

## 6.0 Financing

### 6.1 Introduction

Any large municipal water treatment project will likely need multiple funding sources in order to finance the project and minimize rate impacts to the greatest extent possible. This section identifies the likely funding sources for the Town's second water treatment plant. With grant funding scarce, other sources such as low-interest loans through State and Federal programs as well as rate and fee financing are all potential sources of funding.

### 6.2 Financing Sources

Financing arrangements for a project of this magnitude will require some level of long-term debt financing. Debt financing is an appropriate mechanism for a number of reasons. First, it spreads the burden of the cost out over a longer period of time, lessening the immediate rate impacts. Secondly, by spreading the costs over time, as new customers come onto the system over the next twenty years or more, they will share in the cost of this new WTP. Thus, the financial burden of project costs is shared over a larger base and with more of the customers who will ultimately benefit from the new WTP.

In the worst case scenario, this project would be funded through a municipal revenue bond, at a higher interest rate than other potential low interest debt financing mechanisms. In the best case scenario, this could be funded through a low-interest loan through the Colorado Water Resources and Power Development Authority (the Authority) Drinking Water State Revolving Fund (DWSRF) at a lower interest rate. For some projects, the Rural Development (RD) program will provide small grant amounts along with low-interest loans. Because the RD term, or length of the loan, is typically longer than DWSRF or other low-interest loans, the total cost of an RD loan can sometimes be greater over the long-term. However, these loans can be more affordable in the near-term, just as a 30-year home mortgage can be more affordable within an individual's monthly income than a 15-year home mortgage. Potential funding and financing approaches to the Town's proposed second treatment plant are described below.

#### 6.2.1 Colorado Authority - DWSRF Low-Interest Loans

The Authority was created by the State General Assembly to aid other state agencies in managing the funds for various funding programs for water and wastewater capital improvements. The Authority assists governmental entities such as towns, cities and special districts by issuing revenue bonds and loaning the proceeds to the governmental entities with substantial savings in costs of issuance and interest rates. Eligible projects include treatment plants, storage reservoirs, water distribution and transmission systems, water wells and pumping stations. Eligible costs include design, engineering, costs of issuance, financing reserves, interest during construction, site acquisition, planning, environmental documentations, construction and mitigation costs.

There are primarily two loans types; one is a direct loan, if under \$2 million. The other is a leveraged loan, which is any loan in an amount over \$2 million. Given the size of the project, the Town will need to look toward the leveraged loan for most of the project costs. The Town is on the DWSRF 2013 eligibility list for new treatment plant and transmission line replacements. That is the first step in the application process.

This funding source has a number of eligibility criteria for project costs. These include some of the following that could be relevant to the Town's project:

- Project costs that address present Safe Drinking Water Act (SDWA) exceedances
- Project costs that prevent future SDWA exceedances
- Projects to replace aging infrastructure
- Rehabilitate or develop drinking water sources (excluding reservoirs, dams, dam rehabilitation and water rights) to replace contaminated sources
- Installation or upgrading drinking water treatment facilities if the project will improve the quality of drinking water to comply with primary or secondary SDWA standards
- Installing or upgrading storage facilities, including finished water reservoirs, to prevent contaminants from entering the water system
- Installing or replacing transmission and distribution piping to prevent contamination caused by leaks or breaks, or to improve water pressure to safe levels
- Planning

Unfortunately, the DWSRF funds are not available for growth related/expansion project costs. Therefore, other sources of funding will be necessary for the portions of the project determined to be growth related.

Within each of the above prioritized categories, there are a number of criteria used to assign points in the evaluation and prioritization of the eligibility list. These include several aspects that will not be relevant to the Town.

- Projects serving small communities. Small communities are defined as having populations of less than 5,000. The Authority has the Town's population listed as 5,500. While the Town's permanent population is closer to the 5,000 population limit, the temporary residents and skiers greatly exceed this population limit.
- Ability to pay, or the total annual bill per single family equivalent as a percentage of median household income. The Town is not a "Disadvantaged Community", which scores additional points. According to citydata.com, the Town has a median household income very close to the state median household income. Therefore, this criterion will not be in the Town's favor.
- Projects that are under enforcement action or compliance schedule to meet water quality standards. This criterion is not relevant to the Town's project as there is not an enforcement action on the Town.

- Projects that result in a reduction in pollutant discharge to a segment of impaired waterway for relevant pollutant(s) for that waterway.

In addition, the fact that this plant will provide the Town with redundancy, or a back-up system to the older treatment plant, since there are currently no other agency interconnections providing redundancy should be described in the project application to enhance eligibility potential.

One latter step in the application process, after the project eligibility list has been compiled, is the Department of Local Affairs (DOLA) performs a financial analysis of the application to evaluate several financial parameters including, ability to repay the loan, meeting a debt service coverage ratio<sup>1</sup> of 1.1, the impact of future O&M costs related to the new plant, the Town's current and future planned plant investment fees, existing rate structure and local economic trends, population stability, and median household income.

#### 6.2.1.1 Application time frames:

The two main deadlines for applications during the year are December 15<sup>th</sup> for the spring bond issue in and June 15<sup>th</sup> for the fall bond issue. All application deadlines include:

- March 15<sup>th</sup> for consideration at the June Authority's Board meeting
- June 15<sup>th</sup> for consideration at the Authority's August Board meeting; deadline necessary for requests of principal forgiveness. Principal forgiveness is unlikely, as the Town is not a "Disadvantaged Community".
- September 15<sup>th</sup> for consideration at the Authority's December Board meeting for direct loan consideration
- December 15<sup>th</sup> for consideration at the Authority's March Board meeting. This date is key for the Town to be eligible for leveraged loans issued in the spring.

It is recommended to submit applications at least two weeks prior to any of the deadlines listed above to allow for the Authority and DOLA staff to work with the Town if there are any outstanding information needs to process the application.

#### 6.2.1.2 Key's to Successful Requests:

While project funding is first prioritized for smaller entities with less ability to cover the costs of infrastructure improvements, there are other ways the Town can enhance its application to score as many points as possible. These steps include highlighting any of the following aspects in the planned project:

- Aligning the goals of this project(s) with other community goals (economic development, downtown revitalization, improved environmental quality, etc.). This broadens the base of support for the project, which can lead to letters of endorsement for the project from community groups such as Chamber of

---

<sup>1</sup>Debt service coverage ratios are a financial test of the utility revenue from user rates and charges. For a 1.1 ratio the utility must have adequate revenue to cover operating expenses and provide ten percent more than the annual debt service payment.

Commerce, civic group leaders, community councils, etc. Including letters of support for the project from high level community leaders can assist in higher recognition of the importance of the project.

- Any “green” or renewable energy improvements that will be undertaken as part of the project to reduce O&M expenses and improve the environment.

Developing an on-going relationship with the Water Quality Control Division (WQCD) and Department of Local Affairs (DOLA) staff responsible for application processing can also enhance the chances of a successful application process. These staff can provide technical assistance in preparation of the package. Experience in funding capital projects across the country bears out the claim that strong working relationships help in successfully obtaining funding for projects. For purposes of comparison with other potential debt financing approaches, a term of 20-years and 3.5% interest was assumed for any potential DWSRF loan financing.

### 6.2.2 Rural Development Funding (RD)

The Federal Rural Development funding opportunities include small grants and low-interest loans.

The following types of loans and grants are available:

- Direct loans are offered to communities with populations of 10,000 or less, and qualifying under other criteria. Priorities are for smaller communities (population of 5,500 or less) and disadvantaged communities. These loans are made for improvement to deteriorating water systems, or water system improvement, expansion, or modification.
- Technical assistance grants and training to eligible localities with a population of less than 10,000. These grants can assist the grantee in identifying and evaluating solutions to water problems and to improve the operation and maintenance of existing water systems.

The loans typically have a 30-year term, but can go as long as 40-years. Interest rates are adjusted on a quarterly basis, relative to market conditions. For purposes of this evaluation, an interest rate of 3.0% and 40-year term was used.

### 6.2.3 State and Tribal Assistance Grants (STAG Grants)

While the Congressional budget Sequestration has had an impact on all federal spending, and also on STAG grants, the Environmental Protection Agency (EPA) still has funding available through this funding source. For the fiscal year 2014, STAG grants comprise an estimated 40% of the EPA’s budget. While the likelihood of the Town acquiring a STAG grant is small, it is still a possibility. The discussion below describes the process for applying for a STAG grant and tips to making the effort most likely to be successful.

STAG grants are generally available through Congressional Earmarked funds through the State’s Congressional delegation. Funds come through the Department of Interior Appropriations Bill, within the EPA’s budget categorized as “Congressionally Requested

Project” STAG grants. These are grants of up to 55 percent of the project costs with the rest matched by the entity or other non-federal funding source (revolving loans qualify as match). Funds can also be requested retroactively, for projects already constructed, especially if the financing of that project resulted in utility rates that create a financial hardship (see below in the Section on Affordability).

The best way to begin this process is to call the local Congressional representative’s/Senator’s office and talk to their chief of staff about the project, its merits, and why it is important to the community. Expanding the importance of the project to the County and State, as appropriate, can enhance the delegation’s potential interest in the project. This is the most important step, as it determines if the Congressional member will be supportive of the project and take the request forward. Another key initial step to success in this grant funding process is determining which Congressional Committees the Town’s representatives and Senator’s serve on and what their perspective is on Congressional Earmarks.

#### 6.2.3.1 Evaluation Criteria:

There are no specific evaluation criteria for this funding source. Experience with STAG grants indicates that an entity often must request funding at least twice before funding may be received. In general, the first application makes the Congressional delegation aware of the project and issues it is trying to address. Unless the project is addressing a well-known emergency health or safety issue, it is unlikely the project will receive funding on the first attempt. Often, the second or third time the funds are requested, they understand that this is a critical project, and funding may be provided.

It is important to identify the community problems and concerns the project will solve, and any case for financial hardship (see below) that may be applicable. For the new plant, system redundancy, new infrastructure compliant with drinking water standards, replacement of aging transmission infrastructure, and economic development can be of benefit to Summit County, the State, and the Town. HDR has assisted clients in receiving funding where projects were addressing unfunded mandates and where the project provided other community benefits while addressing regulatory requirements.

Any energy efficiency improvements that will improve (reduce) future operating costs by using less energy, or if the project(s) contains renewable energy components or “green solutions” can often improve chances of funding, as well as provision of local construction jobs, etc.

A NEPA review most likely would be required. The need for a NEPA review is determined on a case-by-case basis.

#### 6.2.3.2 Application Time Frames

Typically, funding requests must get to the Congressional delegation by the first week in February of the prior year. For example, to receive funding in fiscal year (FY) 2015, a funding request would need to be presented to the State Congressional Delegation by January 2014.

The request then goes to the Appropriations Committee for the type of request (agricultural, EPA, etc.) in June/July. If it comes out of that Committee process, it moves

forward in the Appropriations package for approval by October of that year for the following year's budget. The Town can apply annually until reaching the 55 percent level of the total project cost.

#### 6.2.3.3 Financing Terms and Criteria

Grant funding can range from \$500,000 to millions of dollars. The maximum funding level is 55 percent of total project cost. Any ultimate appropriation depends upon other pressing needs within the State, political pull, and the presentation and summary project package information.

#### 6.2.3.4 Key's to Successful Requests

- Submit request to Congressional Delegation, more than once if necessary.
- Have a committed elected official or Town official who is passionate about the Town and project and will champion the project and its benefits to the public and the Congressional delegation. A project champion or community leader will also need to travel to Washington DC for meetings to lobby Congress on behalf of the project.
- Emphasize the drinking water quality, public health and safety benefits, system redundancy needs and benefits, economic development and/or other community benefits/goals accomplished by the project.
- Include letters of support for the project from community and/or regional leaders.
- Identify parallels between the Town's project and other projects that have received STAG grants in the past.
- Emphasize any energy efficiency or renewable energy aspects of the project.

### 6.2.4 Water Infrastructure Finance and Innovation (WIFIA) Act of 2013

Another potential funding source under development is contained within legislation before Congress as of the writing of this report. The intention of this potential new program is to compliment, not replace, the existing funding programs (e.g. SRF, etc.) to address the more than \$1 trillion in infrastructure replacement within the U.S. that needs to take place over the next 25 years. A Water Infrastructure Finance and Innovation Authority would be established, much like the existing Colorado Authority, but on a national level. This Authority would provide funding, most likely to State organizations such as the Colorado Authority, for additional funding through low-interest loans for large capital projects and packaging of numerous smaller capital projects. By financing infrastructure improvements with low-interest loans versus revenue bond financing, the savings in interest payments over the years acts essentially like grant funding, where the total cost of infrastructure is reduced for all water customers through low-interest loan financing.

This proposal passed the Senate in May 2013, and is being discussed in the House. They may develop their own bill later this year, which would return to the Senate for final approval, or to Committee to reconcile to two bills. There is a possibility that this funding source may be available for construction funding for the Town's major improvements.

-

### 6.2.5 Municipal Revenue Bond Funding

Another financing mechanism available to the Town is utility revenue bond financing. If the Town is not able to fund all project costs through one of the low-interest loan mechanisms or other sources described above, this financing option is available. This type of financing may be needed for the portions of the plant that are considered to be growth related. However, the Authority may be able to provide collateral to aide in obtaining a lower interest rate and potentially to act as a reserve for the bonds. Debt payments could be spread over a 20-year period, or longer. Typically revenue bond terms are 20-years or the life of the asset, with a typical maximum term of 30-years for most municipal utility assets. The debt payments can be structured to align with existing debt to provide a gradual increase in debt payments as the Town's other debt obligations retire. An assumption of 5% interest is assumed for the Town, as any revenue bond financing would most likely occur in 2015 or beyond. Five percent represents the average 20-year interest rate for typical municipal revenue bonds.

### 6.2.6 Plant Investment Fees (PIF)

Plant investment fees are another source of revenue which can be specifically targeted toward funding growth related projects, or portions of projects that are growth related. These fees represent the capacity in the system that existing customers have paid for, along with the cost of future capacity projects needed, in order to meet the demands of growth. Since the second treatment plant is related in part to growth, while still meeting all system redundancy and drinking water quality requirements, plant investment fees on hand and in the future could be applied toward the cost of this project.

Another use of plant investment fees is to apply a portion of the fees toward the debt financing of growth related infrastructure. For prudent financial planning purposes, up to 50% or less of annual plant investment fee revenues can be applied to annual debt payments. By targeting 50% or less, the utility would still be able to fund annual debt service payments in any year when plant investment fees are less than projected or anticipated. Applying PIFs toward growth related debt can help keep rates lower than if all PIFs are applied directly to project costs because they have a direct reduction on annual debt payments and rates.

The Town's current PIF is \$5,249 per single family equivalent (SFE). This rate is double for taps in unincorporated Summit County. Actual revenue received in 2011 was around \$450,000. The estimated PIF revenue is projected to be approximately \$250,000 in the 2013 budget. PIF fees and revenue are adjusted and escalated 1% per year. In 2015, the PIF revenue is projected to be approximately \$257,000. The PIF should also be updated to include the cost of the second treatment plant. This could increase the annual revenue received, should growth remain stable or increase beyond current levels.

### 6.2.7 Utility Rates

The Town's current residential water utility rate is \$17.48 per month (\$30.95 billed bi-monthly) which includes 6,000 gallons per month (12,000 gallons per bi-monthly billing period) and a \$4.00 per billing cycle charge for water system maintenance. Any usage

beyond the 12,000 gallons (bi-monthly) is charged at \$3.08 per 1,000 gallons. Assuming a usage of 9,000 gallons per month, the monthly bill would be \$26.72.

Non-residential customers are billed a bi-monthly meter charge, based on the size of meter, with a usage allowance for each size meter, and a usage charge of \$3.05 per 1,000 gallons beyond the allowance for each meter size. The \$4.00 bi-monthly Water System Maintenance Fee also applies to non-residential customers.

Customers outside the Town limits pay 50% more in utility rates than in-Town customers, for the risk the Town takes in developing the system and providing water service to those outside Town limits.

A significant increase in rates will be needed to fund the debt payments for either low-interest loans or bond financing of this project, even with the most optimistic of financing approaches of the funding sources described above.

### 6.2.8 Summary of the Financing Options

In order to provide a perspective on the financial implications of funding the second treatment plant, a rough order of magnitude evaluation of the financing options was developed based on the funding sources described above.

This financing estimate assumed a possible implementation year of 2015. It also assumed no grant funding and only long-term debt financing. To determine an annual debt payment for each of the loan financing alternatives, a range of project cost estimates for the plant at \$25 million and \$29 million in 2013 dollars was used. This cost was escalated at 3% per year to 2015. This resulted in a cost range of \$26.5 million to \$30.7 million to debt finance. The range of annual debt payments were developed, given the potential loan or bond terms described above, and noted below in Table 6-1.

Table 6-1: Comparison of Potential Debt Financing Opportunities

Financing Source and Terms	Estimated Annual Debt Payment on \$26.5 Million	Estimated Annual Debt Payment on \$30.7 Million	Percent of Existing Rate Revenue
<b>Utility Revenue Bond: Interest - 5.0%; 20-year term</b>			
Full Debt Financing	\$2,128,234	\$2,468,751	89% - 104%
With 50% PIFs to debt	\$1,878,234	\$2,218,751	79% - 93%
<b>DWSRF Loan: Interest - 3.5%; 20-year term</b>			
Full Debt Financing	\$1,866,152	\$2,164,736	78% - 90%
With 50% PIFs to debt	\$1,616,152	\$1,914,736	68% - 80%
<b>RD Loan: Interest - 3.0%; 40-year term</b>			
Full Debt Financing	\$1,147,426	\$1,331,015	48% - 56%
With 50% PIFs to debt	\$897,426	\$1,081,015	38% - 45%

The percent increase of projected 2015 rate revenue (\$2.384 million) represents the estimated level of rate adjustment that may be necessary in order to fund the estimated annual debt service payment for long-term financing of the project costs. In short, the worst case scenario, using utility revenue bond financing for the entire project cost, would require the Town to increase rates roughly 89% to 104% of projected 2015 rate revenue levels. If 50% of annual PIF revenue was applied to debt service payments, the rate

adjustments necessary for this worst case scenario would be closer to a range between 79% and 93%, depending on the final project cost. Using the lowest annual debt financing opportunity the Town may be eligible for, the Rural Development loans, the estimated rate adjustments needed would range between 48% and 56% of projected 2015 rate levels for full loan financing, and between 38% and 45% if 50% of projected annual PIF revenue is applied toward annual debt service payments. Overall, the potential rate adjustments necessary to debt finance the preliminary project costs could range between a 38% and a 104% rate adjustment, or an increase of approximately \$10.90 to \$29.86 for a monthly residential bill of \$26.72 (assuming use of 9,000 gallons per month) depending on the financing source, debt financing terms, and the final project costs.

No grant funding was assumed for this order of magnitude estimate of rate adjustments needed. Any grant or other outside funding that the Town applies toward the project costs will reduce the range of rate impacts noted above.

### 6.3 Affordability

Affordability, or financial hardship, is a measure of the cost impact of major capital projects on monthly utility bills. Financial hardship is often considered by agencies providing low-interest loan financing as an additional prioritization criterion in the evaluation process of which projects receive funding. Financial hardship cases are typically defined as a utility customer bill being more than 1.5% to 2% of the median household income for the area. This condition can often qualify an entity for grant funding, along with more favorable low-interest loan financing terms, especially with the Rural Development program.

An assessment of the current median household income from citydata.com: 2009 median household income and the State's 2009 median household income resulted in values of \$53,448 and \$55,430 respectively. For this analysis the 2009 median household income was adjusted by 3% per year to 2015 and then the 1.5% and 2.0% were applied to the estimated 2015 median household income (\$63,820) to determine the monthly bill maximum level. Monthly rates would need to exceed \$80.00 for a 1.5% measure of median household income affordability test, or \$106.00 for a 2% measure of affordability to qualify under the financial hardship criterion. Even with an assumption of revenue bond financing the entire preliminary project cost, a monthly residential bill for a household using 9,000 gallons per month would be under \$60.00/month. Based on this measure, the rate impacts to the Town's customers would not qualify for financial hardship.

A specific financial analysis of funding the project will need to be conducted as part of developing a loan application or for issuing any outside debt, in order to determine what level of rates will be needed to fund the final treatment plant improvement costs.

### 6.4 Conclusion and Recommendations

Assuming the preliminary project costs require some form of debt financing of the full costs, as described above, existing rates will likely need to increase between an estimated 50% and 100%. This is assuming that one or more of the debt financing mechanisms described above is utilized. Any use of PIFs or award of grant funding toward project costs can help to reduce these estimated rate impacts. For example, if 50% of annual PIFs are applied toward debt payments, the rate adjustments could range between an estimated

35% and 90% of the projected 2015 rate revenue, given the various loan and bond financing opportunities potentially available to the Town. As the preliminary project costs are further refined during design, the availability of these financing mechanisms and the available terms and actual rate impacts can be developed in more detail.