

## CHAPTER 9

### FINANCIAL PROGRAM

The purpose of this chapter is to identify the total cost of providing water service to the area served by the Town of Friday Harbor, and to demonstrate that the current rate structure and funding mechanisms are adequate to support the water utility and its improvement schedule for the planning period.

#### Summary of Past Income and Expenses

Summaries of the Town's water system finances are presented in Table 9-1 (see Appendix M for detailed water fund accounting). The figures for 2002 are budgeted amounts; all others are actual.

**Table 9-1. Town of Friday Harbor Water System Finances**

Description	2000 Actual	2001 Budget	2001 Actual	2002 Budget (Amended)
<b>Beginning Balance</b>	\$279,915.49	\$187,500.00	\$187,716.67	\$245,000.00
<b>Revenue</b>				
Cross Connection Inspection	240.00	500.00	240.00	100.00
Usage Charge	500,660.75	494,500.00	497,533.44	446,000.00
Base Charge	441,316.18	436,000.00	438,559.59	484,500.00
Reconnect Fees	690.00	300.00	330.00	1,000.00
Investment Interest	14,714.43	6,800.00	6,863.06	4,500.00
Sale of Timber	-	100.00	-	10.00
Donations	-	-	157.75	-
Service Hookups	45,681.36	35,000.00	36,008.00	25,000.00
Labor & Materials	23,814.57	20,000.00	19,927.58	15,000.00
Grant AWWA	500.00	-	-	-
Settlement	137.21	-	-	-
Miscellaneous Revenue	841.30	100.00	431.93	2,600.00
Main Extension	5,363.28	3,100.00	3,182.00	100.00
From Current Fund	3,600.00	-	-	-
Total Revenue	\$1,037,559.08	\$996,400.00	\$1,002,248.19	\$978,810.00
<b>Expenditures</b>				
Utilities Administration	110,808.55	116,200.00	112,508.59	117,450.00
Administration Planning	17,783.63	31,500.00	29,001.61	27,100.00
System Administrator	18,186.07	21,800.00	16,489.51	17,700.00
Water Conservation Dept.	39,513.96	13,100.00	7,101.13	1,100.00
Finance/Customer Service	28,821.90	33,750.00	31,075.94	30,625.00
Water Meter Reading	19,409.86	17,150.00	14,993.11	19,350.00
Water Treatment	209,799.06	256,850.00	209,983.66	289,450.00
Distribution	148,858.33	176,550.00	144,880.32	158,850.00
Cross-Connection	23,753.54	33,600.00	24,745.78	31,550.00
Other Operating Expenses	22,476.29	27,510.00	21,850.99	27,050.00
Debt-Public Works Trust Fund Loan (1991 Loan for 1 MG Tank)	40,547.93	40,300.00	40,185.89	40,000
Connection Costs	13,066.72	27,000.00	15,997.89	24,000.00
Total Improvements (See Table 9-2 for detail)	202,534.29	58,200.00	33,055.34	28,000.00
Other Uses (Interfund Transactions)	232,989.89	241,700.00	241,472.12	237,650.00
Non expenditures	1,207.88	3,000.00	2,652.13	100.00
Total Expenditures	\$1,129,757.90	\$1,098,210.00	\$945,994.01	\$1,049,975.00
<b>Ending Balance</b>	<b>\$187,716.67</b>	<b>\$85,690.00</b>	<b>\$244,956.00</b>	<b>\$173,835.00</b>

Table 9-2 provides a summary of the capital improvement projects completed in the past 5 years.

**Table 9-2. Improvement Projects Completed**

<b>Improvement Project</b>	<b>Year</b>	<b>Amount (\$)</b>
Water Tank Repair Engineering	2001	10,768
Replace Control Panel AUG 1	2001	10,097
Upgrade Argyle Water Main	2000	84,646
Upgrade Spring Street Water Main	2000	96,269
Install Water Main on Market/Nash Streets	2000	37,535
Upgrade North End Blair Ave Main	1999	33,674
Upgrade Reed St Main	1998	12,382
Elfving Main Extension	1998	955
High School Main Extension	1998	4,822
Complete Blair Ave Line Replacement	1998	206
Trout Lake Dam Improvement Study	1997	21,689
Repairs Water Tank #1	1997	15,713
Filter #3 at Treatment Plant	1997	408,219
Upgrade Fire Hydrants	1997	4,174
Upgrade Water Filters	1997	18,634
Upgrade Marble Street Main	1997	9,646
Install Aley Ave Line	1997	10,271
Upgrade South End Blair Ave Main	1997	28,666
Elfving Main Extension	1997	460

### **BALANCED OPERATING BUDGET**

In 2002, the Town of Friday Harbor contracted Financial Consulting Solutions Group, Inc. to update their Water and Sewer Rate Study, initially performed in 1993, and updated in 1996. For the 2002 update, revenues and expenditures were projected through the year 2008 based on the Town's 2002 budgeted revenues and expenditures, escalated for growth and inflation. These projected budgets, shown in Table 9-3, assumed capital improvements totaling \$7.055 million through 2015 (see Table 8-1). With the expected expenditures over the next six years, it was determined that the Town would have to increase water rates at an annual increase of approximately 8.5 percent through 2008.

The relatively constant rate increases shown in Table 9-3 assumes that funds will be set aside for the transmission line upgrade annually starting in 2003, resulting in a series of smaller annual increases rather than larger increases at the time of the project. Once the transmission line upgrade is completed in 2009, funds are assumed to be set aside toward the Trout Lake Dam project. If no major capital needs are identified, these funds are projected to approach 50 percent of the estimated cost, with the remainder assumed to be bond financed in 2015.

**Table 9-3. Projected Budgets and Water Revenue Requirements**

<u>Cash Operating Expenses</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>
Maintenance Administration	36,850	38,005	39,197	40,426	41,695	43,005	44,356
Administration Planning	28,600	29,459	30,344	31,255	32,194	33,161	34,157
System Administrator	18,500	19,088	19,695	20,322	20,969	21,637	22,327
Water Demand Management	1,100	1,138	1,178	1,220	1,263	1,307	1,353
Finance / Customer Service	32,325	33,303	34,310	35,348	36,418	37,520	38,655
Meter Reading	16,450	16,982	17,531	18,099	18,686	19,292	19,919
Treatment	283,750	292,989	302,541	312,418	322,631	333,192	344,113
Distribution	175,650	181,468	187,485	193,707	200,143	206,799	213,685
Cross Connection	33,350	34,365	35,411	36,489	37,600	38,745	39,926
Other Operating	27,050	27,872	28,719	29,593	30,493	31,422	32,379
Connection Costs	10,050	10,412	10,788	11,178	11,583	12,003	12,438
Improvements	18,000	18,705	19,437	20,200	20,993	21,819	22,678
Taxes	84,600	91,707	100,415	109,959	120,420	131,878	142,670
	<u>766,275</u>	<u>795,491</u>	<u>827,052</u>	<u>860,214</u>	<u>895,087</u>	<u>931,779</u>	<u>968,655</u>
<u>Other Expenses</u>							
Existing Debt Service	177,239	178,467	180,365	174,923	175,452	168,844	163,782
New Debt Service	-	-	-	-	-	-	-
Reserve Funding	-	3,631	3,892	4,020	4,152	4,289	4,431
Capital Rate Funding Required	10,000	57,650	121,900	201,400	283,500	382,100	471,534
less: Non-Rate Revenue	(24,583)	(15,871)	(16,416)	(16,986)	(17,577)	(18,190)	(18,825)
less: Additional Cash Required For Coverage	-	-	-	-	-	-	-
	<u>162,656</u>	<u>223,876</u>	<u>289,741</u>	<u>363,357</u>	<u>445,527</u>	<u>537,043</u>	<u>620,922</u>
Total Rate Revenue Requirement	928,931	1,019,368	1,116,793	1,223,571	1,340,614	1,468,822	1,589,577
Rate Revenue at Current Rates	<u>930,500</u>	<u>939,507</u>	<u>948,638</u>	<u>957,897</u>	<u>967,283</u>	<u>976,800</u>	<u>986,449</u>
Cash Surplus / (Shortfall)	1,569	(79,861)	(168,154)	(265,675)	(373,331)	(492,022)	(603,128)
<b>Annual Rate Increase Required (%)</b>	<b>0.0%</b>	<b>8.5%</b>	<b>8.5%</b>	<b>8.5%</b>	<b>8.5%</b>	<b>8.5%</b>	<b>7.2%</b>
<b>Cumulative Increase (%)</b>	<b>0.0%</b>	<b>8.5%</b>	<b>17.7%</b>	<b>27.7%</b>	<b>38.6%</b>	<b>50.4%</b>	<b>61.1%</b>

**DEMONSTRATION OF REVENUE AND CASH FLOW STABILITY TO FUND CIP  
AND EMERGENCY IMPROVEMENTS**

Funding for municipal water systems is generally derived from the revenue generated by the water utility in the form of monthly user charges and connection charges. This revenue is used for annual operation and maintenance of the system, including minor capital improvements, and provides debt service for bond issues and loans required for major capital improvements. The following sections describe potential funding sources for upgrading and expanding the Town's water system.

**Owner Extension.** Whenever a new development or re-development occurs within the Town's boundaries, the developer must request water service through an owner's extension request. In the event a water line that serves other undeveloped areas is installed, a payback agreement is executed between the Town and the owner of the property.

It is the policy of the Town of Friday Harbor to provide water mains equivalent to 8 inches in diameter. If oversizing of a water main is deemed necessary to meet fire flows, the developer will be

responsible for costs involved in installing a line of more than 8 inches in diameter. These and other responsibilities are explained in greater detail in the Water System Extension Requirements.

**Grant and Loans.** Under certain conditions, state and federal grants are available to assist municipalities. Grants related to specific objectives of the grantee have ranged from public health concerns to creation of new jobs. The availability of grant funds, eligibility requirements, priority with respect to other applicants, political efforts to reduce government spending, and other factors make it impossible to count on grant funds with any certainty. However, low interest loans for public works improvements may still be available through the State Public Works Trust Fund or other sources.

## **RATE STRUCTURE THAT CONSIDERS AFFORDABILITY OF RATES AND WATER CONSERVATION**

The following section discusses the evolution of water rates to the Town's current rate schedule.

### **Water Service Charges**

Across the nation, water rates are increasing as municipalities attempt to replace aging infrastructure and comply with increasing regulatory demands. In an effort to cope with rising production, maintenance and infrastructure costs, the Town of Friday Harbor continues to adjust its water rates. The average annual increase in water rates in Washington has been 5.6 percent (Association of Washington Cities, 1999)

In 1993 the Town of Friday Harbor contracted Financial Consulting Solutions Group, Inc. to complete the *Town of Friday Harbor Utility Rate Study*. The study recommended increases in both the connection charge and the consumption per gallon charge. The Town implemented the recommended increases. In 1996, the Town used the same consulting firm to update the 1993 rate study. This report, adopted in December 1996, recommended an initial 34.5 percent increase for water rates, with annual increases for the following five years. The Town implemented a 31.1 percent one-time increase only. Refer to Exhibit A at the end of the Chapter for the Town's 2002 rate schedule, as approved by Town of Friday Harbor Ordinance No. 1150.

In an effort to encourage water conservation using the water rate structure, in 1997 the Town shifted from a flat rate to a block rate structure for the Single Family Residential (SFR) class. Each block, or tier, charges a certain amount up to a designated number of thousands of gallons used. For example, SFR customers can use up to 3,500 gallons a month, or 117 gallons a day to qualify for the first tier rate of \$3.80 per thousand gallons.

The Town Council added a fourth tier to SFR water rates effective January 1999. A SFR account using 10,500 or more gallons a month, or an average of 350 gallons a day, falls into Block 4 and is charged \$7.58 per thousand gallons. The revenue from this tier helps fund the Town's water conservation program.

All other classes are subject to rate increases during “summer”, defined as June through September. This period typically corresponds to lower reservoir levels, seasonal population increases, and proportionally higher use. This type of rate structure was instituted in 1997. The cost per 1,000 gallons increases from \$3.80 for October through May, to \$4.75 for consumption June through September.

In the adopted 2001 Water Conservation Plan, the Town recommended a program to reward those customers, of all classes, that participate in water efficiency programs offered by the Town Water Conservation Office. In the future, the Town may consider establishing a Conservation Class for each type of water account, with membership determined by a predetermined reduction in use.

Another recommendation from the 2001 Water Conservation Plan is to re-examine the official levels of drought as defined in the Water Shortage Response Plan and attach a drought conservation surcharge to the highest two tiers of residential accounts, to increase as the official drought level increases. For all other classes, it was recommended to institute a surcharge if a specific percentage decrease in use, tied to level of drought, is not achieved.

Currently, the Town is once again updating the Water and Sewer Rate Study in order to ensure adequate revenues to fund the capital improvements discussed in Chapter 8. Preliminary findings from this study are discussed above and shown in Table 9-3.

### Water Connection Charges

The Town’s 2002 water connection charges per Ordinance No. 1182 include both a General Facilities Charge (GFC) and a System Development Charge (SDC) in addition to labor and materials charge. They vary for all classes based on meter size, as shown in Table 9-4. Preliminary findings from the Town’s 2002 update to the Water and Sewer Rate Study propose increases for the Town’s water connection charges in order to fund necessary capital improvement projects.

**Table 9-4. Town of Friday Harbor Water Connection Charges**

<b>Water Meter Size</b>	<b>Current Total Connection Fee</b>	<b>Proposed Future Connection Fee</b>
5/8 to 3/4 inch	\$5,396	\$7,129
1 inch	\$11,962	\$16,294
1.5 inch	\$22,396	\$31,063
2 inch	\$35,018	\$48,885
3 inch	\$67,308	\$95,043
4 inch	\$103,519	\$126,854
4 inch compound	\$105,141	N/A
Fire Hydrant	Time & Materials	N/A