

# STORMWATER UTILITY – FISCAL POLICIES

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## BACKGROUND

The basic framework for evaluating utility revenue needs includes sound fiscal policies. Intended to promote long-term financial viability for the utility, these policies can address a variety of topics including cash management, a capital funding strategy, and financial performance.

There are several policy topics that can be important to consider further as part of managing the finances of the Stormwater Utility: Cash Reserves; Capital Funding; and Replacement Reserve Funding. When evaluating fund reserve levels and objectives, it is important to recognize that the value of reserves lies in their potential use. A reserve strategy that deliberately avoids any use of reserves negates their purpose. Fluctuation of reserve levels merely indicates that the system is working, while lack of variation over many years strongly suggests that the reserves are, in fact, unnecessary.

## CASH RESERVES

Reserves are a key component of any utility financial strategy, as they provide the flexibility to manage variations in costs and revenues that could otherwise have an adverse impact on ratepayers. For the purpose of rate and financial planning, resources are commonly separated into the following distinct accounts or funds: Operating Reserves, Capital Reserves, and Debt Management.

### Operating Reserves

An operating reserve is designed to provide a liquidity cushion; it protects the utility from the risk of short-term variation in the timing of revenue collection or payment of expenses. Like other types of reserves, operating reserves can help smooth rate increases over time.

Target balances for an operating reserve are generally expressed as a certain number of days of operating expenses (less transfers), with the minimum target varying with expected revenue volatility. Industry practice for utility operating reserves typically ranges from 30 days (8%) to 120 days (33%) of operating expenses, with the lower end more appropriate for utilities with stable revenue streams and the higher end of the range more appropriate for utilities with significant seasonal or consumption-based fluctuations.

The most common operating reserve target for stormwater utilities is between 30 days to 60 days of operating expenses. For stormwater utilities with annual billing, such as is anticipated for Lake Whatcom, the reserve target is commonly increased to account for payment timing fluctuations.

**Table 1. Operating Reserve Policy Recommendation**

Policy	Common Target	Recommended Target
Operating Reserve	30 to 60 Days of O&M	120 Days of O&M (33%)

In any year where operating reserves exceed the maximum days (i.e. 120 days) of operating expenses, it is assumed that the excess cash can be used to help pay for capital projects. This can be accomplished by calculating the target balance and comparing it against the actual existing cash balance. If the actual balance is greater than the target, the difference can be designated as a capital resource.

## Capital Reserves

The capital reserve consists of cash that has been set aside for capital purposes. Resources can include utility rate revenue, development charges (if applicable), grants, and debt proceeds. This fund provides a source of emergency funding for unexpected asset failures or other unanticipated capital needs. It can also help the utility address cash flow issues related to capital projects. For example, grants that the utility may rely upon to meet its capital needs, may have a local cash matching requirement.

Given these different purposes, there are a variety of potential benchmarks for setting a minimum balance for this reserve. Some potential options include: a percentage (commonly 1 – 2%) of the original cost of fixed assets; a rolling multi-year average of capital improvement program (CIP) costs; or an amount determined sufficient to fund an equipment failure. However, this capital reserve policy is not intended to guard against catastrophic system failure or extreme acts of nature.

**Table 2. Capital Reserve Policy Recommendation**

Policy	Common Target	Recommended Target
Capital Reserve	1-2% of Original Cost of Assets	1-2% of Original Cost of Assets

## Debt Management

### Debt Reserve

The debt reserve is most often required as a condition of bond issuance, though some loan programs also require a reserve. The intent of the reserve is to protect bondholders (or the agency issuing loans) from the risk of the borrower defaulting on their payments.

The minimum balance for this reserve (typically specified in the bond/loan agreement) is most often linked to either average annual debt service, maximum annual debt service, or the amount issued.

**Table 3. Debt Reserve Policy Recommendation**

Policy	Common Target	Recommended Target
Debt Reserve	Depends on type of debt issued.	Policy should be dictated by terms outlined in contracts for debt obligations, if applicable.

### Debt Service Coverage

Debt service coverage is typically a requirement associated with revenue bonds and some State loans, and it is an important benchmark to measure the riskiness of the utility’s capital funding plans.

Debt service coverage is most easily understood as a factor applied to annual debt service. In such a case, if it sells revenue bonds, the utility agrees to collect enough revenue to meet operating expenses and not only pay debt service, but collect an additional 25% increment above bonded debt service.

The extra revenue is a “cushion” that makes bondholders more confident that debt service will be paid on time. The extra revenue can be used for capital expenditures, to build reserves for future asset replacement, or for debt service on subordinate debt. Depending on the targeted rating level, some rating agencies suggest an annual debt service coverage target of 1.70 or greater (*Moody’s Rating Methodology, US Municipal Utility Revenue Debt; October 2017*). Achieving a bonded debt service coverage level greater than the minimum required level is a positive signal that bond rating agencies notice, and can result in more favorable terms if the utility goes to the market for bonds.

**Table 4. Debt Service Coverage Policy Recommendation**

Policy	Common Target	Recommended Target
Debt Service Coverage	Depends on type of debt issued and targeted debt rating level (e.g. Aaa, Aa, A, etc.)	According to Moody’s, a target range of between 1.25x and 1.70x might contribute towards an “A” rating. A range of 1.70x and 2.00x; an “Aa” rating.

### Debt to Operating Revenues

An important metric, referred to as “Debt to Operating Revenues”, can be useful to help monitor the overall level of indebtedness of a utility. According to the previously mentioned Moody’s report, the “Debt to Operating Revenue” metric is calculated with the following formula: (Net Debt ÷ Most Recent Year’s Operating Revenues), where Net Debt is a utility’s total long term debt outstanding less any debt service reserve funds. The Moody’s report states that, “Systems that carry a lot of debt have less ability to reduce costs if [revenue] shrinks, and are generally more challenged to achieve higher debt service coverage. A greater debt burden may also prohibit a utility from funding necessary capital upgrades, if a covenant prevents the issuer from incurring the debt necessary to fund those upgrades.”

**Table 5. “Debt to Operating Revenues” Recommendation**

Policy	Common Target	Recommended Target
Debt to Operating Revenues	Depends on targeted rating level (e.g. Aaa, Aa, A, etc.)	According to Moody’s, a target range of between 4.00x and 7.00x might contribute towards an “A” rating. A target of between 2.00x and 4.00x; an “Aa” rating.

## CAPITAL FUNDING

Utilities can typically draw funds for capital improvement projects from a variety of sources, such as grants, development charges, utility rates, and debt. While grants and developer contributions would logically be applied to project costs first, the next choice in the funding “hierarchy” is not necessarily apparent. A list of considerations is provided below.

### Debt Funding

Debt mitigates the financial impact of capital investment on ratepayers, but comes with issuance and interest costs. A utility’s ability to meet coverage and other debt-related requirements may limit the amount of additional debt that it can issue. Additionally, excessive amounts of outstanding debt can affect a utility’s credit rating (and its ability to secure low-interest debt).

### Cash Funding

Capital cash resources (e.g. development charges, replacement reserve funding) can be applied to project costs directly, or they can be held in reserve or used toward annual debt service payments.

### Resulting Considerations

The specific decision regarding whether to fund projects by debt or by cash is an important policy decision that will likely be driven by a number of considerations. While cash funding will be cheaper in the long run because there is no interest cost, debt funding may be the more practical option since it allows for the payment of costs over an extended period of time. Using debt to spread the cost over time also promotes “generational equity,” ensuring that future customers pay for their fair share of system costs.

The overlay of other financial policies related to coverage and replacement reserve funding can implicitly define equity generation through rates and development charges, automatically constraining the need for debt to reasonable levels. In this case, a new policy related to debt financing may not provide added value to financial planning or viability.

### Across the Industry

Drawing from a report from Black & Veatch, “*2016 Stormwater Utility Survey*”, of the 74 participants surveyed (from 24 states), the weighted funding profile for stormwater capital projects was approximately 88% cash versus 12% with debt. This result is up from 76% cash in 2012 and 85% cash in 2014.

## REPLACEMENT RESERVE FUNDING (RRF)

The concept of replacement reserve funding is essentially funding long-term infrastructure replacement needs through a regular and predictable rate provision. A RRF program can be structured to take into account the defined funding source (rate revenue), accumulation of funds when funding exceeds near-term needs, and augmentation of funds (e.g. through debt) when replacement needs exceed available cash resources.

Specific benchmarks for annual funding might include any of the following:

- **Original cost depreciation expense as reported in financial records.** This approach fully funds the decline in asset value attributable to the wear and tear from routine use, as measured by

original construction costs. It avoids decline in system asset value (financial integrity) by replacing physical assets with cash assets.

- However, as the General Finance Officers Association (GFOA) notes in their capital asset management recommendations, “Simply budgeting for the historical acquisition value of the asset may not take into account changes in price for a new asset or cases where the asset may not need full replacement based on the condition assessment,” (*Recommendation 7*).
- **Replacement-based depreciation expense.** This approach estimates the replacement cost of the system, and bases the funding target on this higher cost. By so doing, it more closely conforms to the true cost of replacing the system or asset.
- **Asset Management Plan.** This approach specifies a specific dollar amount of funding to be budgeted annually, ideally based on an asset management plan. An asset management plan is typically based on an accurate asset inventory, supplemented by routine asset condition assessments.
  - Based on recent discussions with staff from the Department of Ecology, a condition of qualifying for future infrastructure funding may be dependent upon having an accurate asset inventory, an asset condition assessment program, and a plan to maintain, repair and replace existing infrastructure.
- **Directly budgeted replacement project expenditures.** Budgeting replacement project expenditures as they occur, this approach does not attempt to anticipate or accumulate toward replacement needs and is likely to provide highly variable annual requirements.

Of these various approaches, only the Asset Management Plan approach is actually designed to ensure full funding of replacement needs, assuming the accuracy of assumptions used. All of the others are intended to provide reasonable contributions toward meeting replacement needs, but do not ensure the adequacy of such funding.

Most commonly, utilities that have addressed replacement funding needs have used historical (original cost) depreciation expense as the basis for a reasonable level of reinvestment in the system. This strategy and level of funding satisfies several standards for reasonable rates:

- It avoids decline in system asset value (financial integrity);
- It charges customers commensurate with their consumption of facility useful lives and avoids the possibility of charging customers more than the current cost to provide service (rate equity); and
- It provides a substantial source of funding for replacement (capital funding adequacy).

**Table 6. Replacement Reserve Funding Recommendation**

Policy	Common Target	Recommended Target
Replacement Reserve Funding	Based on original cost or replacement cost depreciation. Asset management plans are becoming more popular—and important—and would provide a more-detailed funding strategy beyond what annual depreciation would suggest.	Implement an asset management plan. Absent that, fund at least 100% of original cost depreciation. Consider building rates over time to fund replacement cost depreciation.

## RECOMMENDATION

We recommend that the County consider the following fiscal policies for the Lake Whatcom Stormwater Utility.

Policy	Common Target	Recommended Target
Operating Reserve	30 to 60 Days of O&M	120 Days of O&M (33%)
Capital Reserve	1-2% of Original Cost of Assets	1-2% of Original Cost of Assets
Debt Service Coverage	Minimum required: 1.25x	If debt is issued, an internal policy target of 2.00x may be prudent.
Debt to Operating Revenues	Depends on targeted debt rating.	If debt is issued, strive to keep total outstanding debt at less than 7.00x annual rate revenues.
Replacement Reserve Funding	Asset management plans are becoming more popular.  Otherwise, a percentage of depreciation (original cost or replacement cost).	Develop Asset management plan.  Or fund at least 100% of original cost depreciation.