11. Financial Program

11.1. Introduction

This analysis provides the City with a comprehensive financial overview of their water utility and an assessment of the utility's ability to fund proposed capital improvements.

The City's water utility and financial operation is atypical in Washington in that the system is both a regional water provider and also provides water on a wholesale basis with rates that are based on actual rather than forecasted costs. Regional customers include two oil refineries operated by Shell and Tesoro that make up approximately 70% of total system water use. Regional customers also include three municipal agencies (Skagit Valley Public Utility District, the Town of La Conner, and the City of Oak Harbor) as well as the Swinomish Tribal Community.

The City provides water under terms set out in contracts that are updated every three years. By contract regional customers are charged for water service using standard volume and fixed rates that are collected monthly to pay for all operating costs as well as a capital rate that is similarly charged monthly. The capital rate for each regional customer is based on maximum annual capacities as specified by contract and the average annual cost of capital improvements over the succeeding three year period.

By contract the City reviews actual operating expenses and water use for each regional customer at the end of each year and recalculates what the fixed and volume rates would have had to have been set at to pay for actual O&M costs and measured water usage. This process is referred to as the reconciliation process and it only applies to operating expenses and is not performed for capital charges and expenses.

11.2. Methodology

The goal of this financial analysis is to assess the ability of the water utility to fund both ongoing operations as well as the capital requirements of the system including existing debt as well as capital improvements. However, as discussed the water utility serves regional customers as well as City customers.

System operating costs are expected to remain stable (except for customary inflation impacts); however, capital expenses are expected to increase as a result of water treatment plant improvements and associated revenue bond issuance. While 2011 regional capital rates have yet to be finalized, regional customers have been provided estimated capital rates.

It is beyond the scope of this analysis to analyze the impact of changes to the regional balance of funding. One or more regional customers could change their usage and thus impact the allocation of costs among the other regional customers. However, the City has minimized the risk associated with such an occurrence by entering into longer term capital obligations with both of the refineries. Additionally, based on a review of historical regional water use and discussion among the regional parties, all indication is that overall water system use will continue to grow and thus increase the efficiency of the system and lower unit costs to serve customers. Therefore this analysis conservatively assumes that regional water use will remain at current levels.

This analysis will assess the ability of the City's retail system to fund their share of regional operating costs, regional capital costs, as well as operating and capital costs only associated with the City's retail system.

Table 11-1 provides a summary of regional customers and the percentage share each is required by contract to pay for regional capital costs. Regional capital costs are currently segregated into one of the following three areas: Regional, Oak Harbor, and Refinery. The Regional area of capital costs includes all intake, treatment, and transmission facilities up to Sharpes Corner and is funded at the percentage shares listed in the second column of Table 11-1. The Oak Harbor capital area includes all facilities from Sharpes Corner to Deception Pass and is 80% funded by Oak Harbor and 20% by the City. The Refinery capital area includes all piping from regional transmission lines to March Point and is 53.1% funded by Shell, 45.4% by Tesoro, and 1.5% by the City.

Table 11-1 Regional Customer Shares for Capital Costs

CUSTOMER	ANNUAL REGIONAL COMMITTED VOLUME (MG)	% SHARE OF REGIONAL AREA CAPITAL COSTS	% SHARE OF REFINERY AREA CAPITAL COSTS	% SHARE OF OAK HARBOR AREA CAPITAL COSTS
Shell	2,860	38.21%	53.10%	
Tesoro	2,235	29.86%	45.40%	
La Conner	162	2.16%		
Oak Harbor	1,000	13.36%		80.00%
Skagit PUD	485	6.48%		
Swinomish Tribal Community	42	0.56%		
City of Anacortes	700	9.35%	1.50%	20.00%
Total	**7,484**	**100.00%**	**100.00%**	**100.00%**

11.3. Operating Expense Forecast

Based on the latest review of system operating costs and regional sharing that occurred during the reconciliation process of 2008, the total annual O&M expense (not including State water excise tax expenses) for the entire water utility (both retail and regional components) was $4.455M of which, after the 2008 reconciliation, the City will collect $3.108M from its regional customers. Therefore the City will have paid 30.2% (1- $3.108/$4.455M) of total system operating expenses. Therefore for planning purposes this analysis assumes that the City will need to continue to fund approximately $1.35M (30.2% * $4.455M) a year as its share of both regional as well as retail O&M expenses.

Table 11-2 lists forecasted O&M expenses for just the City over the next 6 years based on a 2008 total expense of $1.35M and inflationary increases. According to the consumer price index (CPI) for US cities, prices decreased by -0.4% in 2009 and increased by 1.6% in 2010. As shown in Table 11-2, City O&M expenses in 2011 of $1,363,000 reflect adjustments to the 2008 expense for actual CPI in 2009 and 2010. Forecasted O&M expenses in Table 11-2 for 2012 through 2016 assume a conservative annual inflationary increase of 2.5%.

Table 11-2 Forecasted City-Only O&M Expenses (not including water utility taxes)

ACCOUNTS	2011	2012	2013	2014	2015	2016
City Funded O&M Expenses	$1,363,000	$1,397,100	$1,432,000	$1,467,800	$1,504,500	$1,542,100

Note that forecasted O&M expenses in Table 11-2 do not include State water excise taxes since this expense is impacted by future rate increases and is therefore calculated based on projected rate revenues that are addressed later in this analysis.

11.3.1. Debt Service

The water utility has two outstanding debts the 2007 Bonds and the newly issued 2010 Bonds used to finance current WTP improvements. The 2007 Bonds are segregated into three sub debts to facilitate regional cost allocation because one of the components of the 2007 Bonds was used to fund a retail system project to install automatic meter reading (AMR) capability. Therefore the 2007 Bonds are broken into the 2007 Bonds New Money and 2007 Bonds that refunded 2002 Bonds both of which are wholly attributable to the regional system and the 2007 Bonds for the AMR system that is paid solely by the City. Table 11-3 lists annual debt service for each of the outstanding debts and also lists the effective annual debt service for just the City assuming the City is responsible for 100% of the AMR debt component of the 2007 Bonds and 9.35% (the City's capital share as identified in Table 11-1) of all other regional debt service payments.

Table 11-3 Water Utility Debts and City Share of Annual Debt Service

WATER UTILITY DEBT	2011	2012	2013	2014	2015	2016
TOTAL DEBT SERVICE						
2007 Bonds (New Money)	$771,300	$775,900	$774,700	$771,600	$772,400	$771,800
2007 Bonds (Refunding 2002 Bonds)	$201,400	$196,600	$201,800	$199,600	$197,200	$199,500
2007 Bonds (AMR System)	$140,400	$135,200	-	-	-	-
2010 Bonds	$3,143,853	$3,142,404	$3,144,311	$3,143,193	$3,142,476	$3,142,188
CITY SHARE OF TOTAL DEBT SERVICE						
2007 Bonds (New Money)	$72,100	$72,500	$72,400	$72,100	$72,200	$72,200
2007 Bonds (Refunding 2002 Bonds)	$18,800	$18,400	$18,900	$18,700	$18,400	$18,700
2007 Bonds (AMR System)	$140,400	$135,200	-	-	-	-
2010 Bonds	$294,000	$293,800	$294,000	$293,900	$293,800	$293,800
TOTAL	**$525,300**	**$519,900**	**$385,300**	**$384,700**	**$384,400**	**$384,700**

11.3.2. Revenue Forecast

The City performed a rate revenue analysis in 2010 in order to prepare for the issuance of the 2010 revenue bonds and the resulting increase in debt expenses. As a result of this analysis, effective 2011 the City raised base charges on all residential customers, implemented a surcharge on commercial base charges, and increased base rates for customers with meters larger than ¾" so that these rates are consistent with recommended meter flow factors as specified by AWWA.

Table 11-4 shows expected rate revenues from retail customers for 2001 through 2013 assuming the rate increases shown in Table 11-4 for standard residential and commercial customers are implemented in 2012 and 2013. Note that the City elected to restrict rate increases to only base charges due to a perceived imbalance in an average customer's monthly bill resulting from the then fixed and volume charges. After reviewing other agency rates in Western Washington and actual fixed costs it was determined that the current volume rate was appropriately set to encourage conservation while the then base charge of $4.10 per month inadequately addressed actual fixed expenses.

Table 11-4 Rate Revenue Forecast

RETAIL REVENUES	2011	2012	2013
Base Charges	$785,000	$876,100	$966,800
Volume Charges	$1,048,400	$1,048,400	$1,048,400
Increase for Adoption of AWWA Meter Equivalents	$34,200	$38,200	$42,100
Increase for Commercial Base Surcharge	$93,900	$104,700	$115,600
Subtotal Rate Revenues	**$1,961,500**	**$2,067,400**	**$2,172,900**
Other Operating Revenue	$417,000	$417,001	$417,002
Total Operating Revenue	**$2,378,500**	**$2,484,401**	**$2,589,902**
Monthly Rates			
Residential Base Charge for Standard ¾" Water Meter	$7.74	$8.63	$9.52
Residential Volume Charge (per 100 cubic feet)	$1.03	$1.03	$1.03
Commercial Base Charge for ¾" Meter	$11.61	$12.95	$14.28
Commercial Volume Charge (per 100 cubic feet)	$1.55	$1.55	$1.55

11.3.3. Capital Improvements

As previously discussed, the City segregates capital costs between the retail and regional systems and further subdivides regional capital costs into one of three areas (Regional, Oak Harbor, and Refinery). Table 10-3 provides a list of planned capital improvements for 2011-2016 with each project further identified as retail or one of the three regional sub areas. Note that there are no projects planned for 2011-2016 in the Refinery area. Also note that the major WTP improvements are not listed in Table 10-3.

The water treatment plant (WTP) is currently undergoing Phase I of major improvements that are being funded by the 2010 revenue bonds. Phase II of the WTP improvements are expected to occur within the next few years and will also be funded by the issuance of additional revenue bonds. This analysis assumes that an additional $20M in revenue bonds will be issued and also assumes that repayment of this new debt will begin in 2014. Annual debt costs for the assumed additional revenue bond debt is based on a 20 year term and an average annual interest rate cost of 6.0%.

Note that the City expects only minimal O&M increases (electrical usage) after completion of Phase I of the WTP improvements. However, the City is not planning on adding additional staff and more importantly the City only shares in 9.35% of WTP O&M costs. For these reasons this analysis does not include additional WTP operating cost increases other than inflation. It is also likely that customer growth, which is not included in the budget forecast, will provide more revenue than is needed to offset any WTP cost increases.

11.4. Budget Forecast

A complete budget forecast for the City's retail system can now be developed using the revenues, expenses, debts, and capital improvements identified in Section 11.3.

Table 11-5 provides a budget forecast for the City's retail water system. In Table 11-5, operating revenues for 2011 through 2013 are based on total operating revenues as outlined in Table 11-4 and monthly rate revenues for 2014 through 2016 are based on the 2013 revenue increased for a 2.5% annual inflationary increase as specified in the current rate ordinance. The rate ordinance specifies using the US CPI and since operating expenses are forecasted at 2.5% then it is consistent to also use this value as the annual rate adjustment factor. Note that the annual CPI adjustment on rates is not used for 2011 through 2013 since the City is using the explicit rate increases as detailed in Table 11-4.

Operating expenses as listed in Table 11-5 are from Table 11-2 except that Washington State water utility excise taxes have been included. Forecasted water excise taxes are based on the current excise tax rate of 5.029% applied to all retail operating revenues in each year.

Annual debt service expenses from 2011 through 2016 are as previously specified in Table 11-3 but an additional debt payment has been added to account for the expected issuance of an additional $20M in revenue bonds to fund phase II WTP improvements. Note that all the debts shown in Table 11-5 reflect either that the debt is a City retail system debt or the City's share (9.35%) of a regional debt.

The capital improvements listed in Table 11-5 are as listed in Table 10-3 with adjustments made to reflect the City's share (9.35%) of Regional area projects, the City's 20% share of Oak Harbor area projects or 100% responsibility for all retail improvements.

Table 11-5 also includes interest earned on City retail cash reserves of $2,125,000 at the start of 2011. Interest earnings are based on the calculated mid-year reserve balance and interest earnings rates of 0.5% in 2011 and 2012, and 1.0% in 2013, and 1.5% in years 2014 thru 2016.

Note that the projected cash flows include no contributions from growth either from rate revenues or general facility charges and thus the budget forecast is very conservative.

Table 11-5 Budget Forecast

ACCOUNTS	2011	2012	2013	2014	2015	2016
OPERATING REVENUES						
Monthly Rate Revenue	$1,961,500	$2,067,400	$2,172,900	$2,227,200	$2,282,900	$2,340,000
Other Revenue	$417,000	$417,000	$417,000	$417,000	$417,000	$417,000
Total Revenues	**$2,378,500**	**$2,484,400**	**$2,589,900**	**$2,644,200**	**$2,699,900**	**$2,757,000**
OPERATING EXPENDITURES						
City Funded O&M Expenses	$1,363,000	$1,397,100	$1,432,000	$1,467,800	$1,504,500	$1,542,100
City Excise Taxes	$119,600	$124,200	$129,500	$132,200	$135,000	$137,900
Total O&M	**$1,482,600**	**$1,521,300**	**$1,561,500**	**$1,600,000**	**$1,639,500**	**$1,680,000**
DEBT PAYMENTS						
2007 Bonds (New Money)	($72,100)	($72,500)	($72,400)	($72,100)	($72,200)	($72,200)
2007 Bonds (Refunding 2002 Bonds)	($18,800)	($18,400)	($18,900)	($18,700)	($18,400)	($18,700)
2007 Bonds (AMR System)	($140,400)	($135,200)	-	-	-	-
2010 Bonds	($294,000)	($293,800)	($294,000)	($293,900)	($293,800)	($293,800)
2013 Bonds	-	-	-	($163,000)	($163,000)	($163,000)
Total Debt Payments	**($525,300)**	**($519,900)**	**($385,300)**	**($547,700)**	**($547,400)**	**($547,700)**
CAPITAL REVENUES						
Transfer from Operations	$370,600	$443,200	$643,100	$496,500	$513,000	$529,300
Connection Charges	-	-	-	-	-	-
Interest Earnings From Cash	$11,000	$11,700	$23,600	$29,400	$21,100	$20,100
Capital Revenues Total	**$381,600**	**$454,900**	**$666,700**	**$525,900**	**$534,100**	**$549,400**
CAPITAL EXPENSES						
Pipeline Replacements	($200,000)	($210,000)	($221,000)	($232,000)	($244,000)	($256,000)
Relocate 16" Asbestos Waterline	-	-	-	($350,000)	-	-
Water Storage Tank	-	-	-	-	-	-
Water Volume Increase to 2 and 3 M Water Tanks	-	-	($338,000)	($338,000)	($338,000)	-
PRV Rebuilds	($30,000)	-	-	-	-	($30,000)
Sharpes Corner 36" Relocation	-	-	-	($150,000)	($150,000)	-
Reservoir Internal Maintenance	-	($100,000)	($100,000)	($100,000)	-	-
3 MG BSP Rebuild	-	-	($50,000)	-	-	-
Water Comp Plan Update	($900)					($14,000)
Skagit County Coordinated Water Plan	-	-	($9,400)	($9,400)	-	-
Reline 1950's 36" Waterline	-	-	($4,700)	($65,500)	-	-
Intake Traveling Water Screen	-	($17,300)	-	-	-	-
Intake Eductor	-	($2,300)	($4,700)	-	-	-
Intake Painting	-	($3,300)	-	-	-	-
Intake Wash Water Pump Replacement	-	($3,300)	-	-	-	-
Lab Information System	-	-	($1,900)	-	-	-
Pass Lake 10" Water Line	-	-	-	($20,000)	($180,000)	-
Transfer to Operations	-	-	-	-	-	-
Capital Expenses Total	**($230,900)**	**($336,200)**	**($729,700)**	**($1,264,900)**	**($912,000)**	**($300,000)**

11.4.1. Budget Forecast Summary

Table 11-6 presents a summary of the more detailed information provided in Table 11-5.

Table 11-6 Budget Forecast Summary

ACCOUNTS	2011	2012	2013	2014	2015	2016
OPERATIONAL SUMMARY						
(+) Total Operating Revenues	$2,378,500	$2,484,400	$2,589,900	$2,644,200	$2,699,900	$2,757,000
(-) Total Operation & Maintenance	($1,482,600)	($1,521,300)	($1,561,500)	($1,600,000)	($1,639,500)	($1,680,000)
(-) Total Debt	($525,300)	($519,900)	($385,300)	($547,700)	($547,400)	($547,700)
Net Revenue	**$370,600**	**$443,200**	**$643,100**	**$496,500**	**$513,000**	**$529,300**
CAPITAL SUMMARY						
Start of Year Cash	**$2,125,000**	**$2,275,700**	**$2,394,400**	**$2,331,400**	**$1,592,400**	**$1,214,500**
(+) Connection Charges & Interest Income	$11,000	$11,700	$23,600	$29,400	$21,100	$20,100
(+) Transfer from Operations	$370,600	$443,200	$643,100	$496,500	$513,000	$529,300
(+) Total Loan Funds	-	-	-	-	-	-
(+) Total CIAC Funds	-	-	-	-	-	-
(-) Total Capital Expenses	($230,900)	($336,200)	($729,700)	($1,264,900)	($912,000)	($300,000)
(-) Transfer to Operations	-	-	-	-	-	-
Net Capital Revenue	**$150,700**	**$118,700**	**($63,000)**	**($739,000)**	**($377,900)**	**$249,400**
End of Year Cash	**$2,275,700**	**$2,394,400**	**$2,331,400**	**$1,592,400**	**$1,214,500**	**$1,463,900**

11.5. Conclusion

As can be seen in Table 11-6, the City's retail water system is able to support operations over the next 6 years. The planned rate increases discussed in Section 11.3 and passed by ordinance provide sufficient additional revenue to allow the City to meet both the increase debt costs from the 2010 revenue bonds as well as the City's share of an additional $20M in new bonds that are expected to be issued within this time period.

Table 11-6 also verifies that the City can fund all the proposed capital improvements from Table 10-3 while maintaining adequate cash reserves. Even though cash reserves decrease to a minimum of approximately $1.2M in 2015, City reserves will begin to increase as annual capital improvement costs decrease and net revenues from operations are able to be saved.

As a result of the recent rate increases, the forecast confirms that the City's retail rates are appropriate to fund all aspects of running the utility. Furthermore, if a standard single-family residence uses 10 hundred cubic feet (ccf) of water a month then in 2011 the average residence will pay approximately $19 a month for water service ($7.74 + 10ccf*$1.03 plus 6% City utility tax). A monthly rate of $19 is substantially below the average rate for a single-family residence in Washington. In summary, in light of low rates and adequate revenues, the City is operating the water system with extreme cost effectiveness.