act (SDWA) is one of those regulations.

As part of RCAP efforts on the USVI, two Drinking Water trainings were offered in the months of June and October 2019 in Saint Thomas and Saint Croix respectively. The total attendance of these trainings was 24 people ranging from regulatory personal, utility, individual systems, and private sector.

The trainings were 5-hours, divided in five sections:

1. History of Water Treatment
2. Main Drinking Water Regulations
3. Lead and Copper Rule
4. Chlorine Chemistry in Water
5. Comparison of Disinfection Alternatives

Attendees welcomed the information on the regulations and how it applies to them, as well as clarification of the details and requirements to comply with the SDWA.

In addition to the drinking water trainings, RCAP offered the Workshop-In-A box training in Saint Thomas. This training enables community systems to assess their situation and establish a path to improve and achieve compliance with regulations or solve a problem in the community. The workshop was attended by ten people from different backgrounds. The training was well received and provided the networking for future collaborations on the Islands.

Results

Established RCAP as a training provider and as a resource for private, non-for-profit and government institutions. In 2020 we are underway with coordination’s for collaboration with a community group in St. John for trainings and as coordination for our drinking water trainings.
RCAP staff delivered training and technical assistance to this system that has faced multiple challenges including frequent Board and staff turnover as well as financial and technical issues since the system was constructed.

The Need and RCAP’s Assistance

Wattsburg is a small borough in Erie County, Pennsylvania that is an existing USDA Borrower for the construction of its water system. Using USDA Techtrain funds, RCAP assisted this system with Borrower compliance and ongoing loan requirements. RCAP assisted the Borough staff with the preparation of the USDA/RUS Annual and Quarterly Financial Reports as well as all End of Year reports including a summary of aged accounts and existing balances in all accounts related to the water system. Required insurances for the system are updated annually and are reported to USDA as well. RCAP staff also reviews Vulnerability Assessments and Emergency Response Plans and helps to update and certify as needed every three years. Most recently, RCAP focused on ongoing board training regarding review of rates and budgeting.

Results

Through RCAP’s assistance, this small rural utility manages their debt and costs in a financially sustainable manner. The Board also better understands the assets they manage, and staff and board turnover has been greatly reduced.
Haines Woodward Municipal Authority

Haines Woodward Municipal Authority is a small public water system with new members serving on the board. The Authority was in violation of the primacy agency’s regulations for failure to submit operational plans.

The Need and RCAP’s Assistance
In addition to the need for an additional water supply source, the Authority also restructured their Authority board. The new members needed assistance determining their obligations to the primacy agency and the Safe Drinking Water Act.

The Authority reached out to RCAP for assistance. It was determined the Authority needed to formulate an uninterrupted service plan and a comprehensive monitoring plan immediately to comply with the State regulations. The Authority also needed a way to save money on their contracted certified operator services as they were paying their engineer to fill this void. Most of the assistance provided by RCAP involved properly identifying and organizing the Authority’s obligations to the community as a public water system therefore providing a more sustainable system.

Results
With the assistance of RCAP, Haines Woodward Municipal Authority was able to comply with the submission of the uninterrupted service plan and comprehensive monitoring plan under the State’s regulations. The Authority now has a better long-term solution and are saving money on the services of a certified operator. The Authority also has a clearer vision to create a more sustainable system.

Woodward, PA
Population: 140
Median Household Income: $43,214

Derik Dressler
RCAP Solutions, the Northeast RCAP

Services
Drinking Water
Regulatory Compliance
Facilities Development

Funding Source
EPA1

Congressional District
12th (Keller)

“"This is new to most of us, so all your help is much appreciated, thank you for your assistance in this.”

- Russell Haerer,
Authority President

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