

## CHAPTER 9

### FINANCIAL ANALYSIS

This chapter contains an analysis that describes how the City can finance the water improvements outlined in the previous chapters. The potential funding sources, financial status of the water utility, the funding required to pay for the scheduled improvements, and the impact of water improvements on water rates are presented.

#### FINANCIAL STATUS OF EXISTING WATER UTILITY

##### CURRENT WATER RATES

Water rates for the City are defined in the Milton Municipal Code Chapter 13.28.190, as updated in 2009 by Resolution No. 09-1772. The water utility rate structure has a monthly ready-to-serve charge, based on water meter size, with an inclined block rate for monthly usage. The schedule monthly ready-to-serve charge schedule is presented in Table 9-1 and the volume charges are shown in Table 9-2. Customers outside the City limits are charged the same as in-city customers.

**TABLE 9-1**

##### Monthly Water Base Rates

<b>Meter Size</b>	<b>Base Rate</b>
3/4 inch or less	\$24.27
1 inch	\$90.02
1-1/4 inch	\$121.89
1-1/2 inch	\$149.86
2 inch	\$179.84
3 inch	\$299.83
4 inch	\$449.67
6 inch	\$899.33
Senior/Disability 30% Discount	\$15.43
Fire Protection Line	\$26.27

**TABLE 9-2**

**Monthly Water Volume Charges**

<b>Volume Charge</b>	<b>Single-Family and Duplex Cost/ccf</b>	<b>Mutli-family, Commercial, Institutions, Government Cost/ccf</b>
0 to 800 cf/mo	\$2.41	\$2.53
800 to 1,000 cf/mo	\$2.61	\$2.73
1,001 to 2,000 cf/mo	\$2.81	\$2.93
2,001 to 3,000 cf/mo	\$2.81	\$3.13
> 3,000 cf/mo	\$2.81	\$3.33

**CURRENT CONNECTION FEES**

Connection fees are set by the City Council as established in Milton Municipal Code Chapter 13.40. These fees include a service installation fee, which includes connecting the meter and meter box to the system. The service installation fee for a 1-inch single residential meter is \$2,090 in-city and \$2,335 outside the City.

New connections also pay System Development Charges to connect to the system. These charges are applied with the idea that growth pays for growth, and are a means of helping finance system improvements needed to sustain growth. Table 9-3 summarizes these charges.

**TABLE 9-3**

**System Development Charges**

<b>Meter Size</b>	<b>In-Town Charge per Building</b>	<b>Out-of-Town Charge per Building</b>
3/4 inch or less	\$4,325	\$4,975
1 inch	\$7,220	\$8,305
1-1/2 inch	\$14,400	\$16,560
2 inch	\$23,050	\$26,510
Greater than 2 inch	Based on usage	Based on usage
Light Industrial (per acre)	\$15,140	\$17,410

**HISTORICAL FINANCIAL OPERATIONS**

Water utility revenues, expenditures, and the resulting effects on water utility cash and investments for the years 2005 to 2008 are summarized in Table 9-4.

Water sales revenues have increased 3 percent from \$976,143 to \$1,005,293, during the three-year period of 2005 to 2007. In 2008 water sales revenue decreased by 2.4 percent. Actual billable consumption rose 3.5 percent, from 787,060 gallons per day in 2005 to 814,541 in 2007, then dropped by 6.6 percent to 760,706 gpd in 2008. The cause of this slight discrepancy is unknown, though is likely attributed to system leakage or accounting errors.

In the years from 2005 to 2008, the system was not able to generate net operating revenues adequate to meet debt service and provide positive net revenues to contribute to capital improvement projects. The City had to draw from previous surplus or transfer funds to pay for expenses these years. As a result, the net balance has decreased by approximately 20 percent since 2005.

**TABLE 9-4**

**Historical Financial Operations**

	2005	2006	2007	2008
<b>Operating Revenues</b>				
Water Sales	\$976,606	\$989,143	\$1,005,293	\$981,122
Other Goods and Services	\$9,924	\$12,579	\$11,904	\$11,702
Connection Charges	\$18,590	\$59,033	\$38,385	\$4,417
Investment Income	\$63,634	\$87,016	\$96,373	\$33,211
Other	\$59,490	\$181,377	\$123,686	\$109,389
<b>Total Operating Revenue</b>	<b>\$1,128,244</b>	<b>\$1,329,148</b>	<b>\$1,275,642</b>	<b>\$1,139,841</b>
Transfer	\$0	\$0	\$1,227,003	\$0
PWTF Loan	\$0	\$0	\$0	\$0
<b>Total Revenue</b>	<b>\$1,128,244</b>	<b>\$1,329,148</b>	<b>\$2,502,644</b>	<b>\$1,139,841</b>
<b>Operating Expenses – Customer Service, Administration, Operations</b>				
Salaries, Benefits and other Employee Expenses	\$437,011	\$516,530	\$648,485	\$712,291
Supplies	\$82,422	\$119,073	\$135,160	\$132,039
Professional Services	\$113,103	\$56,751	\$84,734	\$149,526
Repairs and Maintenance	\$58,680	\$31,705	\$6,349	\$30,464
Miscellaneous	\$33,878	\$46,261	\$60,967	\$64,228
Rentals and Leases	\$14,757	\$15,085	\$15,377	\$18,956
Machinery and Equipment	\$34,846	\$17,438	\$46,261	\$13,011
Insurance and Other Charges	\$54,860	\$47,915	\$42,795	\$49,153
Taxes	\$211,637	\$105,903	\$107,333	\$110,709
Other Services and Expenses	\$425,845	\$143,632	\$317,396	\$75,314
<b>Total Operating Expenses</b>	<b>\$1,467,039</b>	<b>\$1,100,293</b>	<b>\$1,464,859</b>	<b>\$1,355,693</b>
Water Capital Improvements	\$0	\$0	\$917,687	\$294,859
Transfer	\$0	\$1,500,000	\$9,000	\$0
Public Works Trust Fund Loan	\$79,190	\$77,319	\$75,448	\$72,154
<b>Total Expenses</b>	<b>\$1,546,229</b>	<b>\$2,677,612</b>	<b>\$2,466,994</b>	<b>\$1,722,706</b>

**TABLE 9-4 – (continued)**

**Historical Financial Operations**

	2005	2006	2007	2008
<b>Summary</b>				
Beginning Fund Balance	\$2,896,297	\$2,478,312	\$1,129,849	\$1,165,499
Revenue	\$1,128,244	\$1,329,148	\$2,502,644	\$1,139,841
Expenditures – Operations	\$1,467,039	\$1,100,293	\$1,464,859	\$1,355,693
Expenditures – Capital Improvements	\$79,190	\$1,577,319	\$1,002,135	\$367,013
<b>Ending Fund Balance</b>	<b>\$2,478,312</b>	<b>\$1,129,849</b>	<b>\$1,165,499</b>	<b>\$582,634</b>

A water comprehensive plan, including the financing chapter, is produced in accordance with standards established independently by the Washington State Department of Health (DOH). City staff appropriately provided Gray & Osborne, Inc. with historical financial and budget information through 2009, in order for the City’s Water System Plan to meet the requirements for DOH approval.

**PROJECTED GROWTH**

Estimates of the number of future customers and the demand they will place on the water system are required in order to estimate future revenues and expenses. In Chapter 2, it is projected that service area population growth will be 1 percent in 2009, 2 percent in 2010 and 2011, and 3 percent per year thereafter through 2029. Growth in commercial water needs is projected at the same rate as residential water usage.

**PROJECTED EXPENSES, REVENUES, AND CAPITAL**

**FUTURE OPERATING EXPENSES AND REVENUES**

Following several recent rate increases, the City has not scheduled any further increases within the 6-year planning period. All projected future water sales revenues are based on the present rates as shown in Tables 9-1 and 9-2. Projected water sales revenue is based on forecasted growth of 1 percent in 2009, 2 percent in 2010 and 2011, and 3 percent each year after. Growth is assumed to be mostly residential for purposes of estimating sales revenue. Total water sales are projected to increase from \$1,100,000 in 2009, to \$2,147,000 in 2015. Future water operating revenues are summarized in Table 9-5 below.

Future operating cost projections for the years 2010-2015 use the City’s 2010 budget as a baseline then increase by 3 percent per year for most payment items. It is projected that annual operating expenses will rise from \$1,455,830 in 2009 to \$1,764,476 in 2015. Projected operating expenses are shown in the middle part of Table 9-6.

## **FUTURE CAPITAL EXPENDITURES AND REVENUES**

Capital improvement projects planned for the period of 2009-2015 are summarized in Tables 8-1 and 9-8.

Rates must be able to maintain adequate cash flow and investment balances to finance operations, debt service, capital improvements and contingencies. The City plans to fund capital improvements primarily through revenue bonds with periodic rate increases to supplement reserves. With the recommended CIP schedule and funding, the City will be able to slowly increase its reserve funds which have been nearly depleted over the past several years. If the Revenue Bonds are received, all projects scheduled within the 6-year planning period will be completed by 2013. The Revenue Bonds will result in annual payments of approximately \$192,000 for twenty years. The City may also look into low interest rate loans from state and federal funding agencies for additional future projects.

A summary of all revenues and expenses projected through 2015 is included in Table 9-7.

**TABLE 9-5**

**Projected Water Utility Revenues, 2009 – 2015**

	<b>2009 Projected</b>	<b>2010 Proposed</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
<b>Operating and Capital Revenues</b>							
Water Sales <sup>(1)</sup>	\$1,100,000	\$1,745,000	\$1,965,000	\$2,008,000	\$2,053,000	\$2,099,000	\$2,147,000
Other Goods and Services <sup>(2)</sup>	\$18,000	\$21,000	\$21,000	\$21,000	\$21,000	\$21,000	\$21,000
Connection Charges <sup>(2)</sup>	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
Investment Income <sup>(2)</sup>	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000	\$15,000
Other <sup>(2)</sup>	\$108,293	\$94,000	\$94,000	\$94,000	\$94,000	\$94,000	\$94,000
<b>Total Operating Revenue</b>	<b>\$1,261,293</b>	<b>\$1,895,000</b>	<b>\$2,115,000</b>	<b>\$2,158,000</b>	<b>\$2,203,000</b>	<b>\$2,249,000</b>	<b>\$2,297,000</b>
Transfer	\$100,000	\$150,000 <sup>(3)</sup>	\$0	\$0	\$0	\$0	\$0
Loans & Bonds	\$0	\$2,360,000 <sup>(4)</sup>	\$0	\$0	\$0	\$0	\$0
<b>Total Revenue</b>	<b>\$1,361,293</b>	<b>\$4,405,000</b>	<b>\$2,115,000</b>	<b>\$2,158,000</b>	<b>\$2,203,000</b>	<b>\$2,249,000</b>	<b>\$2,297,000</b>

- (1) Water sales revenue based on connection growth projected in Chapter 2, WUE savings in Ch. 5 and existing rates from Table 9-2, with a reduction of 20 percent for a more conservative estimate.
- (2) Projected to remain constant as a conservative estimate per City projections.
- (3) Interfund loan from Electric Utility Fund to begin design on Corridor Wells treatment project and 15<sup>th</sup> Ave Booster Station.
- (4) Revenue Bond to fund 6-year CIP.

**TABLE 9-6**

**Projected Water Utility Expenses, 2009 – 2015**

	<b>2009 Projected</b>	<b>2010 Proposed</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
<b>Operating and Capital Expenses</b>							
Salaries, Benefits and other Employee Expenses <sup>(1)</sup>	\$748,479	\$548,855	\$575,528	\$603,919	\$634,163	\$666,406	\$700,806
Supplies <sup>(2)</sup>	\$172,050	\$173,830	\$179,045	\$184,420	\$189,955	\$195,655	\$201,525
Professional Services <sup>(2)</sup>	\$142,000	\$81,195	\$83,635	\$86,145	\$88,730	\$91,395	\$94,140
Repairs and Maintenance <sup>(2)</sup>	\$36,500	\$47,200	\$48,620	\$50,080	\$51,585	\$53,135	\$54,730
Miscellaneous <sup>(2)</sup>	\$64,248	\$800	\$825	\$850	\$880	\$910	\$940
Rentals and Leases <sup>(2)</sup>	\$22,030	\$20,480	\$21,095	\$21,730	\$22,385	\$23,060	\$23,755
Machinery and Equipment <sup>(2)</sup>	\$17,900	\$17,250	\$17,770	\$18,305	\$18,855	\$19,425	\$20,010
Insurance and Other Charges <sup>(2)</sup>	\$118,802	\$126,000	\$129,780	\$133,675	\$137,690	\$141,825	\$146,080
Taxes <sup>(2)</sup>	\$121,319	\$169,377	\$174,460	\$179,695	\$185,090	\$190,645	\$196,365
Other Services and Expenses <sup>(2)</sup>	\$12,502	\$32,520	\$33,500	\$34,505	\$35,545	\$36,615	\$37,715
Transfer to General Fund <sup>(2)(3)</sup>	\$0	\$248,771	\$256,235	\$263,925	\$271,845	\$280,005	\$288,410
<b>Total Operating Expenses</b>	<b>\$1,455,830</b>	<b>\$1,466,278</b>	<b>\$1,520,493</b>	<b>\$1,577,249</b>	<b>\$1,636,723</b>	<b>\$1,699,076</b>	<b>\$1,764,476</b>
Water Capital Improvements <sup>(4)</sup>	\$51,697	\$885,800	\$541,059	\$546,364	\$365,790	\$376,764	\$125,375
Existing PWTF Loan	\$71,707	\$69,836	\$67,966	\$66,095	\$64,224	\$62,354	\$60,000
Future Loans and Bonds <sup>(5)</sup>	\$0	\$0	\$192,000	\$192,000	\$192,000	\$192,000	\$192,000
<b>Total Expenses</b>	<b>\$1,579,234</b>	<b>\$2,421,914</b>	<b>\$2,321,517</b>	<b>\$2,381,707</b>	<b>\$2,258,738</b>	<b>\$2,330,194</b>	<b>\$2,141,852</b>

- (1) Salaries and other employee expenses increase by 3 percent per year and Benefits increases by 9% per year beginning in 2011.
- (2) Increases by 3 percent per year beginning in 2011.
- (3) Beginning in 2010 administrative expenses associated with the water utility will be transferred to the General Fund.
- (4) Capital Improvements per Table 8-1 and 9-8, including inflation.
- (5) Projected annual debt service for Revenue Bond of \$2,360,000 in 2010 through 2030.

**TABLE 9-7**

**Projected Water Utility Revenues and Expenses Summary, 2009 – 2015**

	<b>2009 Projected</b>	<b>2010 Proposed</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
<b>Summary</b>							
Beginning Fund Balance	\$582,635 <sup>(1)</sup>	\$364,694	\$2,347,780	\$2,141,263	\$1,917,555	\$1,861,817	\$1,780,623
Revenues <sup>(2)</sup>	\$1,361,293	\$4,405,000	\$2,115,000	\$2,158,000	\$2,203,000	\$2,249,000	\$2,297,000
Expenditures – Operations <sup>(3)</sup>	\$1,455,830	\$1,466,278	\$1,520,493	\$1,577,249	\$1,636,723	\$1,699,076	\$1,764,476
Expenditures – CIPs and Loan <sup>(3)</sup>	\$123,404	\$955,636	\$851,025	\$854,458	\$672,015	\$631,118	\$377,375
<b>Ending Fund Balance</b>	<b>\$364,694</b>	<b>\$2,347,780</b>	<b>\$2,091,263</b>	<b>\$1,817,555</b>	<b>\$1,711,817</b>	<b>\$1,630,623</b>	<b>\$1,785,771</b>

- (1) End of year balance from Table 9-4.
- (2) Balance from Table 9-5.
- (3) Balance from Table 9-6.



Maintaining cash balance at an appropriate level to provide for operations, revenue stabilization, emergency repair or replacement of essential equipment, and for capital maintenance is an element of sound utility management. The City has increased rates several times in recent years to help build cash reserves and is committed to continued review of rates to maintain a sustainable utility.

## CAPITAL IMPROVEMENTS AND FINANCING

### CAPITAL IMPROVEMENTS

Table 9-8 summarizes the capital improvements previously detailed in Chapter 8 in 2009 costs and adjusted costs to reflect future construction costs based on an annual inflationary rate of 3 percent applied from 2009 to the estimated date of construction.

**TABLE 9-8**

**Capital Improvements for the Years 2009 Through 2015**

Project Description	Project	Year	2009 Cost <sup>(1)</sup>	Projected Cost <sup>(2)</sup>
Corridor Wells Iron and Manganese Treatment	WS-1	2010	\$ 655,000	\$ 674,650
Lloyd's Development Booster Station	BS-1	2010	Developer	NA
Meridian Ave E	D-1	2010	\$ 80,000	\$ 82,400
Service Meter Replacement Program	M-1	2010	\$ 100,000	\$ 103,000
Site Security	M-2	2010	\$ 25,000	\$ 25,750
<b>2010 Total</b>			<b>\$ 860,000</b>	<b>\$ 885,800</b>
15th Avenue Reservoir Coating	ST-1	2011	\$ 190,000	\$ 201,571
15th Avenue Booster Station	BS-2	2011	\$ 220,000	\$ 233,398
Service Meter Replacement Program	M-1	2011	\$ 100,000	\$ 106,090
<b>2011 Total</b>			<b>\$ 510,000</b>	<b>\$ 541,059</b>
1 MG Reservoir Booster Station	BS-3	2012	\$ 400,000	\$ 437,091
Service Meter Replacement Program	M-1	2012	\$ 100,000	\$ 109,273
<b>2012 Total</b>			<b>\$ 500,000</b>	<b>\$ 546,364</b>
Birch Street Crossing	D-2	2013	\$ 325,000	\$ 365,790
<b>2013 Total</b>			<b>\$ 325,000</b>	<b>\$ 365,790</b>
Birch Street Crossing	D-2	2014	\$ 325,000	\$ 376,764
<b>2014 Total</b>			<b>\$ 325,000</b>	<b>\$ 376,764</b>
Goat Hill Pressure Zone Change	PZ-1	2015	\$ 105,000	\$ 125,375
<b>2015 Total</b>			<b>\$ 105,000</b>	<b>\$ 125,375</b>
<b>TOTAL</b>			<b>\$2,625,000</b>	<b>\$2,841,152</b>

(1) Capital Improvement costs from Table 8-1.

(2) Capital improvement costs from Chapter 8 have been adjusted 3 percent annually for inflation based on the year the project is estimated to begin construction.

## **AVAILABLE CAPITAL PROJECT FUNDING SOURCES**

This section describes several funding sources available to the City without reference to any specific project, including information on the following, which were considered by the City:

Loans:     Public Works Trust Fund Loan  
              Drinking Water State Revolving Fund  
              USDA Rural Development (RD)  
              Community Economic Revitalization Board

Bonds:     Revenue Bonds

### **PUBLIC WORKS TRUST FUND**

The Public Works Trust Fund (PWTF) is a revolving loan fund designed to help local governments finance needed public works projects through low-interest loans and technical assistance. The PWTF, established in 1985 by the legislature, offers loans below market rates, payable over periods ranging up to 20 years. This program is currently suspended due to the current economic climate, but will likely be reinstated when the economy improves.

Interest rates are 0.5 percent, 1.0 percent, or 2.0 percent, with the lower rates providing an incentive for a higher financial share. For the local community to qualify for a 2.0-percent loan, it must provide a minimum of 5 percent of the project's costs. A 10-percent local share qualifies the applicant for a 1.0 percent interest rate and a 15-percent local share qualifies for a 0.5-percent loan. The useful life of the project determines the loan term, with a maximum term of 20 years.

To be eligible, an applicant must be a local government such as a city, town, county, or special purpose utility district, and have a long-term plan for financing its public work needs. If the applicant is a city, town, or county it must adapt the 1/4-percent real estate excise tax dedicated to capital purposes. Eligible public works systems include streets and roads, bridges, storm sewers, sanitary sewers, and domestic water. Loans are presently offered only for purposes of repair, replacement, rehabilitation, reconstruction or improvement of existing service users. A recent change has now made projects intended to meet reasonable growth (as detailed in a 20-year growth management plan) eligible for PWTF funding.

An applicant can apply to the construction program for up to \$10,000,000 per biennium. Applications for the construction program are due in May of each year, with funds available approximately 1 year later. Preconstruction loans are limited to \$1,000,000 per biennium and can be submitted throughout the year. A preconstruction application must be submitted to the Public Works Board on or before the 15<sup>th</sup> of each month. The Board

meets on a monthly basis and makes the award decisions at that time. Preconstruction funds are available as soon as the contracts can be issued.

### **DRINKING WATER STATE REVOLVING FUND**

Loans of up to \$4,000,000 per year are available from this program, which involves the administration of federal funds by two state agencies. Applications are due in May of each year. Terms of the loan vary according to the market interest rate and financial hardship considerations. The most recently offered terms were an interest rate of 1.5 percent over a 20-year repayment period, with no local match requirement. There is also a 1 percent loan origination fee that can be included in the loan request. Lower interest rates and longer repayment periods are available in cases of financial hardship.

### **COMMUNITY ECONOMIC REVITALIZATION BOARD (CERB)**

This low interest loan and grant program is sponsored by the Department of Trade and Economic Development. Funding is available for infrastructure that supports projects, which will result in specific private developments or expansions in manufacturing, and businesses that support the trading of goods and services outside the state's border. Funding is not available to support retail shopping developments or acquisition of real property. The projects must create or retain jobs. There is one job per \$3,000 of CERB financing. The interest rate fluctuates with the state bond rate.

### **REVENUE BONDS**

A common source of funds for construction of major utility improvements is the sale of revenue bonds. The tax-free bonds would be issued by the City, and the bonds are repaid and backed by water service rate revenue. In order to market revenue bonds, the issuer must typically show that its net water utility operating income (gross income less expenses) is equal to or greater than a factor, typically 1.2 – 1.4 times the annual debt service on all par debt issued. This 1.4 factor is commonly referred to as the debt coverage factor and is applicable to revenue bonds sold on the commercial market. The required debt coverage factor may be specified in previous revenue bond ordinances. If not, it will be determined at the time of bond issue.

### **RECOMMENDATION**

The 6-year financial plan for the City's water utility is summarized in Tables 9-5, 9-6, and 9-7. It is projected that current rates will not be adequate to finance needed capital improvements and maintain financial reserves at an adequate level through 2015. It is recommended that the City obtain revenue bonds to finance the projects identified in the 6-year capital improvement schedule. This will allow the City to build up reserve funds for financing operations, debt service, capital improvements and emergency uses. With revenue bonds, the projects will be paid off over a longer period of time, which will be supported by future growth and rate increases to ensure a sustainable system.