

CREDIT OPINION

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City of Burlington, Vermont Water Enterprise

Update to credit analysis

Summary

Burlington Water Enterprise (A1) benefits from sound financial metrics, including healthy debt service coverage and improving liquidity. The system is small in size but has a stable service area with average income levels. The system has an increasing debt burden and sound legal provisions.

Credit strengths

- » Exclusive provider of an essential service
- » Independent rate-setting authority coupled with annual review of rates
- » Stable service area and ample system capacity
- » System is fully compliant with all federal and state regulations
- » Sound legal security provisions

Credit challenges

- » Liquidity has historically been narrow, although it improved in fiscal 2016
- » Managing increase debt service costs and capital needs to address deferred maintenance
- » Maintaining solid reserves and debt service coverage levels

Rating outlook

Moody's typically does not assign outlooks to local government credits with this amount of debt outstanding.

Factors that could lead to an upgrade

- » Trend of debt service coverage above 2.0 times
- » Sustained growth in liquidity and days cash on hand
- » Significant and sustained growth in customer base and decline in top customer concentration
- » Material improvement in service area income levels
- » Improved general obligation credit profile of the city

Factors that could lead to a downgrade

- » Decline in debt service coverage or liquidity
- » Material increase in debt ratios beyond expectations
- » Declines in customer base or weakening of income levels
- » Reduced general obligation credit profile of the city

Key indicators

Exhibit 1

Burlington (City of) Water Enterprise, VT					
System Characteristics					
Asset Condition (Net Fixed Assets/ Annual Depreciation)	17 years				
System Size - O&M (\$000)	\$4,414				
Service Area Wealth: MFI % of USmedian	112.80%				
Legal Provisions					
Rate Covenant (x)	1.25x				
Debt Service Reserve Requirement	DSRF funded at lesser of standard 3-prong test				
Financial Strength					
	2013	2014	2015	2016	2017
Operating Revenue (\$000)	\$5,704	\$5,825	\$5,791	\$6,533	\$6,335
System Size - O&M (\$000)	\$3,958	\$4,038	\$4,575	\$4,176	\$4,414
Net Revenues (\$000)	\$1,746	\$1,787	\$1,242	\$2,357	\$1,969
Net Funded Debt (\$000)	\$86	\$38	\$250	\$235	\$3,478
Annual Debt Service (\$000)	\$1,418	\$71	\$17	\$15	\$93
Annual Debt Service Coverage (x)	1.2x	25.1x	71.9x	158.4x	21.1x
Cash on Hand	days	9 days	44 days	160 days	145 days
Debt to Operating Revenues (x)	0.0x	0.0x	0.0x	0.0x	0.5x

Cash on hand in fiscal 2017 is net of bond proceeds.

Source: Moody's Investors Service; System's audited financial statement

Profile

The City of Burlington is located in northwestern Vermont along the coast of Lake Champlain and has a population is approximately 42,200. The system serves approximately 9,300 residential commercial, industrial and institutional metered customers in the city. The system also provides wholesale water to Fire District II of the Town of Colchester.

Detailed credit considerations

Service Area and System Characteristics: Stable but concentrated service area with average income levels; Ample system capacity

The waterworks system's service area will remain stable given institutional presence and the absence of any alternative water supply in the region. The system provides water to the City of Burlington (A2) and wholesale water to Fire District II of the Town of Colchester. Burlington's socioeconomic profile is slightly above average – median family income is 107% and 113% of the state and nation, respectively.

The system's primary water source is Lake Champlain, and water supply is ample given that the lake is approximately 6.8 trillion gallons in volume. The system is not limited in the amount of water it can draw from the lake. The 12 MGD water treatment plant treated an

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average of 3.8 MGD in 2016 (average is 4.1 MGD over the past 10 years) and peak usage was 7.5 MDG. The system has ample capacity to accommodate an expected increase in demand given some existing and proposed redevelopment projects throughout the city. Management reports that the system is in compliance with federal and state regulations.

The top three customers (in order of consumption) are the fire district, the University of Vermont & State Agr. Coll. (Aa3 stable), and the University of Vermont Medical Center. Collectively, these customers accounted for a high 24% of total revenues in 2016. Positively, the 15 year contract with the fire district extends to 2024, and the university and medical center have recently been expanding. The top 25 customers accounted for 39.2% of total 2016 revenues.

Debt Service Coverage and Liquidity: Sound coverage projections supported by future rate increases

The financial position should remain sound as the city has shown a recent willingness to increase rates to cover growing costs, and management is preparing for annual rate increases to cover new debt service. As of fiscal 2016 year-end, the system had a minimal amount of debt outstanding and debt service coverage has been very strong over the past three years. Prior to 2014, however, coverage averaged 1.2 times (from 2011-2013) when the city had about \$1.4 million in debt outstanding. Voters in November 2016 approved an \$8.3 million revenue bond authorization. Coverage projections, which conservatively do not take into account planned future rate increases but include all issued debt, reflect sound annual coverage levels of over 2.5 times.

The fiscal 2018 budget included a net increase in water rates to customers as well as the use of \$361,000 of reserves for capital. The system's operating cash increased in 2017 and management believes this will continue in 2018. Rate increases should produce structurally balanced operations in fiscal 2019 and 2020.

The majority of the system's operating revenue comes from water user fees (94% in 2017). Rate increases require a majority vote of the City Council; rates do not require approval from the Vermont Public Service Board. From 2010-2017, rates increased six times, with the highest being 14.3% in 2016. The 2016 rate increase helped support additional spending for pay-as-you-go capital, salary increases, the hiring of a second engineer, and meter replacements. The city projects annual rate increases will be needed going forward to finance the increasing debt service costs. The ability to maintain healthy coverage levels (in line with projections), despite the increasing debt service, will be a key focus of future reviews and could lead to positive credit pressure.

In fiscal 2017 it was uncovered that the system incorrectly billed certain customers. The billing error will require the system to repay \$800,000 to customers, which management believes they will be able to do so over six years.

LIQUIDITY

Fiscal 2017 unrestricted cash on hand (net of bond proceeds) was a strong 145 days' operations.

Debt and Legal Covenants: Debt burden will remain manageable; Sound legal provisions

The city is an infrequent borrower for the water system and has instead relied mostly on pay-as-you-go capital spending. Upgrades to the water treatment plant were financed with debt in 1985, and as discussed, the system has ample capacity for the foreseeable future. As of fiscal 2017 year-end, the system had increased its debt from \$235,000 to \$3.5 million outstanding.

The city is beginning to address deferred maintenance and capital expenses will account for a growing percentage of the annual budget. The improvements to the underground pipe and water distribution system will be financed with a combination of pay-go spending (roughly \$1.3 million annually) and debt. Management anticipates the \$8.3 million authorization will be sufficient to finance projects for the next five years, and we expect additional debt will be needed over the medium term to finance continued improvements. About \$3.1 million of the authorization remains and will be issued over the next year.

When including all authorized debt, the debt burden will increase to roughly 1.3 times revenues.

Bondholders benefit from sound legal provisions that include a 1.25 times rate covenant and a 1.25 times maximum annual debt service (MADS) additional bonds test. The bonds are secured by a debt service reserve account, which will be funded with bond proceeds, and is required to equal to the lesser of MADS, 125% of average annual debt service, or 10% of principal.

DEBT STRUCTURE

In fiscal 2020, after the remaining authorized debt is issued, debt service will remain level and will increase to roughly \$700,000 annually (approximately 11% of revenues).

DEBT-RELATED DERIVATIVES

The system has no exposure to derivatives.

PENSIONS AND OPEB

Employees of the system, along with other city employees, participate in the Burlington Employee Retirement System, a single employer, defined benefit retirement plan. System employees also receive other post-employment benefits.

Management and Governance

The system is a division of the city's Public Works Department, and the Department is governed by a seven member Board of Public Works Commissioners. The commissioners are appointed by the City Council and serve staggered three year terms.

Management benefits from an unlimited rate setting authority and rates are reviewed annually. In addition, management maintains a 20 year risk-based capital plan that was developed in 2008 and substantially updated in 2017.

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