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Cash Reserves Pt. 2: Capital Reserves, Debt Service & Rate Stabilization Reserves

Editor's Note: This is the second article in a two-part series on cash reserves for water utilities. As mentioned in the first article on operating reserves, cash reserves are required to meet the operational, maintenance and capital needs of the utility while providing a necessary service 24 hours a day – every day of the year. This article will specifically review capital reserves, debt service and rate stabilization reserves. It is recommended that water utilities establish either formal or informal financial policies regarding utility cash reserves.

[Part 1: Enhancing Your Utility's Long-Term Financial Sustainability through Cash Reserves](#)

Capital Reserves

Utilities are able to develop the amounts and timing of future capital project costs to replace and rehabilitate their infrastructure systems with good record-keeping, long-range planning, and regular inspections. Capital reserves are established by utilities to serve one or more purposes as indicated below.

Rehabilitation and Replacement Reserves

Rehabilitation and replacement reserves fund unplanned or accelerated infrastructure rehabilitation or replacement needs when assets wear out before the end of their expected useful life or when the utility wants to accumulate funds for future rehabilitation and replacement needs. These reserves also may be used as a source of cash funding for the utility's Capital Improvement Program (CIP) Plan or to set aside funds for intermediate to long-term future replacement of major assets not included in the CIP Plan.

Equipment Replacement Reserves

An equipment replacement fund can be established to pay for the periodic replacement of assets with relatively short useful lives. Assets defined as equipment include vehicles, pumps, computer & office equipment, mechanical equipment, laboratory equipment, and similar equipment with an expected life in the range from three to 20 years.

Emergency Capital Reserves

Emergency capital reserves are utilized to fund replacement of critical infrastructure damaged by catastrophic events such as natural disasters. The following factors should be considered when determining the amount of emergency capital reserves.

- **Risk Factors** – Types of natural disasters, extreme weather conditions, or other force majeure events that the utility could face and the extent of damage that could result.
- **Critical Facilities** – Specific facilities (including replacement costs and condition) that are identified as being critical to utility system operations and could be vulnerable to potential threats.

- **Availability of Other Funds** – Quick access to other funds in the event of an emergency such as a line of credit, transfer from the municipal general fund, or funds from related affiliates for investor-owned utilities.

Special Purpose Capital Funds

Utilities often impose special assessments, system development charges (impact fees), or other charges to fund system expansion or the replacement of specific facilities. These assessments or charges have specific purposes defined by state statutes and local ordinances or resolutions. Often, a segregated account or fund must be established and maintained for the revenues from such fees. Even if not legally required, it is often prudent to establish a segregated account fund to ensure that these types of funds are held and used for the intended purpose and are not comingled with other utility funds.

Debt Service Reserves

Utilities utilize debt service reserves to pay debt service if revenues are not sufficient to satisfy their annual principal and interest requirements on debt. Debt service reserves are commonly established as a legal covenant of a debt issuance and is used in whole or in part to pay debt service in the event of a revenue shortfall. Revenue bond issues commonly require a Debt Service Reserve Fund (DSRF), but may be required (or voluntarily established by the utility) for other types of subordinate indebtedness. Typically, a DSRF requirement is specified as a fixed percentage of the average or maximum annual debt service on the bonds. The DSRF can be funded entirely with bond proceeds at the time of issuance, funded over time through revenue accumulation, funded with a surety or other type of guaranty policy, or funded only upon the occurrence of a special event.

Rate Stabilization Reserves

Rate stabilization reserves are cash reserves that can mitigate the effects of occasional shortfalls in revenue. Revenue shortfalls result from a number of events such as weather factors (wet weather or drought events and natural disasters), increased water conservation, and poor regional economic conditions. Rate stabilization reserves assist in smoothing out revenue variability resulting from these factors and ensure that adequate resources are available during such times that might otherwise require large rate increases.

Revenue and expenditure volatility often drive the decision to establish and maintain Rate stabilization reserves. Smaller utilities may be more prone to such volatility relative to the size of the overall budget as compared with utilities with larger customer bases. In addition, the decision may also depend on whether established reserves are adequate to address the utilities exposure to revenue volatility.

Each utility is unique and operates under a special set of circumstances that must be considered when selecting the type of cash reserves and the corresponding policies to best meet the utility's objectives and requirements. A utility should consider adopting a formal reserve policy to help guide and govern the decision maker's actions while providing greater clarity to the investment community. Having a formal policy must always be weighed against informal policies as there are benefits from greater flexibility with an informal policy.

Water Finance & Management

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*Editor's Note:

This article provides a summary of the recent AWWA Rates & Charges Committee Report, "Cash Reserve Policy Guidelines," and the Journal AWWA article titled Utility Cash Reserves from April 2018. The "Cash Reserve Policy Guidelines" provides a more comprehensive review of reserve policy considerations, as well as case studies providing examples of various reserve policies from utilities across the United States.

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