



CASE STUDY: DRINKING WATER STATE REVOLVING FUND (DWSRF)

Creedmoor - Maha Water Supply Corporation

BACKGROUND

A small public water system located south of Austin, Texas, Creedmoor-Maha Water Supply Corporation (CMWSC) serves a population of 7,500, with 2,500 connections consisting of residential, small business, industrial and agricultural customers. Like many other rural water utilities, CMWSC has had to confront issues associated with its aging system.

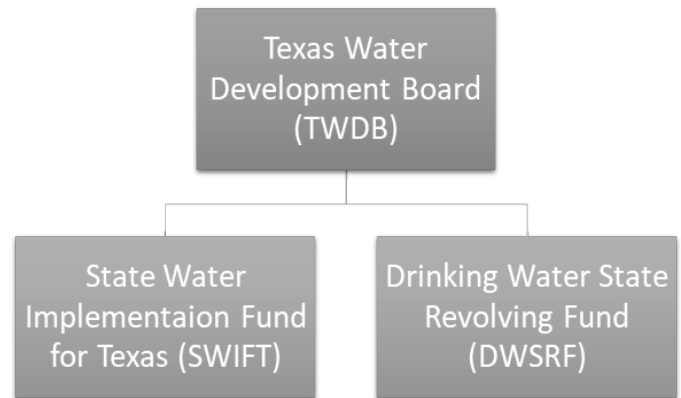
The majority of CMWSC's 170 miles of water lines date from the 1960's and are reaching the end of their service life. "It was like a whack-a-mole effect," said CMWSC Board President Bennie Bock of CMWSC's pipe maintenance program, "when one broke, another needed repair." In addition to increased maintenance costs, CMWSC faced expenses associated with water loss - at times over 25% of the water purchased and pumped for the system was lost to leakage.

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The system's ability to provide enough water to meet increased demand due to undersized pipes also came into question as population and usage grew. CMWSC's location, only 20 minutes outside Austin and situated in the center of the south I-35, SH 45 and 130 corridor, places it in one of the fastest-growing areas in the country. Inevitable development in CMWSC's service area would result in additional strain being placed on the system, further exasperating the issues associated with the aging system.

Recognizing that investment was needed to continue affordable, reliable, and safe service to customers, in 2016 CMWSC's board began to investigate options for financing repair, replacement and upgrades to their system.

EVALUATING OPTIONS



Several options for financing were discussed by the CMWSC board. One option, a loan through a private financial institution, such as a bank, was dismissed because of board concerns that the high interest rates would result in too heavy of a burden for CMWSC's customer base. Forgivable government grants were not an option as the demographics of the CMWSC service area did not allow it to qualify for a grant.

After much discussion, CMWSC board members decided to explore financial assistance from the State. Like many states, Texas offers financial assistance to systems such as CMWSC in order to upgrade older systems at favorable rates. As of November 30, 2018, TWDB has a funded total of approximately \$27.6 billion water projects ranging from San Antonio's brackish desalination facility to a Water Remediation Technology (WRT) system for the City of Eden.

Two programs were evaluated, the State Water Implementation Fund for Texas (SWIFT) and the Drinking Water State Revolving Fund (DWSRF). Both programs are administered through the Texas Water Development Board (TWDB) and provide borrowers, including municipalities, counties, water supply corporations and water districts, with favorable financing terms that cover the planning, design, acquisition and construction costs of eligible projects included in the state water plan.

BUILDING THE TEAM

Although interested in financial assistance from TWDB, board members were uncertain if their projects would qualify; whether SWIFT or DWSRF would be a better fit for CMWSC, and what would be needed for the loan application process. Furthermore, while CMWSC staff were experienced at managing and maintaining the water system, expert assistance was needed to assist with engineering, regulatory and state agency loan process.

While at a water conference, Mr. Bock reached out to Carlos Rubinstein of RSAH2O to seek advice and guidance on CMWSC's predicament. Carlos, a former Chairman of TWDB and Commissioner of the TCEQ, was certain that funding could be obtained through TWDB. This discussion led to CMWSC retaining Carlos and his partner Ricky Anderson, who is familiar with the loan application process.



Soon afterwards, GDS Associates was brought on to provide engineering and ratemaking advise. GDS's involvement would be crucial for collaborating with RSAH2O to identify system needs and developing an engineering plan, complete the loan application, and respond to inquiries from the TWDB.

As communication with CMWSC's customers to convey the need for the improvements and justify any

rate increases associated with the loan was needed, Water Savvy Solutions was added to the team to build an outreach and education campaign. The campaign for CMWSC included developing messaging, one-pagers, mailers, emails, text alerts, and an online FAQs.

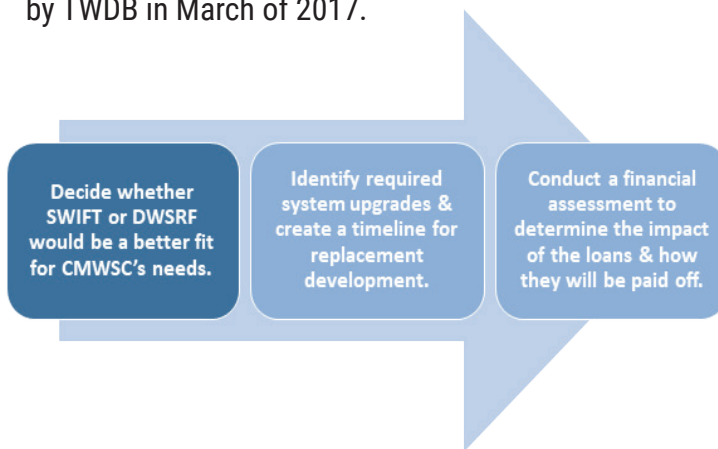
PROCESS

A number of steps were needed in order to successfully apply for the TWDB loan. First, a decision had to be made about whether SWIFT or DWSRF would be a better fit for CMWSC's needs. The comparison of the two options was based on which portions of CMWSC's current project plan were eligible for funding from the loan, and the available interest rates. The DWSRF program provides funding for financial assistance for planning, acquisition, design, and construction of water infrastructure. This program allowed CMWSC to cover the costs associated with obtaining the loan with the financing.

Another factor that made the DWSRF loan attractive to CMWSC was the fact the application period was year-round, as opposed to semi-annually under SWIFT. The project team then consulted with TWDB to confirm that a DWSRF application would be appropriate for CMWSC's needs.

Entities that have projects needing acquisition, planning and design needs; but for which funds have not yet been set aside or available, should keep in mind that under the TWDB SWIFT loan program principal and interest can be deferred up to eight years or until end of construction (for planning and design phase costs), whichever is sooner. This was done to incentivize project development and assist entities with limited funds.

After determining what program to use the required system upgrades needed to be identified and a timeline for replacement developed to allow for total cost estimating. Required improvements for CMWSC included the replacement of leak-prone, undersize water piping with new, correctly sized piping and the addition of a new booster station. CMWSC proposed to amend the Region K and State Water Plans to add its project plan as a water supply project. The proposal was unanimously approved by Region K and accepted by TWDB in March of 2017.



Next, a financial assessment was required to determine the impact of the loans and how they will be paid off. GDS conducted a rate study that had two phases. The first phase determined what rates should be to recover current costs; and the second forecasted customer growth and the rate increases that would be needed in the future to cover the debt servicing costs and inflationary increases in operational costs. This gave the CMWSC board assurance that the loans could be serviced in the future.

CMWSC and the project team then submitted a Project Information Form (PIF) to TWDB that explained the proposed improvements and the benefits that they would bring to the system. After review, TWDB invited CMWSC to apply for the loan.

In order to apply for the loan, the project team worked with CMWSC to provide financial information, statistical information, and details of the proposed projects to determine the level of funding that that would be proposed for TWDB approval.

In October 2018, the Board approved a resolution to CMWSC's request for a low interest loan through the DWSRF and recommended a \$9.3M loan based on the scope submitted.

MOVING FORWARD

As of December 2018, CMWSC is in the process of closing on the loan. In the meantime, CMWSC has begun to inform its customers and hire the necessary talent needed for the successful execution of the project plan.

CMWSC put a bid out for engineering companies to help execute the three phases in the project plan. RSAH₂O continues to provide advise on effective execution of the loan and to ensure all requirements are sufficiently met as the project progresses.



LESSONS LEARNED

Aging infrastructure is a reality that utilities across the United States are having to face. Utilities are forced to replace water lines and other distribution systems. This can easily cause financial distress for smaller utilities and those with rural customer bases that require greater investment per customer. In many cases, these replacements are the largest capital project embarked upon by the utility since the time the systems were incorporated. Although the cost can be daunting, these replacements are essential for the provision of service and reduction of expenses associated with piecemeal replacement of lines. "It is necessary to keep up with the times. For the most part we can get by for a while, but changing government regulations will catch up with you." commented CMWSC board member Carl Urban.

Financial assistance is available through many state development boards and revolving funds, which helps defray some of the costs associated with the improvements.

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This valuable resource for small utilities is underutilized and sometimes perceived as unattainable. Utility managers and governing boards need to be aware of, and assisted in pursuing the funding mechanisms that have been created to help the system and their communities in the long run.

An active board willing to take the steps needed to identify issues faced by their systems and actively seek financing is essential in this process, along with the recognition that investment in the system is essential to provide a stable base for future operations.

According to Bobby Buckland, a CMWSC board member in the case of CMWSC, "Board members were willing to accept change and adapted accordingly; this is because the right people were on the Board working together. Furthermore, having a Board that is involved helps to ensure that there is accountability throughout the process."

Finally, CMWSC learned that having the right team to do the job matters. Preparing an application for a TWDB loan requires specialized engineering and regulatory knowledge that does not typically exist in small utilities. CMWSC board members, although they had experience in agriculture, business and government, did not know the exact steps that needed to be taken for the application. Hiring the right consultants allowed CMWSC to successfully obtain financing for its projects.

Over the past two years CMWSC has made great strides, from consolidating financial services, hiring the right personnel at the utility, and identifying a solution to the issues facing the utility as a result of its aging infrastructure.

**"We are more in faith than disbelief that something can get done."
– Bennie Bock, Board President of
CMWSC**

PROJECT PARTNERS

