



12 Financial Plan Development

12.1 Background of the Financial Plan

As part of the water master plan development, a financial plan was also developed. Five different capital planning/funding scenarios were considered. These are described in more detail in Appendix G. The discussion contained in this Chapter summarizes the financial plan for the preferred capital scenario.

This plan is intended to show future cash flows (both revenue and expenses) and to provide guidance on needed rate increases to fund the capital improvement plan developed. The City provided historical revenue and expense data for Fiscal Years (FY) 2021 and 2022 and prospective revenue and expense data for FY 2023. The expense data provided included a detailed budget for all departments associated with water and wastewater services. For departments that cover both utilities, it was generally assumed that 50% of the expenses are associated with the water utility. The City also provided the number of water customers by customer class, meter sizes for each customer, and the volume billed for each customer class over a full 12-month period. This information, and the developed CIP, was used to build a financial planning model for the water utility. This model forecasts future revenue and expenditures of the utility under varying assumptions including customer growth rates and varying levels and timing of capital improvement spending. The model provides projections for a 20-year period, or until 2042.

To develop a projection of revenues, the current FY23 water utility rates were entered, and the number of customers and volume billed in each customer class were used to calculate the revenue generated for each year of the 20-year period. In addition to rate revenues, the Water Utility also receives revenue from other miscellaneous sources including interest earnings, late charges and water transfer fees. No transfers in from the General Fund or other sources of revenue outside of the rate revenue were included. The financial model allows the water utility rates to be adjusted each year as a percentage increase. The total customer count can also be adjusted each year to reflect population growth and the collection rates can also be adjusted. It should be noted that the customer growth rate was set at 2.0% annually for all customers and the revenue generation was based on an assumed collection rate of 97%.

On the expenditures side, a 3% rate of inflation was assumed on all expenditures, including personnel, maintenance and supply costs. For the sequential CIP costs, a 3% rate of inflation was also assumed for all project costs. In general, some projects were assumed to be partially grant funded through WWDC grants, with the remaining portion of those projects being cash funded. Projects that were not eligible for grant funding are funded with only cash (no future debt issues are assumed in the scenario described below) It is important to understand that HDR is not acting as the City's municipal financial advisor, and all assumptions described above were for scenario comparison purposes and estimated rate impacts only.

12.2 Current Utility Assessment

As summarized above, data contained within the rate model to determine revenues and expenses was derived from data provided by the City. This section will provide a more detailed discussion and summary of that data.

Currently, the City charges the water demand charge (or the fixed portion of the monthly water bill) based on water meter size. This is the current best practice for charging water rates within the industry. For the volume portion of the bill, all customers are considered one customer class and charged the same rate per 1,000 gallons of usage over 4,000 gallons per month. All usage under 4,000 gallons per month is included in the demand charge. Many utilities will have separate customer classes for residential and



non-residential customers as it is sometimes appropriate to have a different volume rate structure for each customer class depending on their use characteristics. Likewise, many utilities will employ more tiers (normally around four) to help better capture the cost of providing water service to high water users.

The water utility currently appears to have a health fund balance with about 6-months of cash on hand. It was assumed the utility entered FY23 with a fund balance of about \$1.2 million. Total estimated expenses for FY23 are \$2,507,671 (\$2,052,029 in Operations and Maintenance Expense, \$301,143 in existing debt service expense, and \$154,500 for cash funded Capital Projects. No transfers to the General Fund are included in the water utility expenses. Total estimated revenue in FY23 is \$2,806,716 for a positive net revenue of \$299,045.

There is currently limited debt associated with the water utility, so the utility will have capacity to issue debt if needed in the future to fund capital programs, although no future debt issues have been included in this scenario. In the past, there has been limited spending on capital projects have mostly been paid for with cash with limited debt issues to fund larger projects. Over the past several years, the utility has been generally neutral with net revenues, meaning increased revenue (i.e. rate increases) will be needed if expenses increase, such as with an increased capital program.

12.3 Proposed Plan (Capital Cost, Distribution and Assignment; Use of Funding Mechanisms, Assumptions, Term/Rate Projections/Fund Summary, Tool Guidance)

As part of the master plan development, \$45.8 million of needed capital projects were identified. When inflated to their year of construction, this total becomes \$66.2 million (Table 1). Of this total, about \$44.8 million is modeled as being cash funded with the remaining portion being grant funded.

Table 12-1 Proposed Funding Plan for Capital Projects

Project Name	Source of Funding	Estimated Project Cost by Year																				Five-Year TDP
		2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	
Aspen Condition Assessment	Cash	\$ 154,500																			\$ 154,500	
PRV Station Meeting	Cash		\$ 90,777																		\$ 90,777	
Water Structure and Infiltration Gallery Alternatives Analysis	Other		\$ 17,500																		\$ 17,500	
Water Structure and Infiltration Gallery Alternatives Analysis	Cash		\$ 10,072																		\$ 10,072	
High Pressure Zone Tank Rehabilitation	Other			\$ 218,552																	\$ 218,552	
High Pressure Zone Tank Rehabilitation	Cash			\$ 437,105																	\$ 437,105	
Lincoln Street Transmission Line	Other				\$ 1,842,413																\$ 1,842,413	
Lincoln Street Transmission Line	Cash				\$ 907,456																\$ 907,456	
Melvin Road Pipeline	Cash					\$ 791,784															\$ 791,784	
WTP Improvements Phase 1	Cash						\$ 1,671,673														\$ 1,671,673	
Infiltration Gallery Rehabilitation (Budgeting)	Other							\$ 1,648,007													\$ 1,648,007	
Infiltration Gallery Rehabilitation (Budgeting)	Cash							\$ 811,717													\$ 811,717	
10th Street Transmission Line	Other								\$ 1,074,208												\$ 1,074,208	
10th Street Transmission Line	Cash								\$ 779,408												\$ 779,408	
N. 5th Street Pipeline	Cash								\$ 1,627,563												\$ 1,627,563	
Waterfront Replacement	Cash									\$ 279,227											\$ 279,227	
Madison Creek Transmission Line	Other									\$ 1,642,263											\$ 1,642,263	
Madison Creek Transmission Line	Cash									\$ 782,587											\$ 782,587	
Goodwin Connector Pipeline	Cash										\$ 366,385										\$ 366,385	
Aspen Station	Cash									\$ 717,626											\$ 717,626	
Sumner Vista Drive Transmission Line	Other										\$ 2,570,440										\$ 2,570,440	
Sumner Vista Drive Transmission Line	Cash										\$ 1,296,038										\$ 1,296,038	
Crabtree/Johnson St. Fairview Mountain Pipeline	Other											\$ 143,945									\$ 143,945	
Crabtree/Johnson St. Fairview Mountain Pipeline	Cash											\$ 1,056,957									\$ 1,056,957	
Water Structure Rehabilitation (Budgeting)	Other											\$ 1,910,119									\$ 1,910,119	
Water Structure Rehabilitation (Budgeting)	Cash											\$ 841,007									\$ 841,007	
10th Street Transmission Line	Other											\$ 3,990,073									\$ 3,990,073	
10th Street Transmission Line	Cash											\$ 1,965,873									\$ 1,965,873	
S. 1st Street Pipeline	Cash											\$ 1,522,737									\$ 1,522,737	
Cascade Street Pipelines	Cash											\$ 4,692,854									\$ 4,692,854	
Major Transmission Line	Other											\$ 1,163,132									\$ 1,163,132	
Major Transmission Line	Cash											\$ 1,567,961									\$ 1,567,961	
Aspen Pipelines	Cash											\$ 2,815,067									\$ 2,815,067	
WTP Improvements Phase 1	Cash											\$ 3,500,000				\$ 417,324					\$ 3,917,324	
Distribution System Renewal 1	Cash											\$ 3,500,000									\$ 3,500,000	
Distribution System Renewal 2	Cash											\$ 3,500,000									\$ 3,500,000	
Distribution System Renewal 3	Cash											\$ 3,500,000						\$ 4,000,000			\$ 7,500,000	
Distribution System Renewal 4	Cash											\$ 3,500,000									\$ 3,500,000	
Distribution System Renewal 5	Cash											\$ 3,500,000									\$ 3,500,000	
		\$ 154,500	\$ 196,267	\$ 1,311,372	\$ 2,749,871	\$ 791,784	\$ 1,671,673	\$ 2,499,747	\$ 4,777,263	\$ 5,307,776	\$ 4,302,863	\$ 3,202,802	\$ 6,930,844	\$ 4,721,093	\$ 4,692,854	\$ 2,815,067	\$ 3,917,324	\$ 3,500,000	\$ 4,000,000	\$ 4,500,000	\$ 4,500,000	\$ 47,392,863

In response to this, cash funded projects are expected to increase over time from \$154,500 in 2023 to \$5.0 million per year by 2042. With this increase in cash funded capital projects and inflation on other costs associated with providing water services, costs for the utility are expected to increase from \$2.5 million in 2023 to \$8.6 million in 2042, or a 243% increase (Table 12-2 and Figure 12-1).

Table 12-2 Income Statement Summary

Item	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042		
BEGINNING FUND BALANCE		\$ 1,200,000	\$ 1,496,045	\$ 1,911,377	\$ 2,171,016	\$ 2,126,182	\$ 2,366,312	\$ 1,968,604	\$ 2,899,549	\$ 1,873,647	\$ 2,185,208	\$ 2,948,272	\$ 4,440,001	\$ 3,150,191	\$ 4,506,983	\$ 2,968,767	\$ 3,951,314	\$ 3,468,243	\$ 4,033,653	\$ 4,344,681	\$ 4,414,391	
REVENUES																						
Operating Revenues	\$ 2,492,205	\$ 2,563,262	\$ 2,826,716	\$ 2,962,251	\$ 3,170,496	\$ 3,408,074	\$ 3,666,633	\$ 3,963,971	\$ 4,264,034	\$ 4,601,934	\$ 4,971,630	\$ 5,374,011	\$ 5,816,583	\$ 6,327,232	\$ 6,911,597	\$ 7,623,468	\$ 8,376,412	\$ 9,231,146	\$ 10,184,151	\$ 11,242,454		
Operating Transfers in																						
Total Revenues	\$ 2,492,205	\$ 2,563,262	\$ 2,826,716	\$ 2,962,251	\$ 3,170,496	\$ 3,408,074	\$ 3,666,633	\$ 3,963,971	\$ 4,264,034	\$ 4,601,934	\$ 4,971,630	\$ 5,374,011	\$ 5,816,583	\$ 6,327,232	\$ 6,911,597	\$ 7,623,468	\$ 8,376,412	\$ 9,231,146	\$ 10,184,151	\$ 11,242,454		
EXPENDITURES																						
O&M Expenses (less capital & transfers)	\$ 1,730,455	\$ 2,364,129	\$ 2,052,029	\$ 2,113,589	\$ 2,176,997	\$ 2,242,307	\$ 2,309,576	\$ 2,378,863	\$ 2,450,229	\$ 2,523,736	\$ 2,598,448	\$ 2,677,432	\$ 2,757,755	\$ 2,840,487	\$ 2,925,722	\$ 3,013,473	\$ 3,103,877	\$ 3,196,964	\$ 3,292,903	\$ 3,391,660	\$ 3,493,441	
Operating Capital																						
Debt Service - Existing Debt	\$ 301,143	\$ 301,143	\$ 301,143	\$ 301,143	\$ 301,143	\$ 301,143	\$ 301,143	\$ 301,143	\$ 301,143	\$ 301,143	\$ 301,143	\$ 301,143	\$ 301,143	\$ 301,143	\$ 301,143	\$ 296,367	\$ 278,921					
Debt Service - Proposed New Debt																						
Total Debt Service	\$ 301,143	\$ 301,143	\$ 301,143	\$ 301,143	\$ 301,143	\$ 301,143	\$ 301,143	\$ 301,143	\$ 301,143	\$ 301,143	\$ 301,143	\$ 301,143	\$ 301,143	\$ 301,143	\$ 301,143	\$ 296,367	\$ 278,921					
Transfers																						
Operating																						
Cash CIP/Other Capital Transfers		\$ 154,300	\$ 125,187	\$ 432,720	\$ 907,456	\$ 791,784	\$ 1,671,673	\$ 811,717	\$ 2,602,967	\$ 1,759,433	\$ 1,632,423	\$ 1,296,957	\$ 4,029,412	\$ 1,967,961	\$ 4,692,854	\$ 2,815,067	\$ 3,917,324	\$ 3,500,000	\$ 4,000,000	\$ 4,500,000	\$ 5,000,000	
Total Transfers	\$ -	\$ 154,300	\$ 125,187	\$ 432,720	\$ 907,456	\$ 791,784	\$ 1,671,673	\$ 811,717	\$ 2,602,967	\$ 1,759,433	\$ 1,632,423	\$ 1,296,957	\$ 4,029,412	\$ 1,967,961	\$ 4,692,854	\$ 2,815,067	\$ 3,917,324	\$ 3,500,000	\$ 4,000,000	\$ 4,500,000	\$ 5,000,000	
Total Expenditures	\$ 2,031,598	\$ 2,665,272	\$ 2,507,871	\$ 2,539,919	\$ 2,910,860	\$ 3,402,907	\$ 3,402,505	\$ 3,951,679	\$ 5,427,836	\$ 4,660,224	\$ 4,610,967	\$ 4,115,833	\$ 7,171,042	\$ 4,794,806	\$ 7,961,714	\$ 6,137,860	\$ 7,114,271	\$ 6,192,903	\$ 7,391,660	\$ 7,993,441	\$ 8,988,244	
NET REVENUE	\$ 460,607	\$ 100,010	\$ 298,045	\$ 413,333	\$ 259,639	\$ 144,934	\$ 267,130	\$ 100,706	\$ 706,946	\$ 900,960	\$ 911,610	\$ 783,014	\$ 1,500,739	\$ 1,208,910	\$ 1,506,792	\$ 1,510,216	\$ 882,547	\$ 883,613	\$ 688,411	\$ 311,028	\$ 66,710	\$ 110,197
ENDING FUND BALANCE		\$ 1,200,000	\$ 1,496,045	\$ 1,911,377	\$ 2,171,016	\$ 2,126,182	\$ 2,366,312	\$ 1,968,604	\$ 2,899,549	\$ 1,873,647	\$ 2,185,208	\$ 2,948,272	\$ 4,440,001	\$ 3,150,191	\$ 4,506,983	\$ 2,968,767	\$ 3,951,314	\$ 3,468,243	\$ 4,033,653	\$ 4,344,681	\$ 4,414,391	\$ 4,500,000

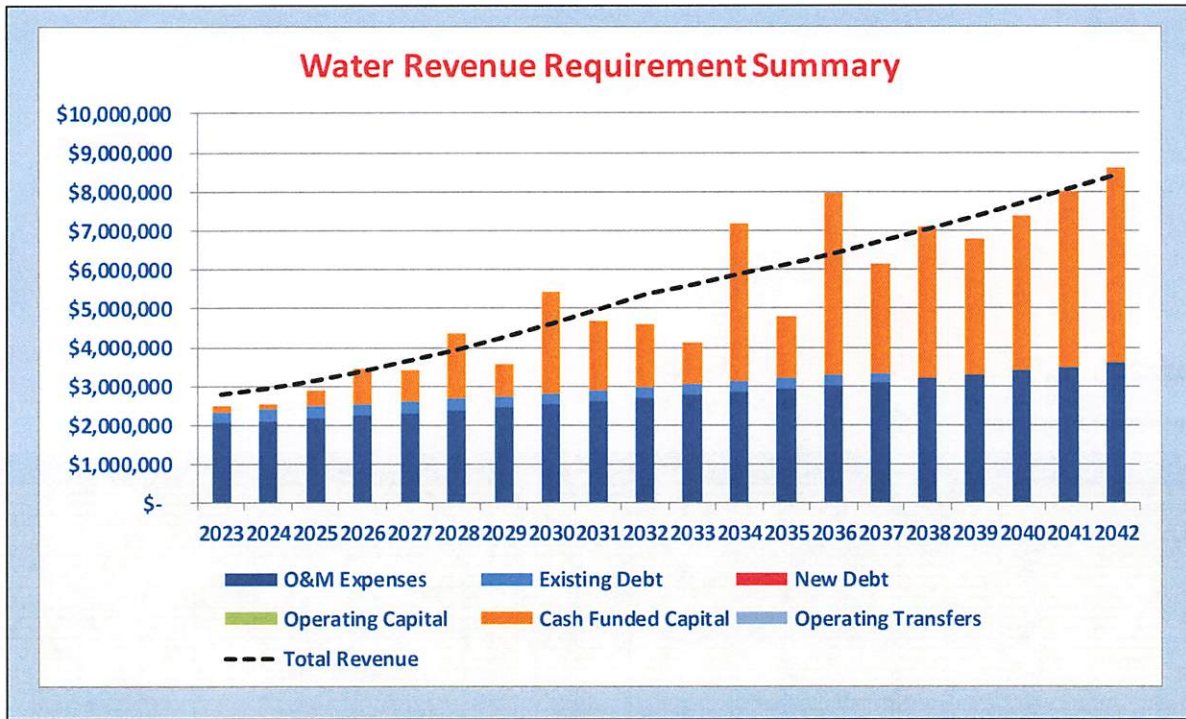


Figure 12-1 Water Revenue Requirement Summary

Due to the limited growth rate of the utility, most of the increased revenue needed will likely come from rate increases. As modeled, a 7% rate increase is assumed starting in 2023 and continuing through 2032. After this time period, a 3% rate increase has been modeled for the remaining years in the planning period (Figure 12-2).

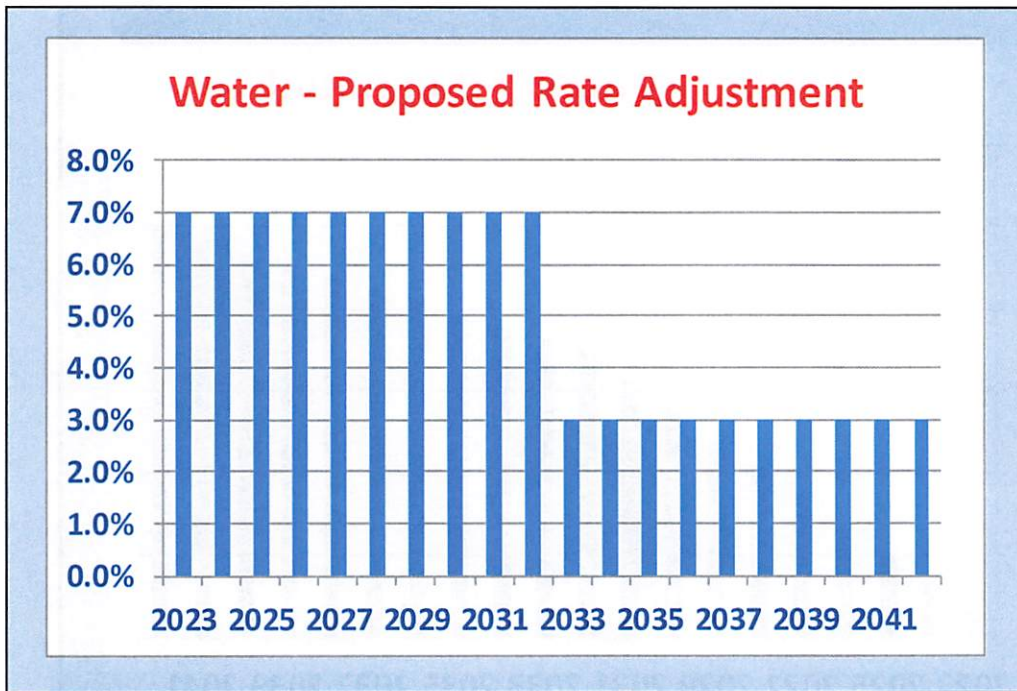


Figure 12-2 Proposed Rate Adjustments for Water Utility

The cumulative rate increase needed over the planning period to fund all projects and other expenses associated with the utility is 100% (Figure 3).

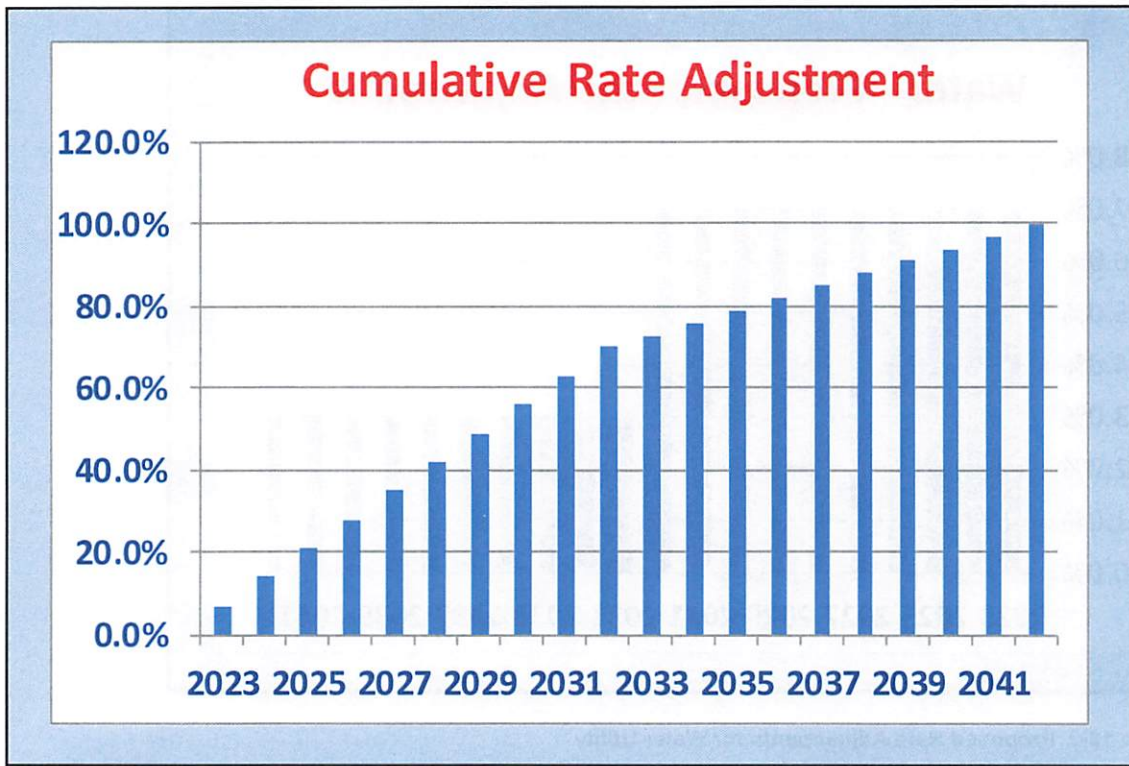


Figure 12-3 Cumulative Water Rate Increase