

SMALL SYSTEM GUIDE: UNDERSTANDING UTILITY FINANCIAL STATEMENTS



A Publication of



COMMUNITY RESOURCE GROUP
Rural Community Assistance Program

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INTRODUCTION

SUSTAINABILITY is a word applied to a variety of things today: sustainable organizations, sustainable agriculture, and sustainable communities. If you are responsible for a community water utility, *sustainability* refers to your ability to consistently provide safe, high-quality water to your customers while meeting all of your regulatory responsibilities, over the long-term. **FINANCIAL SUSTAINABILITY** is a large part of meeting this mission. Being financially sustainable means you are selling water and/or wastewater disposal services to your customer at a rate that consistently generates enough revenue to meet all of your expenses (both short and long-term).

The most difficult task you will face in running a water utility is maintaining a financially sustainable utility *and* providing water and/or wastewater disposal services at an affordable cost to your customers.

The Safe Drinking Water Act (SDWA) amendments passed by Congress in 1996 contained special provisions related particularly to small water systems. Small water utilities were given special consideration and resources to make sure that they had the managerial, technical and financial capacity to comply with drinking water standards. State agencies that have primary enforcement responsibilities for implementation of the Act (state “primacy” agencies) were also required to establish and implement state capacity development strategies designed to insure that small water utilities developed and maintained the technical, managerial and financial capacity to meet their responsibilities for providing water over the long-term.

Since passage of the *Safe Drinking Water Act* amendments, there has been a much greater emphasis on financial sustainability of water utilities. Numerous tools and resources have been made available to help utilities achieve greater financial stability, and a greater emphasis has been placed on implementing concepts such as “full-cost pricing” and “asset management” in small utility operations.

FULL-COST PRICING simply means *calculating and setting rates that reflect the true cost of producing and selling water*, including all operating expenses, debt service and reserve funds for equipment replacement and future improvements. **ASSET MANAGEMENT** refers to *a planning process for efficiently preserving and/or the planned replacement of critical infrastructure*. Asset management is similar to capital improvements planning, or long-range planning.

WHAT MAKES A COMPLETE FINANCIAL STATEMENT?

Ultimately, the key for determining the financial sustainability of your utility is found in the financial statements produced by your bookkeeping staff, accountant or independent auditor. This booklet is designed to help you analyze important financial statements produced by your utility to better enable you to manage system finances. And like herding relatives into a family photo, in order to take a complete picture of your utility’s financial health, you need to bring together all the components involved for a complete snapshot.

Your utility’s financial picture and cost of conducting business will be reflected in three financial statements:

- **THE BALANCE SHEET** (sometimes called the Statement of Financial Position) *shows your system’s net worth* - how much your system is worth at a particular point in time.
- **THE INCOME STATEMENT** (or Statement of Activity) *shows the results of operations over a period of time* - how much revenue the system has earned versus the amount of expense it has incurred.
- **THE CASH FLOW STATEMENT** *breaks down all of the financial transactions of the system in terms of how they affect cash flow.*

As you will see in the example statements in this booklet, financial statements are often presented comparatively - where the balances from the current and previous year are shown side by side - which allows for easy comparison between periods.

SECTION 1 THE BALANCE SHEET

The Balance Sheet has three components: **ASSETS**, **LIABILITIES** and **EQUITY**. The heading of the Balance Sheet will tell you the “date” - the point in time for which the Balance Sheet is relevant. On the *Rural Water System Balance Sheet* example on page 7, the date listed in the heading is December 31, 2010. In the example you will see that the numbers for 2010 are compared to the numbers for the year prior - December 31, 2009.

It is called a Balance Sheet because the numbers on the sheet must be “in balance.” That means the Total Assets must equal the Total Liabilities and Equity:

$$\text{Liabilities} + \text{Equity} = \text{TOTAL ASSETS}$$

But what if the liabilities of the utility are more than its assets? In that case the system has what is called **DEFICIT EQUITY**. *Deficit equity occurs when the system has incurred more in net losses over the life of the system than net income.* Deficit Equity will normally be noted by parentheses around the numbers in the Equity section of the Balance Sheet. Particular care should be taken when reviewing a Balance Sheet of a system with Deficit Equity. Questions should be asked to determine how the system got into a deficit position, and a plan should be formed for moving the system back to a stable or positive equity position.

ASSETS

Assets represent *the total economic resources of the system that are expected to provide benefits to the system in the future.* Assets are normally listed in liquidity order, which means they are listed based on how easy they are to convert to cash. So naturally, the first item listed will be *Cash and Cash Equivalents*. The assets section is also broken down into **CURRENT ASSETS**, **LONG-TERM ASSETS** and **PROPERTY, PLANT AND EQUIPMENT**.



CURRENT ASSETS

Current Assets are *items than can be converted to cash within one year of the date of the Balance Sheet.* Current Assets include cash and cash equivalents, accounts receivable, inventories, short-term investments and prepaid assets.

- **CASH AND CASH EQUIVALENTS** include the amount of money currently available in the system's demand accounts. Cash equivalents include any security which has a maturity date of less than 90 days. The Balance Sheet example (page 7) includes a certificate of deposit in the cash and cash equivalents section that will mature on February 28, 2011, less than 90 days from the balance sheet statement date of December 31, 2010.
- **ACCOUNTS RECEIVABLE** is money owed to the system. This includes things like outstanding water bills, connection fees owed to the system, and reconnection fees.
- **PREPAID EXPENSES** are expenses paid in advance; for example, an insurance policy that is purchased where the annual premium is paid “up front.” The value of the insurance premium will be recorded as a prepaid asset until the premium is used. In the Balance Sheet example, prepaids of \$4,982 are listed, which is the result of a property insurance premium paid on December 15, 2010. The insurance policy is effective from January 1, 2011 thru December 31, 2011. Since the system will receive the benefit of this policy during the next fiscal year (2011), the amount paid is considered an asset on the effective date of the example balance sheet, December 31, 2010.
- **SHORT-TERM INVESTMENTS** include investments with maturities greater than 90 days from the Balance

Sheet date but shorter than one year from the balance sheet date. In the balance sheet example on page 7, the short term investments are certificates of deposit with maturity dates of July 8, 2011 and December 26, 2011.

- **INVENTORY** includes the value of products related to the business that are or will become available for use or sale within the next year, such as new meters, pipe, equipment, and replacement parts.



FIXED ASSETS

Fixed Assets (property, plant and equipment) are *the land, buildings, furniture and fixtures that the system owns and uses in day-to-day operations*. On the Balance Sheet example, Fixed Assets are broken out to show the cost of each category. The amount of accumulated depreciation is then subtracted to “net down” to the book value of the assets. Some systems may choose to show only the book value of the assets on their financial statements. Both presentations are acceptable.

What does *depreciation* mean in terms of Fixed Assets? Over time the value of Fixed Assets are “used up” and you must account for the decrease in value of these assets from the normal wear and tear due to age and typical use. This is done by recording depreciation.

There are several methods for calculating depreciation. The easiest is the *straight line* method. Under all methods, the system’s managers must determine the life of the asset, or how long to expect to be able to use the asset. For example, the normal life of a building is 30 years. If a building initially costs \$100,000 and has a life of 30 years, it will depreciate \$3,333 (\$100,000/30 years) a year. The building will “use up” \$3,333 in value each year; so this year it is worth \$3,333 less than last year and next year it will be worth \$3,333 less than this year, and so on. The amount of what is “used up” is tracked and added together in the *accumulated depreciation account*.

The accumulated depreciation is separated from the original cost in order to see what was paid originally for the asset and how much of the asset has been “used up.” The net value of the asset (or book value) provides the utility’s management a current estimate of the value of the plant, property or equipment, or the current resale value. Land value does not depreciate.



LONG-TERM ASSETS

Long-Term Assets include *items that cannot be converted to cash within one year of the date of the Balance Sheet*. Common examples of Long-Term Assets include investments with maturity dates greater than one year. In the Balance Sheet example on page 7, the utility has a certificate of deposit with a maturity date of January 2, 2012 – two days longer than one year.



TOTAL ASSETS

Adding *Current Assets to Fixed Assets and Long-Term Assets* provides the Total Assets. What is owned is listed and totaled:

$$\text{Current Assets} + \text{Fixed Assets} + \text{Long-Term Assets} = \text{TOTAL ASSETS}$$

LIABILITIES

The next step is to determine your system's **LIABILITIES** and **EQUITY (NET ASSETS)**, or what is owed and what the system is worth.

Liabilities are *what the system owes to others*. The Liabilities section is divided into two components - Current Liabilities and Long-Term Liabilities. Current Liabilities include current *maturities of long-term debt, accounts payable, accrued liabilities and other short-term notes to be paid*. Long-Term Liabilities are *loans expected to be paid back over several years*.



CURRENT LIABILITIES

This section can be further broken down into the following:

- **ACCOUNTS PAYABLE** are *what the system owes for the normal operations of the business*. Examples include utility bills, office supplies, and reimbursement to employees for travel expenses.
- **CURRENT MATURITIES OF LONG-TERM DEBT**, or current portion of long-term debt, is *the principal amount the system will be required to repay on long-term loans during the next twelve months*. This does NOT equal the total payment amount. The total repayment amount includes *both* the interest and the principal. The current maturities will only record the *principal amount* that is being repaid. This amount can be obtained by reviewing the payment schedule of each outstanding loan and adding the principal portion of each monthly payment for the next 12 months.
- **ACCRUED LIABILITIES** basically are *the same as accounts payable - they represent amounts the system owes to others; however, the difference between accrued liabilities and accounts payable relates more to whom the amounts are owed*. Accounts payable usually are for items the system has purchased in the normal course of operations to support the ongoing activities of the system. They also are called *trade payables*. Accrued liabilities normally are items that would be owed to employees, such as salaries, unpaid vacation/sick time. They also include payroll taxes withheld from employee's checks but not yet remitted to the taxing agency and security deposits from customers (these are considered liabilities because the expectation is that the system will have to return them to the customer).
- **ACCRUED INTEREST** is *the interest that has been incurred but not paid*. For example, many systems have long-term loans or bonds that only require annual or semi-annual payments. Even though the system has not paid interest during the months between payments, they have incurred the interest and owe it to the lender. The system will be required to pay this incurred interest with the next regular payment. The system should record the interest as it is incurred on their balance sheet as an accrued, "current" liability.



LONG-TERM LIABILITIES

Long-Term Liabilities include *investments and the portion of payments to be made over the next several years that are not included in the Current Liabilities*.

For example, if you took out a capital improvements loan that you were scheduled to pay back over the next five years, the principal amount to be repaid within the next year would be recorded in Current Liabilities as a current maturity. The remaining principal scheduled to be paid back in years two through five would be listed as a Long-Term Liability.

EQUITY

The final section of the Balance Sheet covers **EQUITY** (or **NET ASSETS**).

Depending on the legal structure of your system (for profit vs. governmental unit vs. nonprofit), this section will have various names. Other names include: “net assets,” “fund balance,” or “owner’s equity.”

Equity is *the net value of the system over time* and is what should be left if the utility closed its doors, paid off all of its outstanding bills, collected everything that it was owed, and sold all of its assets for exactly the same price as they were recorded in the financial statements.

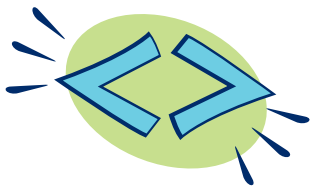
The system increases its equity each year it earns a *net income* - or has more revenue than expenses. In turn, a system decreases its equity each year it *incurs a net loss* - or has more expenses than revenue.

Looking at the Balance Sheet example on page 7, once again, you will see that if the system ceased operations on Dec. 31, 2010, paid the outstanding liabilities of \$1,423,935, collected the accounts receivable of \$60,026, sold the inventory for \$14,248, and sold the fixed assets for \$1,286,489 it would have cash in the bank afterward of \$527,163.

Equity *increases* for each year that a *net income* is recorded and is easiest to see using the **INCOME STATEMENT**, which we will examine in Section 2.

REVIEW THE BALANCE SHEET

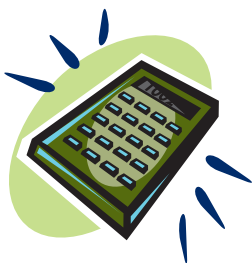
Now that you know the components of the Balance Sheet, it’s time to put this knowledge to good use. There are two primary ways to analyze the information on a Balance Sheet to better understand where the utility stands financially:



FIRST, LOOK FOR CHANGES

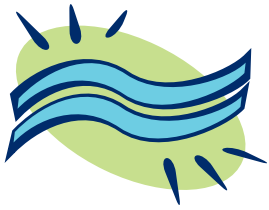
Look for significant changes from one year to the next on a comparative statement. It’s important to know why changes are taking place, so you know if corrections need to be made immediately to keep the system in the black. Questions to ask include:

1. *Why did the value of fixed assets increase or decrease?*
2. *Was new equipment purchased and installed?*
3. *Was equipment sold or otherwise disposed of?*
4. *Why did account receivables rise or drop dramatically?*
5. *Was there a breakdown in bill collections, or an increase in efforts to collect outstanding bills?*
6. *Were new customers added, or were large water consumers lost?*



SECOND, CALCULATE IMPORTANT RATIOS

Calculating a few common ratios can also provide a better picture of the system’s overall financial health. The two most important are **LIQUIDITY RATIOS** and **LEVERAGE RATIOS**.



LIQUIDITY RATIO OR CURRENT RATIO

The Liquidity Ratio (or Current Ratio) *measures the system's ability to pay off current liabilities*. Systems with less than a 1.5 Liquidity Ratio are considered to be in financial distress. To calculate the Liquidity Ratio, you simply divide the balance sheet's current assets by the current liabilities:

$$\text{Current Assets} \div \text{Current Liabilities} = \text{LIQUIDITY RATIO}$$

Look again at the Balance Sheet. The current assets for 2010 are \$577,949 and the current liabilities are \$125,997. Using the ratio above to calculate, you will arrive at a Liquidity Ratio of 4.59.

$$\$577,949 \div \$125,997 = 4.59$$

Judging from this Liquidity Ratio, the RURAL WATER SYSTEM is in safe financial waters.



LEVERAGE RATIO

The Leverage Ratio *measures how much the system relies on debt*. A Leverage Ratio below 0.30 indicates the system may be in financial distress. The Leverage Ratio is determined by dividing the Equity by Total Assets:

$$\text{Equity} \div \text{Total Assets} = \text{LEVERAGE RATIO}$$

Using the numbers from the Balance Sheet example you can see that the total equity for 2010 is \$527,163. Divide that by the total assets, in this case \$1,951,098:

$$\$527,163 \div \$1,951,098 = 0.27$$

The sample water utility has a leverage ratio of 0.27. The utility has a heavy debt load compared to its actual value - which means this system could be considered to be in financial distress.

Keep in mind, these ratios are only indicators. They should be used as tools to help guide the review of financial statements. One ratio alone won't determine the financial health of a system. These and other ratios should be considered together.

Throughout the remainder of this publication you will learn to use different tools, and to look at all the numbers and ratios available to you, in order to develop a true picture and balanced understanding of your utility's financial health.

RURAL WATER SYSTEM
Balance Sheet Example
Dec. 31, 2010

<u>ASSETS</u>	<u>2010</u>	<u>2009</u>
Current Assets		
Cash and cash equivalents	\$ 496,474	253,573
Accounts receivable	60,026	65,040
Prepaid expenses	4,982	4,957
Short-term investments	2,219	0
Inventory	<u>14,248</u>	<u>15,302</u>
Total Current Assets	577,949	338,872
 Fixed Assets		
Land	6,950	6,950
Property, plant & equipment at cost	2,915,599	2,915,599
Less accumulated depreciation	<u>(1,636,060)</u>	<u>(1,523,462)</u>
Total Inventory	1,286,489	1,399,087
 Long-Term Assets		
Investments	<u>86,660</u>	<u>186,660</u>
Total Long-Term Investments	86,660	186,660
 TOTAL ASSETS	 \$1,951,098	 \$1,924,619
 <u>LIABILITIES AND NET ASSETS</u>		
Current Liabilities		
Accounts payable	\$ 8,432	\$ 7,987
Current portion of long-term debt	56,123	54,238
Withheld & accrued payroll taxes	3,158	3,479
Accrued interest	13,335	0
Meter deposits	43,504	44,602
Other accruals	<u>1,425</u>	<u>1,335</u>
Total Current Liabilities	125,997	111,641
 Long-Term Liabilities		
Long-term notes payable	<u>1,297,938</u>	<u>1,354,061</u>
Total Long-Term Liabilities	1,297,938	1,354,061
 Equity		
Contributed capital (membership)	56,415	56,415
Donated capital (govt. grants)	1,720,300	1,720,300
Retained earnings	<u>(1,249,552)</u>	<u>(1,317,798)</u>
Total Equity (Net Assets)	527,163	458,917
 TOTAL LIABILITIES AND NET ASSETS	 \$1,951,098	 \$1,924,619

SECTION 2

THE INCOME STATEMENT

The Balance Sheet provides a good snapshot of where the system stands at a particular point in time. What about over a longer period of time? Are budget goals being met? Is equity growing or shrinking?

The best way to answer these questions is with the Income Statement. Sometimes referred to as the Statement of Activities, the Income Statement *shows how much revenue a water system has earned and how much expense it has incurred during a specified period of time* - much like a scoreboard during a football game. Just as you reset the scoreboard at the end of the game, the Income Statement starts over at the end of a set time period, such as at the end of a fiscal year.

On the Income Statement income and expenses are broken down by type to provide a better understanding of how the system generates revenue and how it spends it. Generally, the Income Statement tracks revenue and expense on a 12 month basis. This period is called the system's *fiscal year*, and it may or may not coincide with a calendar year. Common fiscal years are July 1 - June 30 or October 1 - September 30. At the end of the fiscal year, all the revenues and expenses incurred during that year are moved to the **EQUITY** section of the Balance Sheet.



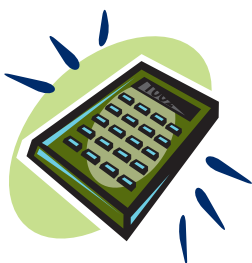
LEARNING TO READ YOUR INCOME STATEMENT

To understand the Income Statement the best place to start is at the top. Look at the *Rural Water System Income Statement* example on page 11. The heading provides valuable information, including the name of the system and the time period covered by the statement.

- A heading that reads “*For the month ending June 30, 2010*” means the statement’s figures represent revenue and expenses incurred during June 2010 only.
- “*For the quarter ending June 30, 2010*” indicates that the document covers revenue and expenses incurred from April 1 to June 30 of 2010.
- “*Statements for the year ending June 30, 2010*” would cover the fiscal year, which in this case takes place from July 1, 2009 to June 30, 2010.

Time frames are important because they let you know when the revenue listed has been *earned* and when the expenses have been *incurred*. It is important to stress *earned* and *incurred* because the system may not have collected or paid the cash as of the date of the Income Statement, but it is entitled to the revenue and is obligated to pay the expenses. It’s common to have a time difference between the date you record the financial information and the date you actually collect the money or pay the expense.

Revenue recorded on the Income Statement may not correspond exactly to deposits made to the system’s bank account, nor will expenses tie directly to checks written by the system. Those deposits may be made or checks may be written *after* the period listed on the Income Statement, but the obligation to make those deposits or write those checks takes place during that period, and therefore must be logged.



ACCRUAL ACCOUNTING

Most utility systems record financial activities on the *accrual basis* of accounting. *Under this type of accounting, the system must record revenue when it is earned, or when the system is entitled to the money.*

It also must record expenses when they are incurred, or when the system is legally obligated to pay the debt. It doesn't matter when the system actually collects the money or pays the cash.

For example, say a water system prepares water bills for customers' May water usage on the last day of that month and puts those bills in the mail. The system records a *receivable* at that time for what customers owe for May water usage, even though the money won't actually be received until around the due dates in mid-June. This increases receivables on the Balance Sheet and increases revenue from water sales on the Income Statement. The same is true of expenses. If the system receives a bill on May 31, it is recorded then, even though the bill may not be paid until June.



UNDERSTANDING DETAILS

Now that you know the basic function of and information found on an Income Statement you will more easily understand how to review each section. There are three basic elements to the Income Statement - **REVENUE**, **OPERATING EXPENSES**, and **NET OPERATING INCOME OR LOSS** (Loss is often shown in parenthesis).

- **REVENUE** is *income that has been earned by the system*. Examples include water sales to customers, late charges and service charges.
- **OPERATING EXPENSES** are *incurred during the system's normal operation*. This can include salaries, fringe benefits for employees, utility bills, insurance, and water purchased for resale.
- **NET OPERATING INCOME (OR LOSS)** is *determined by subtracting operating expenses from revenue*. If the system has more revenue than expenses, it is operating at a net income. If operating expenses are greater, the system is operating at a net loss. This is a very important number because you want to make sure your system is charging enough to cover the full cost of providing water.
 - **NOTE:** The Net Operating Income may be the last section on the statement; or, some income statements may have one more section titled **OTHER INCOME AND EXPENSES**. This section is the category where you list *interest income, interest expense and any gains or losses on sales of equipment*. It also will show items that are unusual in nature, such as things not related to the operation of the system. Unusual items are hard to define but as the saying goes, "you'll know them when you see them."
- The last line on the statement is titled **NET INCOME (OR LOSS)**. To determine the *overall* Net Income, add the Net Operating Income to Other Income and Expenses, (or subtract if it's a loss). This gives you the final Net Income (or Loss) for the period listed on the Income Statement, such as the fiscal year:

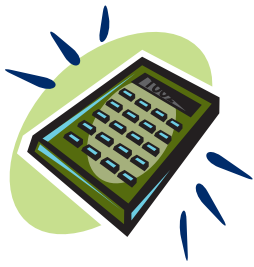
Net Operating Income + Other Income & Expenses = NET INCOME

Or

(Negative Operating Income) + Other Income & Expenses = NET INCOME

Most income statements will be comparative, which means they'll compare numbers from two similar time periods, such as the past fiscal year and the prior fiscal year. The Income Statement example is a comparative income statement because it shows numbers for both 2009 and 2010.

Comparative income statements provide an idea of how the system is progressing. Are revenues up or down? Do the revenue changes make sense? Why are water sales way up over the same period last year? Are there more customers, or did the system implement a rate increase? Is revenue down, if so - why? Are expenses up or down, if so - again, why? Any changes from one year to the next should make sense to you. Don't be afraid to question employees, such as the operator, bookkeeping or accounting staff, or the utility's auditor, until the answers do make sense.



CALCULATING INCOME STATEMENT RATIOS

In the Balance Sheet section you learned to calculate Liquidity and Leverage Ratios as a measure to check your system's fiscal health. Learning to calculate ratios on your Income Statement is also an effective way to check the overall fiscal health of your system. The two most important ratios to calculate on the Income Statement are the **OPERATING RATIO** and the **DEBT SERVICE RATIO**:

OPERATING RATIO

This ratio is *a simple calculation used to measure the profitability of the system*. Normally, a water utility that has an operating ratio of less than 1.0 is considered financially distressed. The formula for calculating the Operating Ratio is:

$$\text{Operating Revenues} \div \text{Operating Expenses} = \text{OPERATING RATIO}$$

Using figures from the Rural Water System Income example on page 11, you will note that the Operating Ratio for 2010 is 1.19. The system appears to be financially viable:

$$681,856 \div 575,234 = 1.19$$

DEBT SERVICE COVERAGE RATIO

This ratio *measures the utility's ability to pay its debt*. The adequate Debt Coverage Ratio will vary from system to system, depending upon the requirements of each lender, or in some cases, state statute. The Rural Utilities Service (USDA/Rural Development) Water and Waste Disposal loan program is a major federal lender for small and rural utilities. The RUS prefers a *minimum* debt service coverage ratio of 1.1 or higher, as calculated by the following formula:

$$\frac{(\text{Net Operating Income} + \text{Depreciation})}{\text{Total Debt Service}} = \text{DEBT SERVICE COVERAGE RATIO}$$

In the formula shown above, Depreciation is added to the Net Operating Income for the year because it is a "non-cash" expense. *Total debt service includes the total annual payment that is paid during the year on funds borrowed by the system, including principal, interest, and any debt service reserve deposits that may be required.*

To calculate the Debt Service Coverage Ratio for the example utility in 2010, you need to know the annual principal payment. For the example use \$70,000 as an annual principal repayment amount. The total debt service for this utility would be \$141,671 (principal of \$70,000 + interest expense of \$71,671). The sum of Net Operating Income plus Depreciation would be \$219,220 (net from operations, \$106,622 + depreciation of \$112,598). For the example the debt service coverage ratio is:

$$219,220 \div 141,671 = 1.55$$

With a Debt Service Coverage Ratio of 1.55 the sample water utility is able to meet its annual debt service payments, and would not be considered in financial distress.

RURAL WATER SYSTEM
Income Statement Example
For years ending Dec. 31, 2010 & Dec. 31, 2009

Revenue	<u>2010</u>	<u>2009</u>
Water Sales	\$661,363	\$665,091
Misc. Construction & Meter Connections	19,293	10,831
Membership Fees Received	<u>1,200</u>	<u>1,305</u>
Total Revenue	681,856	677,227
Operating Expenses		
Water Purchases	34,165	19,997
Electricity and Utilities	45,647	40,634
System Repair & Maintenance	24,816	19,498
Service Supplies	61,460	70,555
Testing and Analysis	2,662	2,941
Bad Debt Expense	6,646	2,663
Bank Charges	132	90
Contract Labor	35,545	29,484
Continuing Education	2,913	3,603
Depreciation	112,598	118,338
Fuel and Oil	13,408	11,990
Insurance	40,786	33,702
Legal and Accounting	4,829	5,585
Miscellaneous	4,385	4,294
Office Expenses	3,320	3,699
Postage	4,374	4,659
Repairs and Maintenance	11,052	9,347
Retirement Expenses	3,464	556
Salaries	142,752	133,147
Taxes and Licenses	16,696	17,482
Telephone	9,701	7,761
Truck Expense	2,094	4,452
Uniforms	<u>2,841</u>	<u>3,226</u>
Total Operating Expenses	\$575,234	\$538,356
Other Income and Expenses		
Interest Income	\$20,000	\$12,230
Gain on Sale of Equipment	13,295	0
Interest Expenses	<u>(71,671)</u>	<u>(75,113)</u>
Total Other Income and Expenses	(38,376)	(62,883)
NET INCOME (LOSS)	\$68,246	\$75,988

SECTION 3

THE CASH FLOW STATEMENT

The Cash Flow Statement shows *how all of the water system's financial transactions impacted its available cash*. It also shows how transactions during the year increased and decreased the available cash, and how much cash is available at the end of the year after all the transactions are tallied. In the Cash Flow Statement on page 15, transactions are broken into three areas - **FINANCING**, **INVESTING** and **OPERATION**:

- **FINANCING ACTIVITIES** are *transactions resulting from activities to attract investors or creditors*. Examples include loans for purchases of assets or major system repairs.
- **INVESTING ACTIVITIES** result from *transactions made to obtain the property, plant and equipment needed to run the organization*. They also include transactions associated with the investment of idle cash, such as purchasing stocks or bonds. Another example would be purchasing a new building or new equipment.
- **OPERATING ACTIVITIES** result from *what is needed for the system to perform its function of providing safe drinking water to customers*. Operating activities can include employee salaries, office supplies, minor system repairs, and the purchase of water from other systems.



WHY IS THE CASH FLOW STATEMENT IMPORTANT?

The Cash Flow Statement is often the most overlooked of the three main financial statements, and is the most difficult to read and understand. It also might be thought of as the least important of the three statements. This isn't the case.

The lack of cash flow can kill a company faster than operating at a net loss every day. Even if a system shows more assets than liabilities and shows a net income, it still could be in serious financial distress if the cash flow isn't available to meet its obligations. Many organizations that file for bankruptcy have more assets than liabilities on their balance sheets and show a net income on their income statements; however, a review of their cash flow statements often shows that in the months or years prior to the bankruptcy, they did not have sufficient cash resources to meet their obligations.

An organization that does not have the cash available to pay operating expenses can spiral quickly into financial distress that can lead to serious trouble. A negative cash flow can create a chain of events that will destroy your utility:

1. Without available cash in the bank, bills go unpaid or are paid late. Not only does this damage the system's reputation with the party to be paid, but it also can lead to late fees and interest penalties. This must be added to the system's operating costs ...
2. Late or missed payments can damage the water system's credit rating. As a result, the system may be required to pay cash for supplies and services. Because cash is already limited, the system may be unable to obtain the necessary supplies and services ...
3. Without the necessary supplies and services, the system must delay or forego necessary system maintenance or repair ...
4. Without necessary repairs, supplies and services, the quality or quantity of water produced may suffer. The system's reliability can be affected and service can be disrupted ...
5. Eventually the utility may be forced into making emergency repairs, or be cited for operational deficiencies by regulatory agencies, or both.

The Cash Flow Statement can alert you to possible future financial distress because it shows how the accounts on the Balance Sheet have changed from one year to the next.

There are additional areas on the Cash Flow Statement that are of particular importance in providing a snapshot of your system's fiscal health: **ACCOUNTS RECEIVABLE**, **ACCOUNTS PAYABLE** and **LONG-TERM DEBT**.



ACCOUNTS RECEIVABLE

The first thing to check in your Cash Flow Statement is the line item “(Increase) Decrease in accounts receivable.” In the *Rural Water System Statement of Cash Flow* example on page 15, you will find this line under the heading “Adjustments to reconcile change in net assets to net cash.”

Remember - Accounts Receivable are *payments owed to you by vendors or customers*. An increase in Accounts Receivable from one year to the next means the system was owed more at the end of the current fiscal year than it was owed at the end of the last fiscal year. This could be a warning sign and it's important to determine why the system was owed more this year than last. One possible explanation is simply system growth - more customers mean more receivables; however, it also could mean the system isn't actively pursuing unpaid water bills.

When the system “records” the amount due from customers, it increases both revenue and assets. The system shows a healthy revenue and net income as well as increased assets. Everything looks good when the amount due is recorded. But what happens if the customers don't pay what is actually owed? The system is out the cost for providing the water services AND doesn't have the cash to pay the costs of future service. The problem becomes compounded the longer the system allows customers to use its services without paying for them. The system must continue to cover the costs of services for which it's not getting paid. What if other customers then stop paying? That means more costs for the system to cover. Although assets and net income may show the money is expected to come in, without pursuing delinquent accounts, the cash won't actually be there when it's needed. Bottom line: Keep a handle on delinquent accounts.



ACCOUNTS PAYABLE

The next thing you want to examine is the line item “(Increase) Decrease in accounts payable.” In the example statement you will find this line also under the heading “Adjustments to reconcile change in net assets to net cash.”

Again, to review, Accounts Payable is just the opposite of Accounts Receivable. Accounts Payable *is money your system owes to vendors*.

Look again at the example sheet on page 15. In comparing the Accounts Payable between the two years listed (2009 & 2010) what do you see? Did this line item increase or decrease? Similar to receivables, an increase in payables simply can be the result of a system experiencing significant growth but it could also be the result of delaying payments to vendors.



LONG-TERM DEBT

Sometimes also called “notes payable,” Long-Term Debt is an important tell-all on the Cash Flow Statement. This line item can be found on the example statement on the opposite page under the heading “Cash Flows from Financing Activities.” It is listed as “Retirement of long-term debt.”

Compare your debt retirement activities from the previous year to the current year. Were you able to reduce the long-term debt, or did your debt actually increase? If debt increased make sure there is a reasonable explanation for the increase. Was it from growth - such as borrowing money to extend lines, upgrade of the facility or to purchase equipment? Without a reasonable explanation for increased debt, an increase in this line item from one year to the next is a good indicator you are not able to keep up with your system’s cash flow requirements.



THE BOTTOM LINE - LITERALLY

Finally, look at the bottom of the Cash Flow Statement example on the opposite page, which shows the **NET INCREASE (or DECREASE)** in cash. Is there more or less cash at the end of this year than at the end of the previous year? An increase in receivables, along with an increase in payables and a decrease in cash, could be the result of normal operations. But it also could be worth questioning.

RURAL WATER SYSTEM
Cash Flow Statement Example
For year ending Dec. 31, 2010 and 2009

<u>Cash Flows from Operating Activities</u>	<u>2010</u>	<u>2009</u>
Net Income (Loss)	\$ 68,246	\$ 75,988
Adjustments to reconcile change in net assets to net cash		
Provided by operating activities:		
Depreciation	\$112,598	\$118,338
(Increase) Decrease in accounts receivable	5,014	(7,395)
(Increase) Decrease in prepaid expenses	(25)	(1,485)
(Increase) Decrease in interest receivable	0	(3,053)
(Increase) Decrease in inventory	1,054	6,938
Increase (Decrease) in accrued expenses	90	870
Increase (Decrease) in payroll tax liabilities	(321)	624
Increase (Decrease) in accrued interest	13,355	10,243
Increase (Decrease) in meter deposits	(1,098)	0
Increase (Decrease) in accounts payable	<u>445</u>	<u>28</u>
Net cash used in operating activities	\$199,358	\$201,096
<u>Cash Flows from Investing Activities</u>		
Purchase of property and equipment	<u>0</u>	<u>(19,857)</u>
Net cash used in investing activities	0	(\$19,857)
<u>Cash Flows from Financing Activities</u>		
Retirement of long-term debt	(54,238)	(37,106)
Purchase of Securities	(2,219)	0
Sale of Securities	<u>100,000</u>	<u>0</u>
Net cash used in financing activities	\$43,543	(\$37,106)
<u>Net Increase in Cash</u>	\$242,901	\$144,133
<u>Cash Balance, beginning of year</u>	253,573	109,440
<u>Cash Balance, end of year</u>	\$496,474	\$253,573

SECTION 4

THE AUDIT REPORT

As you've probably realized by now, while each individual financial statement contains important information, the statements must be reviewed together to obtain a clear picture of your system's financial stability. And while it is not an official part of your financial statements, an external Audit Report must be conducted. It is a critical document for your system to have, and is also an important indicator of the overall fiscal health of your utility.



HOW TO PREPARE AN AUDIT REPORT

Many water utilities are required, either by state law or by an external lender, to complete an annual Audit Report. Even if an external audit is not a requirement, it can be a good business decision to have an annual Audit completed.

The Audit Report hiring process starts with a **REQUEST FOR PROPOSALS (RFP)** from independent accounting firms. As part of the bidding process your system should require that firms have:

- A clear understanding of your water system's business
- References from other clients in the water or wastewater industry
- Résumés of the personnel working on the Audit
- A clean peer review letter that shows the firm has undergone an extensive review of their policies and procedures in performing audits and that they adhere to industry standards in completing the audits

The system also should request the cost of the Audit be sent in a separate, sealed envelope from the qualifications proposal because you'll want to open them separately. First, review each firm's qualifications and rank them on that basis. Then, open the cost proposals. If the firm with the best qualifications isn't the cheapest, then it may give you a chance to negotiate the final fee.

At the end of the Audit, the firm will issue an **AUDITOR OPINION**. The opinion is the first page of the Audit. An *Unqualified Opinion* or *Clean Opinion* is the best an organization can receive. It means the auditor did not find any material misstatements in the system's financial records.

The report will also include the primary financial statements: the **BALANCE SHEET**, the **INCOME STATEMENT** and the **CASH FLOW STATEMENT**. The next major item is the **NOTES TO THE FINANCIAL STATEMENTS**. The notes provide valuable information regarding the nature of operations and in-depth information about various balances in the financial statements, such as notes payable and property, plant and equipment. The notes will contain a lot of information and should be read carefully.

The final step in the Audit process is the **REPORT PRESENTATION**. The auditor should present the Audit to the water system's entire board. The auditor should be available to explain the report's numbers and to respond to any questions. Board members should not be afraid to ask questions until they understand the Audit completely. Remember, the auditor works for the utility's decision-making board.

These documents and steps will help you ensure that your utility is running smoothly and in the black. Diligent review of these documents can ensure that your system remains healthy for years to come.

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