



Financial Management for Small Water Utilities

IACC Conference 2015
Wenatchee, WA

S-17 October 21, 2015 9:20-10:15

Financial Tools and Templates

- Financial Management Brochures, Spreadsheets and Templates can be found at: <http://www.RCAC.org>
- RCAP resource library here: http://www.rcap.org/resource_search




HOW to READ and UNDERSTAND BASIC FINANCIAL STATEMENTS

GLOSSARY OF TERMS

- Generally Accepted Accounting Principles (GAAP)**
A body of accounting principles that encourages uniformity in financial reporting.




Cash Basis Accounting = Record revenue when cash is received and expense when bills are paid.

<p>PROS</p> <ul style="list-style-type: none"> Easier on day-to-day basis 	<p>CONS</p> <ul style="list-style-type: none"> Not accurate -don't know who owes and who is owed Not GAAP Can't record non-cash activity (depreciation, accruals) May give readers a false sense of security Income/expense not matched to correct period
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Accrual Basis Accounting = Record revenue when it is earned and expenses when they are incurred.

<p>PROS</p> <ul style="list-style-type: none"> More complete and accurate picture of organization's finances throughout the fiscal year Match income and expense to the correct period (Spread insurance premium) 	<p>CONS</p> <ul style="list-style-type: none"> More complicated process Hard for management & board to think in other than cash terms 
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Comparison reports...

- Provide a useful tool when determining which line items increased or decreased from the previous year.
- Very useful during the budget development process.



GLOSSARY OF TERMS

- **Assets – What you THINK you own**
Resources of measurable financial value that an organization possesses (cash, accounts receivable, land, inventory, equipment, buildings).



GLOSSARY OF TERMS

- **Liabilities – What you Owe**

A claim on the assets of an organization by an outsider representing a financial obligation on the part of the organization.



NET ASSETS

- **NET ASSETS/EQUITY** – The net value of the organization (assets-liabilities) developed from capital contributed, increased or decreased by net profit earned by the organization from the beginning of its existence.

(What you really own!)



THE ACCOUNTING EQUATION

$$\text{ASSETS} = \text{LIABILITIES} + \text{NET ASSETS/EQUITY}$$

(Revenue - Expenses)



What we have

Who owns it

NET WORTH:

$$\text{ASSETS} - \text{LIABILITIES} = \text{NET ASSETS/EQUITY}$$



Standard Financial Statements

- **Statement of Financial Position** - Also known as the Balance Sheet, it lists what the water system **Owns (Assets)** and also what it **Owes (Liabilities)** with the difference expressed as **Net Assets** at a particular point in time, usually the end of the month or year.
- **Statement of Activities** - aka, the Profit and Loss Income Statement, Revenue and Expense Statement, lists the water systems' **Sources** of funds (**Revenue or Income**) and **Uses** of funds, (**Expenses**), with the difference expressed as Net **Income/(Loss)** for a particular time period up to one year.



Statement of Activities

- Summary of **income** and **expenses** *over a period of time* with the difference stated as a change in net assets or profit.



Statement of Activity Terms

- **OPERATING REVENUES** – The sources of funds charged to your customers for providing water service. This may include a base fee for the service, a water fee for usage, connection or shut off fees and late payment penalties.
- **OPERATING EXPENSES** – The uses of funds to operate the water system. These will include administrative expenses for performing tasks such as billing and collecting the funds from customers and operating expenses to actually operate the water system.
- **NON OPERATING INCOME AND EXPENSES** – Sources and uses of funds incidental to providing water to customers. This can include interest on savings and reserve accounts, Buy In fees, back hoe or cell tower rental fees, etc.



What's the difference....?

Your rate structure!!!!

- Your rate structure should assure your **Operating revenues** will cover your **Operating costs** through the service charges billed to your customers.
- Proper classification will assist with monitoring whether your current rate structure IS recovering those operating costs.



Statement of Activities: Profitability/Sustainability

- Does the water system's revenue cover it's expenses?
- Are surpluses sufficient to cover Balance Sheet Obligations?
- Are surpluses sufficient to fund reserves?



Statement of Activities: Costs

- What does the organization spend on operating activities?
- Are expenses adjusted in line with revenue changes?
- Statement of Activities will not reflect expenditures on capital items or debt principal repayments



What Reserves Needed to Be Funded?

- Capital Improvement Reserves
- Operating Reserves
- Emergency Reserves
- Debt Service Reserves



ACME WATER ASSOCIATION			
STATEMENT OF ACTIVITIES			
A CHANGE IN RETAINED EARNINGS (Internal)			
September 30, 20XX and 20XY			
	20XY	20XX	Variance
Operating Revenues:			
Water Rate:	\$105,511	\$102,766	\$2,745
Sales for Resale:	2,912	2,448	464
Total Operating Revenues	108,423	105,214	3,209
Operating Expenses:			
Salaries & expenses:	48,182	45,509	2,673.00
Payroll taxes and insurance:	6,693	6,386	307.00
Materials & Supplies:	8,532	7,818	714.00
Chemicals:	6,017	6,392	(3,375.00)
Repairs & Maintenance:	10,004	7,869	2,135.00
Legal & Accounting:	5,500	4,875	625.00
Engineering:	4,950	4,263	687.00
Depreciation:	7,137	6,876	261.00
Bad Debt Expense:	4,861	3,675	1,186.00
Utilities:	5,253	4,770	483.00
Miscellaneous expense:	2,741	3,418	(677.50)
Total Operating Expenses	109,890	103,791	6,099.00
Income (Loss) from Operations	(1,467)	1,423	(2,890.00)
Nonoperating Income (Expense):			
Interest Income:	7,173	6,912	261.00
RUS Grant/Net Title (Interest/Investment/Contributed/Capital/Revenue Asset):	10,000	0	10,000.00
Gain(Loss) on Sale of Asset:	2,328	(188)	2,516.00
Capital Improvements:	(15,200)	0	(15,200.00)
Debt Service:	(10,120)	(12,685)	2,565.00
Transfers to Balance Sheet:	2,805	0	2,805.00
Total Nonoperating Income (Expense)	(619)	(5,961)	5,342.00
Net Income (Loss)	(2,086)	(4,538)	
Retained Earnings, Beginning of Year:	(4,538)	0	
Retained Earnings, End of Year	(6,624)	(4,538)	

Operating Ratio

- Revenues ÷ Actual Expenses
- Should be at least 1.0
- May need to show planning for 1.3 in order to borrow money (coverage ratio)

Income Statement by Operations

	Sewer	Water	TOTAL
Ordinary Income/Expense			
OPERATING REVENUE			
Total OPERATING REVENUE	129,525	253,862	383,387
MISCELLANEOUS CHARGES			
Late Fees and Penalties	1,120	2,810	3,930
Total MISCELLANEOUS CHARGES	1,120	2,810	3,930
Total Revenue	130,645	256,672	387,317
EXPENSES			
Total ADMINISTRATIVE	12,031	166,496	178,527
Total OPERATING	55,537	82,112	137,649
Total PERSONNEL COSTS	40,769	67,696	108,465
Total RESERVES	0	4,172	4,172
Total Expense	108,337	320,476	428,814
Net Ordinary Income	22,308	-63,806	-41,497
Other Income/Expense			
Total Other Income	38,000	46,371	84,371
Capital Expenditures	0	0	0
Total Other Expense	0	0	0
Net Other Income	38,000	46,371	84,371
Net Income	60,308	-17,435	42,873

Statement of Cash Flows

- Summary of where cash came from and where it went over a specific period of time.
- Major classifications include:
 - Cash Flows from Operating Activities
 - Cash Provided by (Used by) Investing Activities
 - Cash Provided by (Repaid to) Financing Activities

Leading Cause of Problems is Poor Financial Planning

- In private business = bankruptcy
- In water systems = non-viability and possible health/environmental risks.



Budget Preparation for Small Water Systems

Santa Rosa

Budget Development Has Four Parts:

1. Establishing **Reserve** funding levels
2. Estimating full cost of **operating expenses** for the system
3. Estimating **revenue** from sale of water
4. **Balancing** the Budget: do revenues meet expenses?



Budget Projection

- Understand the steps in preparing a budget document
- Understand importance of budget projection analysis



Budget Projection Includes:

- Developing financial policies
- Creation of an expense budget
- Identifying reserves needed
- Understanding the importance and uses of budget worksheets
- Implementing a budget review process



\$000000....What is a "budget"?

It's a best-guess projection of the financial needs of the water system and shows where the money, **hopefully**, is coming from!



1. Establishing reserve funds

- Debt service reserves
 - Funding level by funder
- Capital improvement reserves
- Emergency reserves
 - Sufficient cash to replace the most expensive piece of infrastructure
- Operating (cash flow) reserves
 - 45 days (1/8th of a year)



2. Developing your Expense Budget

- Estimating the FULL cost of operating your system
- Define your Expense Categories



The Annual Expense Budget

- The expense budget is a list of expenses you expect to have, plus your future plans....such as:
 - Salaries
 - Debts
 - Utility bills
 - Administrative costs
 - Emergencies
 - **Future repairs/replacements**



Typical Expense Budget Categories:

- May include up to a zillion line items:
 - Annual Debt Service
 - Purchased Water
 - Salaries or Personnel Costs
 - Operating Supplies
 - System Repairs
 - Professional Services
 - **Reserves**



Budget Categories and Expense line items

- Should be **easy to understand** and be logical.
- **A definition of each expense line item should be readily available and understood!**



Expense Budget Worksheet Should:

- Have several columns:
 - Last Year's Actual Expenses
 - Current Years Expenses
 - Changes in Next Years' Budget
 - Next Five Years' Estimated Expenses
 - 5 years required for SRF application
 - 2-3 years is minimum for small systems
 - **Replacement costs out to 15-20 years!**



3. Estimating System Revenue and Balancing the Budget

- We've looked at the overall budget process, how to calculate the debt service and financial reserves, and how to estimate expenses, now we'll look at Estimating System Revenue and Balancing the Budget



The Revenue Budget

- Where do your financial resources come from?...
 - Most of the **income revenue** will come from "user fees"
 - **Will the money (revenue) you expect to collect match or exceed the amount you expect to spend?**



Estimating System Revenue

- Most systems have two types of income:
 - Operating Revenue
 - Non-Operating Revenue



Operating Revenue

- Operating Revenue is system income from:
 - **User fees**
 - connection fees
 - late payments, penalties, reconnection fees
 - forfeited meter deposits



Non-Operating Revenue

- Non-operating Revenue is income from:
 - interest on checking accounts
 - interest on reserve accounts
 - meter deposits
 - Sometimes - local tax share



When Estimating Revenues:

- We suggest you **ignore non-operating revenues** and only count on **Operating Revenues** to cover expenses of operating your system



Line Item Review

Operating revenue

•Water sales – I am estimating the water sales to be slightly more (1.6%) than the projected year end this year due to some growth. I think people in general will continue to make improvements to increase water conservation.

•Interest - Will increase a little because of increased reserve build up and return on our investments.

•Misc. income – This item reflects surplus property sales, meters and scrap metal, any rebates, photo copies and agency refunds.



4. Balancing the Budget

- Systems that underestimate expenses or overestimate revenues just to make the budget balance consistently wind up in financial trouble. **Don't do it!**



Operating Ratio

- Revenues ÷ **Actual** Expenses
 - Should be at least 1.0
 - May need to show planning for 1.3 in order to borrow money (coverage ratio)



Things to Help Balance the Budget - Without Raising Rates:



- Collect overdue Accounts
- **Get serious about leak detection/I & !!**
- Make sure water meters work (if applicable)
- **Update fees, deposits and service charges**
- Improve customer billing



Things to balance the budget, cont....

- Get tough on cheaters, **"no free services"**
- Put your money to work, make deposits frequently in interest bearing accounts.
- Buy in bulk
- Add new customers
- Sell unneeded assets
- Rent water tower space
- Provide other services



Question

- How many ways are there to compensate for Inflation in a budget?
 - Raise rates every year
 - Pay for inflation out of cash reserves
 - **Factor inflation into the reserve calculator**
 - Reduce expenditures
 - **Possible!**: Loan payoff, CIP finish
 - **DO NOT reduce salaries!!!!!!**



Monthly Financial Report

- Should include:
 - Revenues, expense's, transfers to reserves and operation gain (loss), and past due account summary.
 - Should show the actual current month, actual year-to-date, the annual budget and percent of budget, to date.

