

Financial Management and Planning



NMED Drinking Water Bureau

3 SPA Training Credits

Overview

Sound financial management is essential in order to:

- Ensure the system pays its debts
- Ensure the system has the supplies and equipment it needs to operate
- Ensure system infrastructure is functional and reliable
- Assure the system is adequately staffed
- Plan for future needs
- Stay in legal compliance

Overview

It is the board's responsibility to:

- Ensure adequate revenue is generated in order to operate and maintain the system and to cover future needs.
- Protect the systems assets with a system of internal controls.
- Monitor the financial state of the system.
- Insure the system is in compliance with all applicable laws.

Overview

In order to ensure adequate revenue now and in the future, the board must:

1. Establish financial reserve goals.
2. Complete an annual budget.
3. Do a rate analysis, as needed.
4. Prepare a 5-year financial plan.

Reserves

- Systems need to determine the amount of reserve funds they would like and then how much to contribute each year.
- Reserve accounts should include:
 - Emergency Reserve
 - Capital Improvement Reserve
 - Operating Reserve
 - Debt Reserve (if required by lender)
- Sanitary Projects Act requires a reserve fund for “non-major capital items”.

Reserves

Emergency Reserve

- For unplanned major maintenance or equipment failure.
- Should be able replace the most “vulnerable” non-major assets such as a pump or chlorinator.
- Review past emergencies.
- Involve the operator in these decisions.

Reserves

Capital Improvement Reserve

- This is to plan for replacement or upgrading of major capital assets.
- Should look at least 10 years into the future.
- An asset management plan is strongly recommended to help determine which assets to replace and when.
- Need to decide what percentage of assets to be replaced will be financed.

Reserves

Operating Reserve

- In the event of cash flow variations caused by:
 - Seasonal variations in revenue
 - Accelerated maintenance
 - Unanticipated Increase in costs
- Covers operations and maintenance.
- Should put aside 1 – 2 months of operating expenses.

Budget

- The budget is a tool for forecasting system expenses and revenues for the coming year.
- The goal is to ensure that
$$\text{Revenue} \geq \text{Expenses}$$
- It is essential that a budget be done annually at the beginning of the year.
- The board should review a budget comparison on a monthly basis.
- If there are significant changes to expenses or revenue during the year, the budget should be revised.

Budget

	% Fixed Cost	2007 (actual)	2008 (actual)	2009 (projected)
REVENUE				
Water Sales		\$57,205.89	\$54,000.00	\$74,100.00
Hook up and meter sales		\$233.88		
Membership fees				
Penalties				
Bank Interest				
Other Income:				
*Gross Receipt Taxes & Water Conservation Fee			\$3,500.00	\$3,500.00
Total Operating Revenue		\$57,439.77	\$57,500.00	\$77,600.00
EXPENSES				
LOAN PAYMENTS (Debt Service)	100%	\$20,000.00	\$20,000.00	\$20,000.00
RESERVE FUND CONTRIBUTIONS:				
Operating Reserve	100%			
Emergency Reserve	100%			
Capital Improvement Reserve	100%			\$2,000.00
Debt Reserve	100%			
Total Reserve Funds	100%	\$0.00	\$0.00	\$2,000.00
OPERATING EXPENSES:				
Insurance	100%	\$171.00	\$179.00	\$179.00
Electricity	10%	\$1,400.00	\$1,450.00	\$1,500.00
Repairs and maintenance	75%	\$15,386.20	\$20,000.00	\$20,000.00
Operating Supplies/Materials	50%	\$2,477.14	\$5,000.00	\$5,000.00
Rural Water Membership and other dues	100%	\$310.00	\$145.00	\$145.00
Testing and chemicals	50%	\$318.94	\$400.00	\$400.00
Software	100%	\$5,332.16	\$0.00	\$0.00
Printing and reproduction	100%	\$85.63	\$50.00	\$50.00
Office supplies	90%	\$462.79	\$500.00	\$500.00
Postage	100%	\$1,028.40	\$1,000.00	\$1,000.00
Post office box	100%	\$50.00	\$50.00	\$50.00
Bookkeeper	90%	\$7,865.68	\$7,865.68	\$7,865.68
Meter reader	95%	\$5,784.10	\$5,784.10	\$5,784.10
Operator	75%	\$2,400.00	\$2,400.00	\$2,400.00
Training, subscriptions	100%	\$0.00	\$0.00	\$0.00
Public Regulation Commission	100%	\$30.00	\$30.00	\$10.00
Legal and consulting/advertising	100%	\$478.82	\$500.00	
*Gross Receipt Taxes & Water Conservation Fee		\$3,895.18	\$3,500.00	\$3,500.00
Professional Services	100%	\$0.00	\$270.00	\$270.00
Property tax	100%	\$28.93	\$30.00	\$30.00
Permits	100%	\$1,000.00	\$1,000.00	\$1,000.00
Bank Fees	100%	\$421.50	\$100.00	\$100.00
Audit	100%	\$6,000.00	\$6,000.00	
Total Operating Expenses		\$54,926.47	\$56,253.78	\$49,783.78
TOTAL EXPENSES (including debt and reserve)		\$74,926.47	\$76,253.78	\$71,783.78
REVENUE – EXPENSES		(\$17,486.70)	(\$18,753.78)	\$5,816.22

Budget

- Annual expenses should be estimated based on the past 2 years and anticipated changes.
- If Revenue < Expenses, then there are 2 options:
 - Decrease expenses. Not easy to do.
 - Increase revenue. This generally means a rate increase, but may also include collecting on overdue accounts, increasing fees, calibrating or replacing meters, decreasing leakage,...

Rate Analysis

- If your budget shows a deficit, a rate analysis should be done to determine how to adjust rates so that Revenue \geq Expenses.
- The acceptance of a rate increase by the customers hinges on having 1) a reasonable budget; 2) a fair and well thought out rate structure; and 3) an open process.

Rate Analysis

- The steps in a rate analysis are:
 1. Determine which rate type(s) the system will consider
 - Flat rate (only if no meters)
 - Uniform rate
 - Increasing block rate (encourage conservation)
 2. Estimate water usage based on past usage.
 3. Try different rate structures to find the most appropriate structure to meet the system's financial needs and that is fair to the customers.
- Account for possible lower water use when switching to an increasing block rate.

Rate Analysis

- If the board is reviewing monthly budget comparisons, it may find the need for a rate adjustment at any time of year.
- If a needed rate increase is substantial, consider a phased approach.

5-Year Plans

- A 5-year plan is a budget projection for the five years beyond the current year.
- This will allow you to see if your current budget is likely to be sufficient over the next few years, or if more revenue will be needed.
- The 5-year plan will require estimates of inflation and other known or anticipated cost increases.

Protect System Assets

- The system's assets belong to the water system, not to the board or any employees.
- Theft of equipment or embezzlement are serious crimes that should be turned over to the District Attorney.
- Put a system of internal controls in place to protect financial and physical assets.

Protect System Assets

An internal control system should include:

- Separation of duties
 - Separate authorization, record keeping, reporting, money deposits
- Multiple signatures on checks (ensure bank only accepts checks with proper signatures)
- Reconcile accounts monthly
- Board reviews financial reports at all board meetings
- Inventory equipment annually

Financial Monitoring

- Treasurer, bookkeeper or accountant should prepare financial reports for every board and annual meeting
- Board should review financial reports at every board meeting, including:
 - Balance Sheet
 - Budget Comparison
 - Late and outstanding balances
- Board should also consider the following reports:
 - Revenue and Expense Statement
 - Statement of Cash Flow

Financial Monitoring

Balance Sheet

- Provides detailed information about a system's assets, liabilities and equity
 - Assets are things the system owns that have value (e.g. cash, property, equipment)
 - Liabilities are amounts of money owed to others (e.g. accounts payable, debt, payroll)
 - $\text{Equity} = \text{Assets} - \text{Liabilities}$
= Accumulated earnings as cash or property

Financial Monitoring

Balance Sheet

- Gives a snapshot in time of financial condition
- Do not want negative equity

Financial Monitoring

Budget Comparison

- A comparison between the annual budget (projected revenue and expenses) and actual revenue and expenses for current fiscal year to date
- Helps system assess if they are on track to stay in the black and meet the financial reserve goals

	Current Month June	Year-to-Date Jan - Jun	Annual Budget	YTD % of Budget	Remaining Balance
REVENUE					
Water Sales	\$7,000	\$35,000	\$74,000	53%	\$39,000
Hook up and meter sales	\$0	\$300	\$1,000	70%	\$700
Membership fees	\$0	\$2,000	\$6,000	67%	\$4,000
Penalties	\$0	\$0	\$0	0%	\$0
Bank Interest	\$30	\$180	\$400	55%	\$220
Other Income:	\$0	\$0	\$0	0%	\$0
TOTAL REVENUE	\$7,030.00	\$37,480.00	\$81,400.00	54%	\$43,920
EXPENSES					
LOAN PAYMENTS (Debt Service)	\$1,666.66	\$10,000.00	\$20,000.00	50%	\$10,000
RESERVE FUND CONTRIBUTIONS:					
Operating Reserve				0%	\$0
Emergency Reserve				0%	\$0
Capital Improvement Reserve	\$916.00	\$5,500.00	\$11,000.00	50%	\$5,500
Debt Reserve				0%	\$0
Total Reserve Funds	\$916.00	\$5,500.00	\$11,000.00	50%	\$5,500
OPERATING EXPENSES:					
Insurance	\$0.00	\$200.00	\$179.00	-12%	-\$21
Electricity	\$350.00	\$1,700.00	\$3,500.00	51%	\$1,800
Repairs and maintenance	\$750.00	\$10,000.00	\$17,000.00	41%	\$7,000
Operating Supplies/Materials	\$350.00	\$4,000.00	\$5,000.00	20%	\$1,000
Rural Water Membership and other dues	\$0.00	\$145.00	\$145.00	0%	\$0
Testing and chemicals	\$0.00	\$200.00	\$400.00	50%	\$200
Software	\$0.00	\$0.00	\$0.00	0%	\$0
Printing and reproduction	\$0.00	\$75.00	\$50.00	-50%	-\$25
Office supplies	\$0.00	\$350.00	\$500.00	30%	\$150
Postage	\$80.00	\$500.00	\$1,000.00	50%	\$500
Post office box	\$0.00	\$50.00	\$50.00	0%	\$0
Bookkeeper	\$655.00	\$3,932.00	\$7,865.68	50%	\$3,934
Meter reader	\$482.00	\$2,892.00	\$5,784.10	50%	\$2,892
Operator	\$400.00	\$2,400.00	\$4,800.00	50%	\$2,400
Training, subscriptions	\$0.00	\$0.00	\$0.00	0%	\$0
Public Regulation Commission	\$0.00	\$10.00	\$10.00	0%	\$0
Legal and consulting/advertising	\$0.00	\$0.00	\$0.00	0%	\$0
Professional Services	\$0.00	\$0.00	\$0.00	0%	\$0
Property tax	\$100.00	\$600.00	\$1,200.00	50%	\$600
Permits	\$0.00	\$0.00	\$0.00	0%	\$0
Bank Fees	\$10.00	\$60.00	\$120.00	50%	\$60
Audit	\$0.00	\$0.00	\$0.00	0%	\$0
Total Operating Expenses	\$3,177.00	\$27,114.00	\$47,603.78	43%	\$20,490
TOTAL EXPENSES (including debt and reserve)	\$5,759.66	\$42,614.00	\$78,603.78	46%	\$35,990
REVENUE – EXPENSES	\$1,270.34	(\$5,134.00)	\$2,796.22		\$7,930.22

Financial Monitoring

- At the annual meeting, the board should review the following reports:
 - Budget comparison
 - Proposed budget
 - 5-Year plan
 - Balance sheet
 - Income statement
 - Cash flow statement

For More Info

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- View DWB web site:
www.nmenv.state.nm.us/DWB
- View Drinking Water Watch
<http://eidea.nmenv.state.nm.us/SDWIS/>