TESTING THE WATERS

Should MMSD's Privatization Framework Be Revisited?

WISCONSIN POLICY FORUM

ABOUT THE WISCONSIN POLICY FORUM

The Wisconsin Policy Forum was created on January 1, 2018, by the merger of the Milwaukee-based Public Policy Forum and the Madison-based Wisconsin Taxpayers Alliance. Throughout their lengthy histories, both organizations engaged in nonpartisan, independent research and civic education on fiscal and policy issues affecting state and local governments and school districts in Wisconsin. WPF is committed to those same activities and that spirit of nonpartisanship.

PREFACE AND ACKNOWLEDGMENTS

This report was undertaken to provide Milwaukee Metropolitan Sewerage District officials, stakeholders, and citizens with analysis that will be helpful to them as they consider whether wastewater treatment operations should continue to be outsourced after the current contract with Veolia Water Milwaukee expires in 2028. The intent was to lay out fiscal and programmatic data and frame future deliberations, but not to make specific recommendations with regard to future service models.

Report authors would like to thank officials from both MMSD and Veolia for their assistance in providing information and for patiently answering our questions. In addition, we acknowledge and thank MMSD for commissioning and underwriting much of the cost of this research.

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INTRODUCTION

Eleven years ago, the Wisconsin Policy Forum published *Downstream Accomplishments, Upstream Challenges*, the fourth in a series of reports analyzing the finances of metro Milwaukee's largest local governments. This report focused on the fiscal condition of the Milwaukee Metropolitan Sewerage District (MMSD) and found that "overall, as measured by commonly used fiscal indicators, MMSD enjoys sound fiscal health and appears well-positioned for the future."

An important observation in the 2011 report was that MMSD differed from other governmental entities in that its "decision to outsource most of its operations has greatly reduced operating budget pressures and risk." The outsourcing decision was made in 1998, when MMSD's leadership entered into a contract with United Water Services to operate the district's sewers, two treatment plants, and the production of Milorganite, an organic fertilizer produced from waste material and sold by MMSD. In 2008, the district transferred the 10-year operating contract to Veolia Water Milwaukee, and that contract was renewed for another 10 years in 2018.

Our favorable assessment of MMSD's privatized operational framework stemmed largely from the stability associated with a 10-year operating contract, which largely shielded the district from large, unforeseen operating budget spikes; as well as the significant experience and expertise that both private vendors brought to MMSD's operations, which yielded operational efficiencies and allowed for lower staffing levels.

At the same time, we warned that "the substantial savings associated with private operations were realized with the first contract. Consequently, as MMSD grapples with… the realities of a potential small bidding pool (for subsequent contracts), it must recognize that its future ability to wring financial savings out of its operations contract may be limited."

It is also important to note that the current 10-year contract with Veolia establishes a projected profit margin for the private company, which had not been specifically delineated in the previous 10-year contract. As a result, the financial benefits associated with privatization may have diminished from those we reported in 2011.

Amid a changing financial landscape and with a new contract still several years away, MMSD leaders have now asked WPF to conduct an analysis to help inform their decision on whether to contract once again with a private vendor. This report is the culmination of that broad analysis. Using a comprehensive review of MMSD data sources, consideration of privatization efforts in other jurisdictions across the U.S., and interviews with MMSD and Veolia officials, we assess the financial impacts of MMSD's privatization decision and explore whether benefits the district has realized can be sustained in the future. While our emphasis is on financial considerations, we also explore to a limited extent how the district's operational objectives have been impacted by its decision to outsource.

In our concluding section, we reflect on our research findings and attempt to frame for MMSD leaders and stakeholders how they should approach their upcoming deliberations. We do not advocate for or against specific courses of action, but instead seek to objectively frame the decision-making process in a manner that hopefully will be useful to MMSD leaders and outside stakeholders as they consider the path forward.

MMSD, VEOLIA, AND THEIR CONTRACTUAL RELATIONSHIP

MMSD and Veolia have had a contractual relationship since 2008 under which Veolia operates the district's main wastewater treatment facilities and operations. In this section, we provide an overview of the two organizations and their contractual relationship.

MMSD Service Area, Responsibilities, and Governance

The Milwaukee Metropolitan Sewerage District is an independent district authorized by the Wisconsin Statutes that provides wastewater treatment services to approximately 1.1 million people across Milwaukee County as well as portions of neighboring counties.[1] Sewage is conveyed to the two MMSD water reclamation facilities through a 4,033-mile system of local collector sewers, a 295-mile system of intercepting and main sewers, and storage tunnels.

The two water reclamation facilities – the Jones Island Water Reclamation Facility and the South Shore Water Reclamation Facility – collect and treat on average over 200 million gallons of wastewater daily, with capacity of 600 million gallons. The Jones Island facility also houses equipment that turns biosolids produced through wastewater treatment into fertilizer. The fertilizer is sold across the U.S. for various types of lawn care under the federally patented and trademarked name Milorganite®.

While the core function of MMSD is to provide sewer and wastewater treatment services, it also maintains a broader mission of striving "to cost-effectively protect the quality of the region's water resources." Examples of how the agency addresses this broader goal include the collection of household hazardous waste at designated sites and promotion of "green" strategies, such as the sale of rain barrels to minimize stormwater runoff into area waterways.

MMSD also has had discretionary responsibility for flood management for the five rivers that flow through the district: the Milwaukee River, Root River, Menomonee River, Kinnickinnic River, and Oak Creek. Its flood management activities include buying and clearing houses and other buildings located in flood plains; constructing levees, retention ponds, and pumping stations; and reshaping river channels.

An 11-member commission serves as MMSD's governing body. Seven of the commissioners are appointed by the Mayor of the City of Milwaukee and confirmed by the Common Council. The remaining four are appointed by a subcommittee of the Milwaukee County Intergovernmental Cooperation Council (the full council is comprised of the chief elected officials of the county's 19 municipalities). Three of the Mayor's appointees and three of the ICC's appointees must be elected officials.

The Commission is charged with establishing and enforcing policies in compliance with state and federal statutes, as well as oversight of budgetary, administrative, procedural, operational, and

[1] MMSD serves 18 of Milwaukee County's 19 municipalities (South Milwaukee is the lone exception) as "members" as well as 10 "non-member" municipalities from adjacent counties. The non-member communities are Brookfield, Butler, Caledonia, Elm Grove, Germantown, Menomonee Falls, Mequon, Muskego, New Berlin, and Thiensville.

informational processes. Oversight for these functions is spread across two standing committees: a Policy, Finance, and Personnel Committee and an Operations Committee.

MMSD's operations are funded through sewer fees, which are paid by users through billings to the municipalities in the district's service area. Those fees support the bulk of the district's operating budget, which also relies to a lesser extent on smaller revenue items like payments from the sale of Milorganite and household hazardous waste collection fees. MMSD also levies property taxes annually for its Milwaukee County member communities to support its capital program and receives annual payments based on equalized property values from its 10 non-member communities to support its capital budget.

Veolia Water Milwaukee

Veolia Water Milwaukee is a private company that holds a contract with MMSD to operate the district's two water reclamation facilities, and conduct bio-solids management and field operations. The company is a subsidiary of Veolia North America, which in turn is a subsidiary of the French transnational company Veolia Environnement. Headquartered in Paris with nearly 220,000 employees worldwide, the company offers water, waste, and energy management services.

Veolia Water Milwaukee (Veolia) focuses solely on wastewater service operations for MMSD. Other subsidiaries within Veolia North America offer a range of services, including the regeneration of sulfuric acid, hazardous waste disposal, and municipal water supply.

Beyond operating the MMSD infrastructure, Veolia actively supports the Milwaukee-area community through involvement with educational and environmental causes and activities.[2] This includes an active program providing tours and information sessions to help young people consider a career in the trades and water industry. Recently, the company has partnered with MMSD, Milwaukee Water Works, and several other entities to help inspire a career pathway in the water sector for individuals in marginalized communities.

Finally, Veolia helps fund research and development programs on certain water and wastewater issues. As of 2020, the company had spent $1.9 million locally toward these efforts. Veolia Water North America and Veolia Environnement resources also contribute to these research programs, which partner with local universities and external organizations to develop emerging technologies and pilot potential treatment and environmental solutions.

Privatization History & Contracts Overview

MMSD has contracted with a private sector company to run its operations, including the production of Milorganite, since 1998. Three contracts have been executed to date, each lasting for 10 years. The first ran from 1998 through early 2008 and was held by United Water Services (UWS), which was selected after a competitive bidding process that involved three other bidders. Approximately 290 MMSD employees transferred from the district to UWS with the onset of the contract.

[2] We note for the purpose of full disclosure that Veolia is a dues-paying member of the Wisconsin Policy Forum (at a $5,000 annual dues level) and has also sponsored WPF's Salute to Local Government for the past several years (the 2022 sponsorship fee is $3,700). MMSD also is a dues-paying WPF member at an annual level of $650. WPF's total annual operating budget is $1.5 million and its annual budgeted dues payments for existing members total $330,000 in 2022.

The bid for the second iteration of the contract was won by Veolia (it and UWS were the only bidders). In 2018, sensing a lack of competition and expressing satisfaction with Veolia's performance, MMSD renewed the contract (although with some modified terms) without a competitive bidding process.

In our 2011 report, we noted that UWS promised an anticipated savings of $145.8 million (30%) over the life of the initial 10-year contract for MMSD and its ratepayers compared to projected expenditures if MMSD had maintained its operations in-house. We further reported that several years into the contract, MMSD found the savings were significantly greater than anticipated, at $164.6 million. As we explained at the time:

UWS entered into the contract anticipating that its ability to recognize greater efficiencies in MMSD operations would allow it to profit from the contractual arrangement, while also generating savings for the district. The company shortly realized, however, that it had inherited an already-efficient operation, which would limit its ability to implement cost-saving measures. Furthermore, UWS eventually faced unforeseen, rapid elevations in energy costs. Because the contract required UWS to hold MMSD harmless for energy cost increases, the UWS contract turned out to be favorable for the district, but a money loser for the private operator.

While the basic structures of each of the three 10-year contracts have had many similarities in terms of basic contractor responsibilities and assumption of risks, each contract also has included some substantive changes. The major changes are summarized in Table 1. One change not noted in the table involves specific charges for overhead and an operating "profit" margin. Those items were built into other cost items in the UWS contract, largely combined in an "Other" category in the first Veolia contract, and specifically delineated in the second Veolia contract as a means of enhancing transparency (6.5% of operating expenses for corporate overhead and 5% for an operating margin).

Table 1: Major changes between MMSD system operator contracts

	United Water 1998-2008	Veolia 2008-2018	Veolia 2018-2028
Contract fee adjustment provisions	MMSD annual payment increase to contractor capped at the lower of 2.5% growth annually or a metric based on the Consumer Price Index. If the index is between 2.5% and 5.0%, then there is no adjustment to the cap. If it is greater than 5.0%, then the increment above that amount is added to the 2.5% cap.	MMSD annual payment increase to contractor capped at the lower of 3.5% growth annually or Base Cost Blended Index. If the Base Cost Blended Index is between 3.5% and 5.5%, then there is no adjustment to the cap. If it is greater than 5.5%, then the increment above that amount is added to the 3.5% cap.	Same as previous contract
Environmental testing performance bonuses and penalties	Bonuses and penalties	Bonuses and penalties	Penalties only
Cost of utilities	United Water 100%	MMSD 75% Veolia 25%	MMSD 75% Veolia 25% up front, but Veolia payment essentially is offset by an adjustment in the contractual payment the following year
Capital repairs and replacements	United Water pays for minor repairs and replacements to capital assets costing under $5,000 and contributes $5,000 to any larger "material capital repair and replacement" (MCRR) projects that exceed that amount	Veolia pays for minor repairs and replacements costing less than $10,000 and contributes $10,000 to MCRRs	Veolia pays for minor repairs and replacements under $10,000 and contributes $10,000 to MCRRs but an annual MCRR fee somewhat offsets the payment. Because the number of MCRRs was not pre-determined in the contract, both MMSD and Veolia assumed some risk depending on whether there was a high or low number of MCRRs in a given year. (As we will discuss below, that provision was recently amended.)

The major changes cited above reflect certain lessons learned by both MMSD and Veolia as each contract has played out over its 10-year life. Given the realization that a substantial portion of UWS' losses[3] were attributed to unforeseen increases in utility costs, of which UWS paid the full amount, Veolia's bid in the second contract split utility costs 75%/25%, with MMSD carrying the larger burden. MMSD also gained a positive change in that contract, which required Veolia to contribute up

[3] Those losses exceeded $60 million by the end of the contract in 2008.

to $10,000 for minor capital repairs and replacements relating to the infrastructure it operates as well as $10,000 to each material capital repair and replacement (MCRR) project that exceeded that amount, as opposed to the $5,000 contribution made by UW.

Another change in the first Veolia agreement involved the annual cap in MMSD's main payment to the vendor in each year of the contract (called the O&M fee). Increases generally are set at the lower of either a cap outlined in the contract and growth determined by a Base Cost Blended Index from the U.S. Bureau of Labor Statistics. The cap was set at 2.5% in the UWS contract and raised to 3.5% in the two Veolia contracts. The contract also stipulates that the cap is not adjusted if the index exceeds it up to a certain increment (5.5% in the Veolia contracts), after which any increment above that amount is tacked on to the amount established by the cap.

Notably, the Base Cost Blended Index rate has been the standard for fee increases, as until this year it had never exceeded the numerical cap set in the contract. Prior to 2022, the upward adjustment of the cap to 3.5% created an additional buffer for Veolia's financial risk and a potential additional cost for MMSD. However, the index was calculated at 5.32% heading into 2022, while the increase in the O&M fee was limited to 3.5% per the contract. Consequently, according to Veolia officials, the company was required to absorb approximately $900,000 in increased costs (thus providing a contractual benefit to MMSD).

When MMSD renewed its contract with Veolia in 2018, most of the existing contract elements remained in place, though some important changes were implemented. One was the removal of bonuses paid to Veolia for exceeding environmental testing expectations, while the penalties for failing to meet the standards were kept in place. To date, Veolia has not had to pay penalties for failing to meet environmental standards. The bonuses that were removed included $50,000 apiece for reaching certain levels with regard to biochemical oxygen demand (BOD) and total suspended solids (TSS) in discharged effluent based on environmental test results.[4]

Finally, there were important changes regarding utilities and capital repairs and replacements. While the provision requiring Veolia to assume 25% of utility payments was retained, and while Veolia therefore incurs a quarter of the risk of cost overruns in a given year, a new provision required MMSD to essentially reimburse Veolia for its annual energy costs through an adjustment to the fee payment the following year. Similarly, Veolia continued to be responsible for up to a $10,000 payment toward the cost of both minor repairs and replacements and MCRRs, but an offsetting payment was created that was to be adjusted annually based on actual experience. (As we will explain below, a June 2022 contract amendment raised the threshold to $25,000 for minor repairs and eliminated the $10,000 payment and reimbursement for MCRRs.)

Table 2 provides additional detail regarding the risks that both parties carry under the current contract, as well as the responsibilities of each.

[4] Additional bonuses also were removed that related to Veolia's performance in limiting or eliminating bypasses during major storms.

Table 2: Responsibilities and financial risks carried by each party

	MMSD	Veolia
	Responsibilities and Risks	
Chemical Costs	Per a recent amendment, MMSD is responsible for cost of ferric chloride used at South Shore facility	All other chemical costs (previously all chemical costs until new amendment)
Environmental Performance Standards		Penalty levied if water quality testing exceeds limits set in the contract. Federal or state fines also passed through to Veolia, as applicable
DNR Fees	Full annual payment to DNR	
Maintenance and reporting standards		Fined $1,000 per day until issue is resolved
Annual contract fee adjustments	Annual contract increases up to 3.5%, as determined by two Bureau of Labor Statistics indexes, with provisions as outlined in Table 1 above to increase the fee if the indexes show growth of over 5.5%	Absorbs inflationary costs each year if they are between the 3.5% cap and 5.5%
Uncontrollable Circumstances	Provides additional payments or gives time extensions to Veolia	
Governmental fines or penalties assessed to MMSD for operating infractions		Veolia pays all damages
Utility Costs	In light of reimbursement provision, essentially 100% of costs, though there is a one-year lag in reimbursement and Veolia may need to initially absorb increases from year to year	25% of costs contributed each year but largely offset through adjustments to O&M fee in following year
Material capital repair & replacements (MCRR)	Full cost of MCRR projects related to Veolia's operations that exceed $25,000 (per new 2022 amendment)	Full cost of minor repairs and replacements on assets related to its operations that cost less than $25,000 (per new 2022 amendment)
Workforce	Responsible for MMSD workforce and contractors related to capital or other non-operational projects	Responsible for hiring operations staff to fulfill contractual obligations
Supplies		Must procure all chemicals, spare parts, and fuel oil needed to conduct operations for which it is responsible
Milorganite Production	Bags, markets, and sells product	Creates product and must dispose of byproducts
Decisions to allow overflow	MMSD makes the ultimate choice, after consultation with Veolia	

This table shows some important areas in which it could be argued that MMSD experiences reduced risk and thereby benefits by contracting with Veolia. Those include Veolia's responsibility to pay for most chemicals used in the wastewater treatment process regardless of any unanticipated cost increases; and maintain an appropriate operations workforce, regardless of challenges associated with recruitment and retention. Yet, financial risk sharing that existed in the initial contract with Veolia in 2008 – such as Veolia's assumption of 25% of utility costs and a $10,000 contribution per capital project for the assets it operates – largely disappeared over time through contract adjustments that resulted in MMSD taking on those costs through larger fee payments to Veolia.

Another trade-off for MMSD is that it must cede some authority over the quality of operations to Veolia, although it has some leverage over contract performance through stipulations that Veolia pays damages or fees in the event of fines assessed to MMSD for operating infractions, or should environmental water testing limits set forth in the contract be breached. MMSD also retains full responsibility for one of its most critical environmental decisions, which is when to allow overflow of untreated sewage into waterways during major storm events.

An additional important trade-off is the existence of a profit margin in the contract for Veolia. This provision is understandable given that Veolia is a private corporation and is assuming considerable risk, but it is a cost borne by MMSD and its ratepayers that would not be incurred in profitable years if MMSD operated its treatment facilities itself. On the other hand, United Water was able to trim the operations workforce by dozens of positions in the initial contract and the size of the workforce has remained largely the same. It is unknown whether MMSD would be able to achieve the same staffing efficiencies if it took back operations; if it needed to add staff, then the benefit of eliminating a profit margin would be partially or fully offset by an increased cost of operations. Similarly, if MMSD needed to procure contracted technical support to replace any expertise lost with the departure of Veolia, then that added cost would offset some of the potential gain from elimination of the margin.

In subsequent sections of the report, we explore in greater detail these benefits and trade-offs, as well as others related to Veolia's status as a major international company with procurement advantages and global water industry expertise.

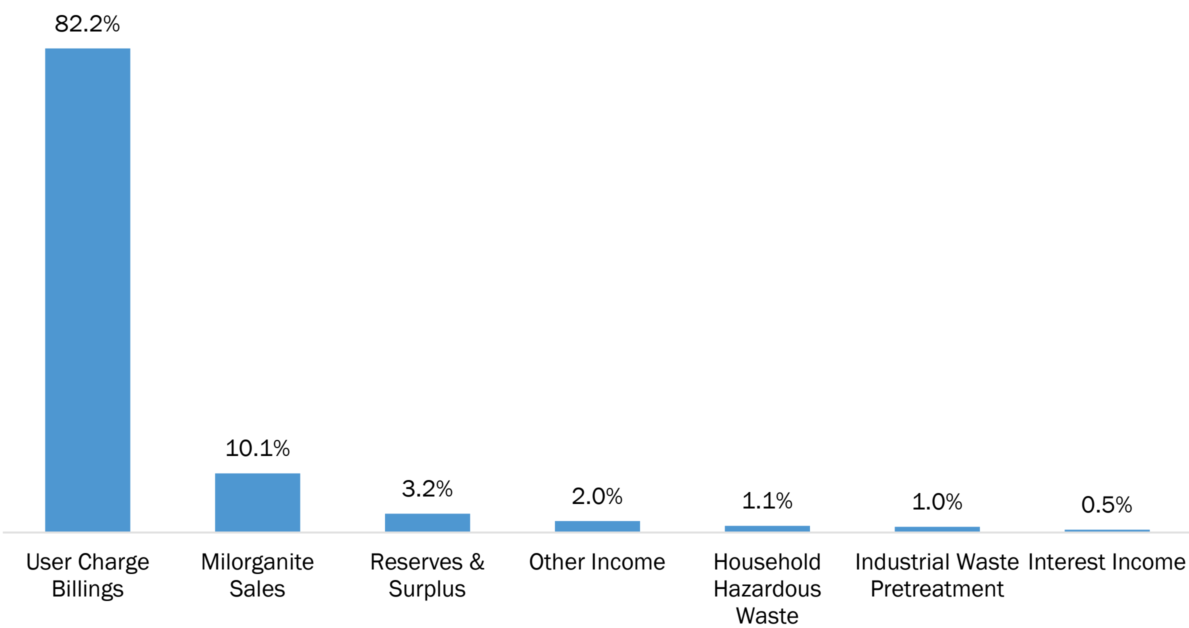
FISCAL AND OPERATIONAL IMPACTS OF PRIVATIZATION

In this section, we outline MMSD's operating and capital budgets to provide financial context for its outsourcing decision. We also provide an overview of the financial elements of the contract and how they have impacted Veolia. A snapshot of current staffing levels within each organization is also included.

MMSD Budget and the Veolia Contract

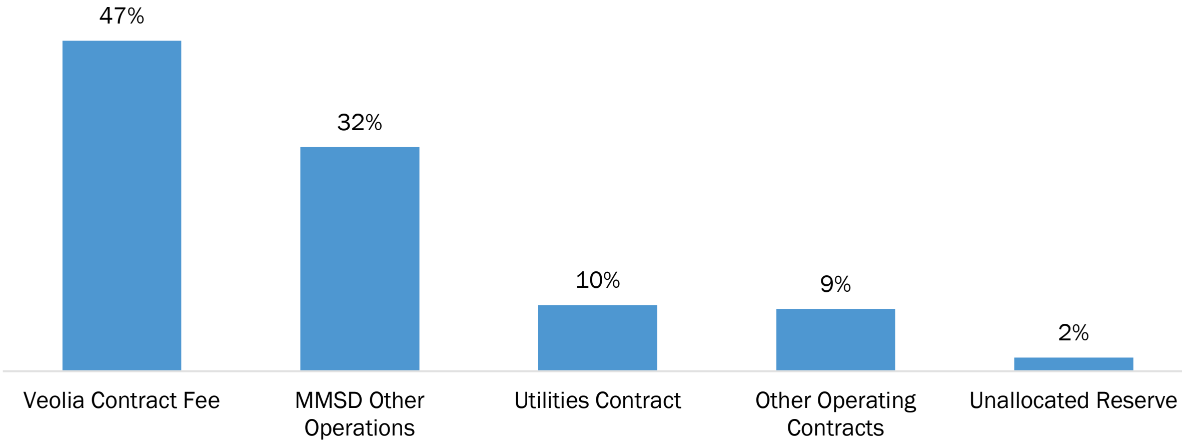
In 2022, $90 million (82%) of MMSD's $109.4 million in budgeted operating revenues are from user fee payments from the residents of member and non-member communities served by the district **(Chart 1)**. The second highest revenue stream comes from Milorganite fertilizer sales, at $11 million (10.1%), while the remaining 7.7% of operating revenues is supplied by a mix of smaller sources.

Chart 1: Budgeted operating revenues as percentage of total (2022)



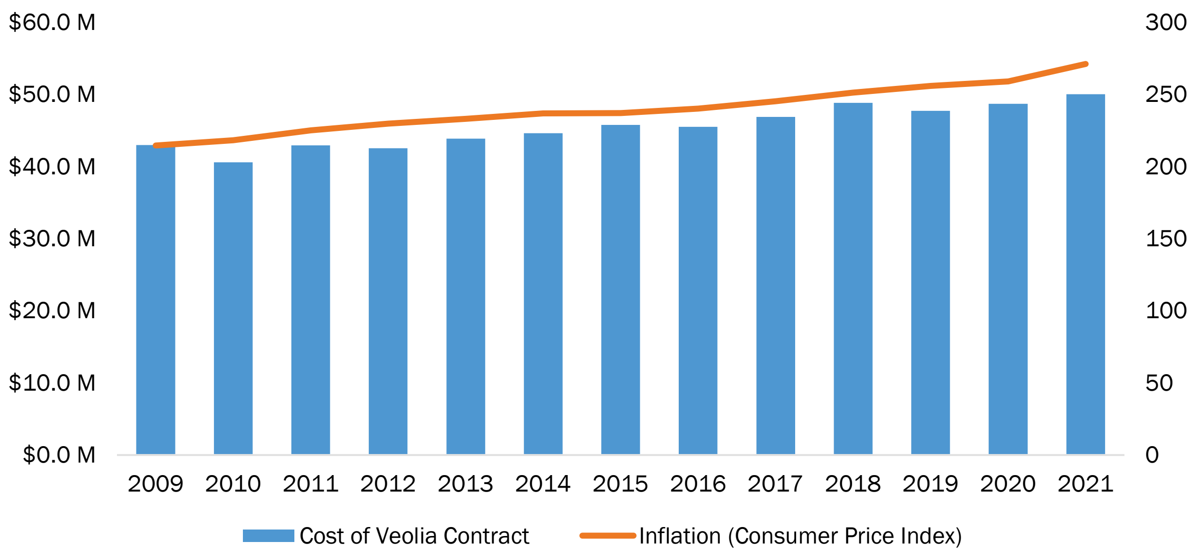
On the expenditure side, as shown in **Chart 2**, Veolia contract costs comprise nearly half (47%) of MMSD's budgeted operating expenses in 2022. However, it is important to note MMSD's operations include far more than the Veolia contract. Its operation costs for the sizable portion of its operations that it conducts on its own, including salaries and fringe benefits for its staff, account for 32% ($35.2 million) of operating expenditures. Utility costs account for 10% ($10.4 million) of budgeted expenditures, followed by other operating contracts at 9% ($9.8 million).

Chart 2: MMSD major budgeted expenditures (2022)



Still, at 47% of MMSD's operating budget, the contractual payment to Veolia obviously is a key item. **Chart** 3 shows that between 2009 and 2021, the payment rose by $7 million, or just 16%. As shown in the chart, that growth was well below the growth in inflation as measure by the Consumer Price Index, which rose 26% over that same time frame.

Chart 3: Annual MMSD payments to Veolia vs. Consumer Price Index, 2009-2021 (in millions)

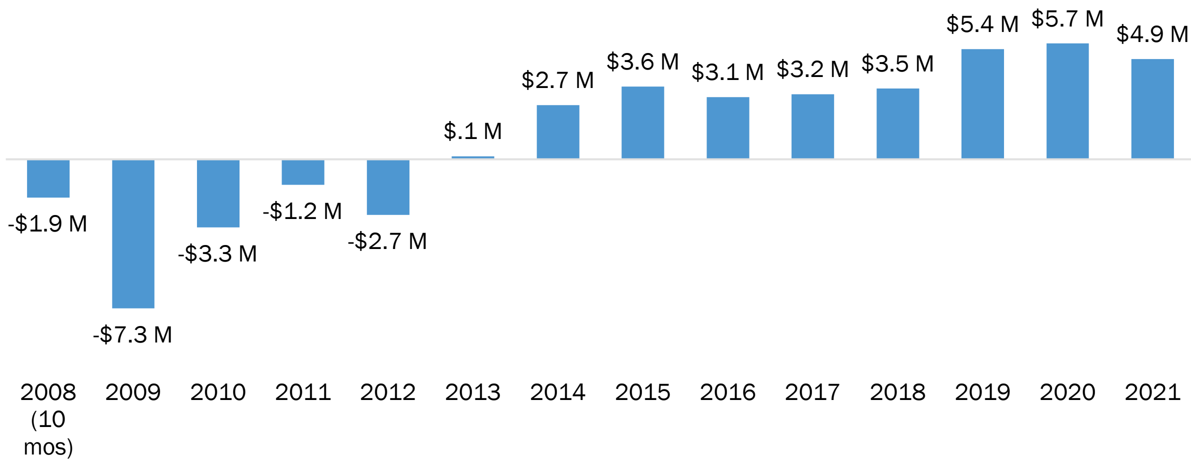


While Veolia has recognized some growth in its annual contract payments, **Chart 4** on the following page shows that the company suffered a net operating loss during each of its first five years running MMSD operations, with an annual net profit not realized until 2013.[5] Company officials say a number of factors played into the initial losses, including unanticipated events like chemical and utility price increases. Efforts to reduce chemical and utility consumption levels (while still meeting

[5] The figures in **Chart 4** come from Veolia's annual financial statements prepared by an independent auditor (Ernst & Young). The statements cite both a net profit/loss, which reflects the annual operating profit or loss; and a comprehensive profit/loss, which includes both net profit/loss and profit/loss from actuarial changes to post-retirement benefit liabilities linked to former MMSD employees for which Veolia is responsible. In this report, we use net profit/loss figures, which we consider to more accurately depict Veolia's actual operating margin each year. However, it should be recognized that Veolia's actuarial retiree benefit liabilities are a real obligation, although they are not recognized until payments are made.

performance requirements) helped Veolia begin to realize an annual profit by 2013, and that profit margin has been close to or exceeded $5 million in each of the past three years.

Chart 4: Veolia annual net gain/ loss, 2008-2021 (in millions)

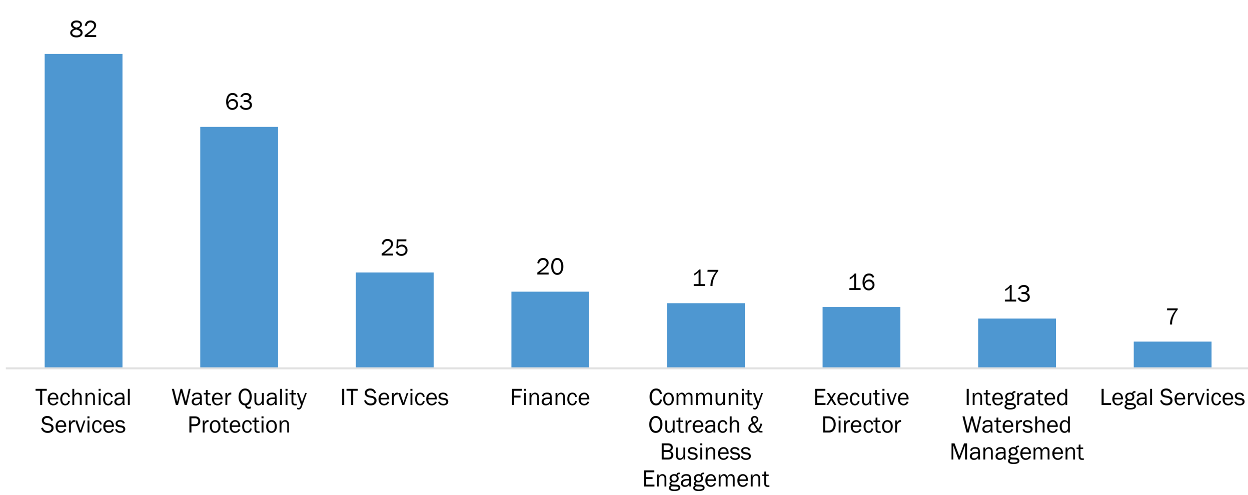


Because Veolia Water Milwaukee is part of a multinational company, any losses suffered by the Milwaukee operation potentially can be covered by the parent company. Also, it is difficult to precisely pinpoint profits and losses for the Milwaukee operation given that some overhead and administrative responsibilities are housed within the parent company and are not reflected in a corporate overhead payment that is built into the contract. Nevertheless, cumulative losses as shown by audits prepared for Veolia reached $16 million in 2013, although cumulative profits by 2019 had more than fully offset them (not adjusting for inflation).

MMSD and Veolia Staffing Levels

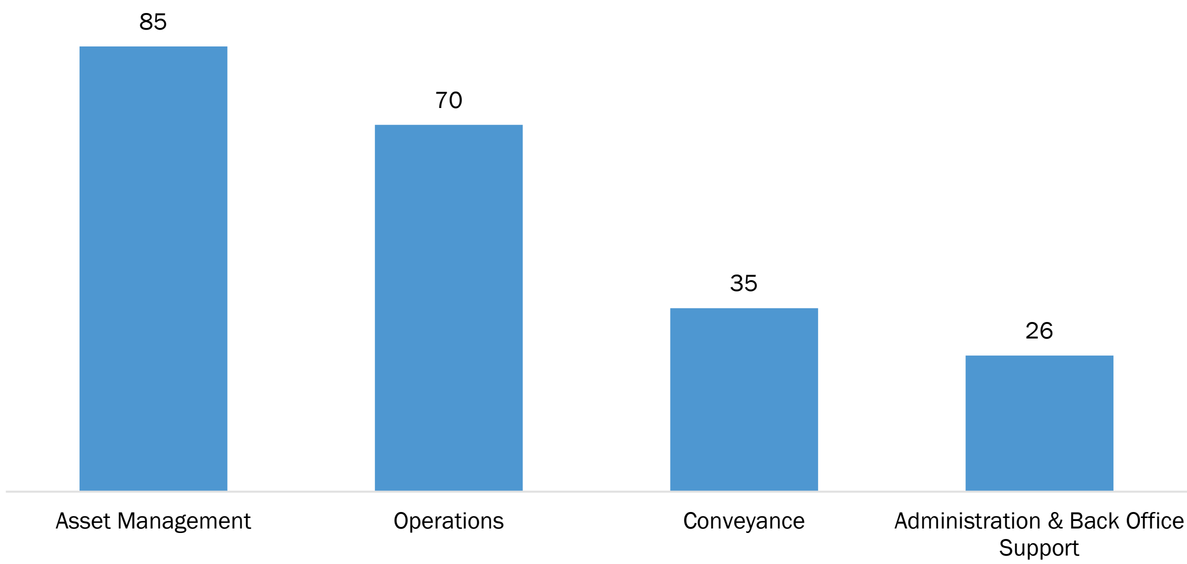
Chart 5 shows a position breakdown for each of MMSD's functional areas outside of the Veolia contract. The $35.2 million in budgeted spending for operations not handled by Veolia in 2022 supports 243 full-time equivalent (FTE) employees across MMSD's eight divisions.

Chart 5: MMSD budgeted positions by divisions, 2022



Under the current contract, Veolia is budgeted for 216 FTEs, with a breakdown of position categories shown in **Chart 6**. However, there are generally a handful of positions under recruitment at any given time and Veolia officials say they elect to fill three to four full-time positions not built into the contract to support various elements of operations. They also point to seasonal labor, interns, and individuals hired to staff a river skimmer and estimate that the number of budgeted FTEs in a given year may be as high as 227.

Chart 6: Veolia budgeted positions in the 2018-28 contract

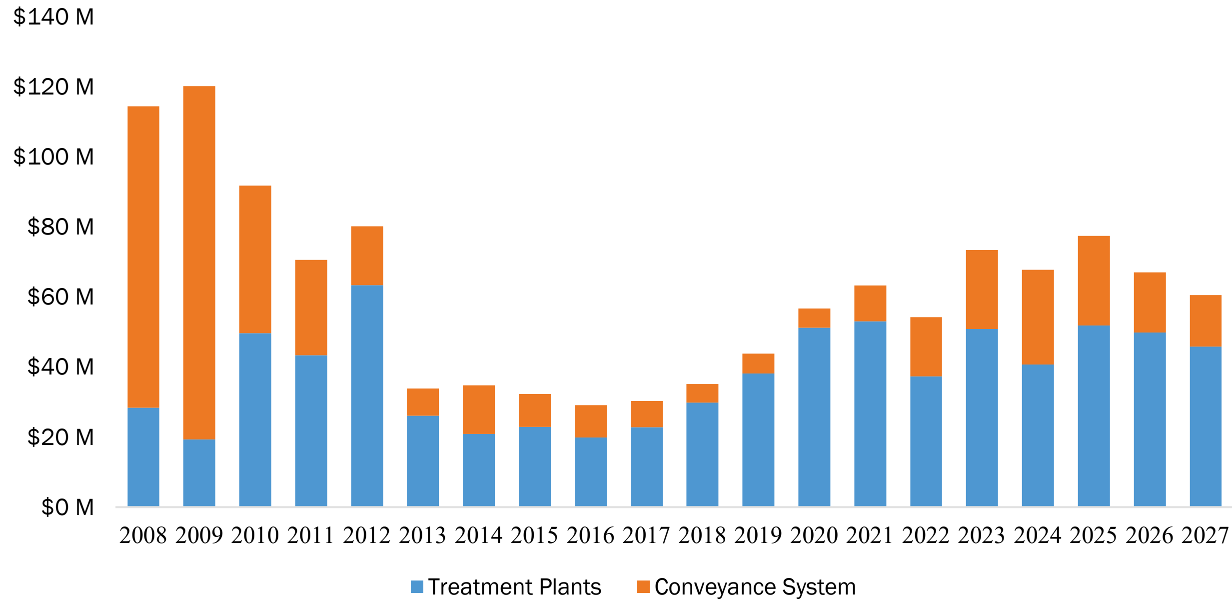


Capital and Maintenance Spending

MMSD is primarily responsible for financing and implementing major capital projects associated with the infrastructure that it owns but Veolia operates on its behalf. Those include the wastewater treatment plants and the conveyance system. These projects are completed using in-house staff or through contractors, one of which may be Veolia.

Chart 7 shows total capital spending on these operating system assets from 2008 through 2021, as well as estimated spending from 2022-2027 per MMSD's long-range capital improvement plan. Annual spending amounts have varied from year to year, reaching a height of $114 million in 2009 when a 27th St. Deep Tunnel Inline Storage System extension project and rehabilitation of the Central Metropolitan Interceptor Sewer System occurred. Both projects have a lifespan of 75 years. Looking forward, annual capital expenditures are anticipated to be between $54 million and $77 million from 2022 through 2027, largely due to equipment replacement needs at the treatment plants that are coming to the end of their 25-year life cycle.

Chart 7: MMSD treatment plants and conveyance system actual and projected capital spending, 2008-2027 (in millions)



Veolia previously paid for minor repair and replacement projects valued below $10,000 for equipment and assets that pertain to its contractual responsibilities. These projected costs were factored into the O&M fee in the 2018 contract extension. The company also contributed $10,000 toward the cost of larger material capital repair and replacement projects (MCRRs) and was then reimbursed through an MCRR reimbursement mechanism (the level and method of establishing the fee was changed in the 2018 contract).

Between 2009-21, Veolia spent $9.7 million in support of these larger capital projects. This amounts to only 1.3% of total capital expenditures during this period, but it also arguably gave Veolia an incentive to address minor maintenance needs before they required large-scale capital investment.

A contract amendment adopted this year does away with the MCRR payment and reimbursement fee and simply requires Veolia to pay for any repair or replacement projects that cost less than $25,000 while MMSD picks up the full cost of any projects that exceed that amount. Also, all labor costs will be included in the cost calculation, regardless of who performs the labor, and the definition of spare parts is clarified. The rationale for the change is the desire to reduce administrative burden and eliminate disagreements that previously arose between the two parties around whether in-house labor should be included within the $10,000 limit, as well as disputes over use of spare parts.[6]

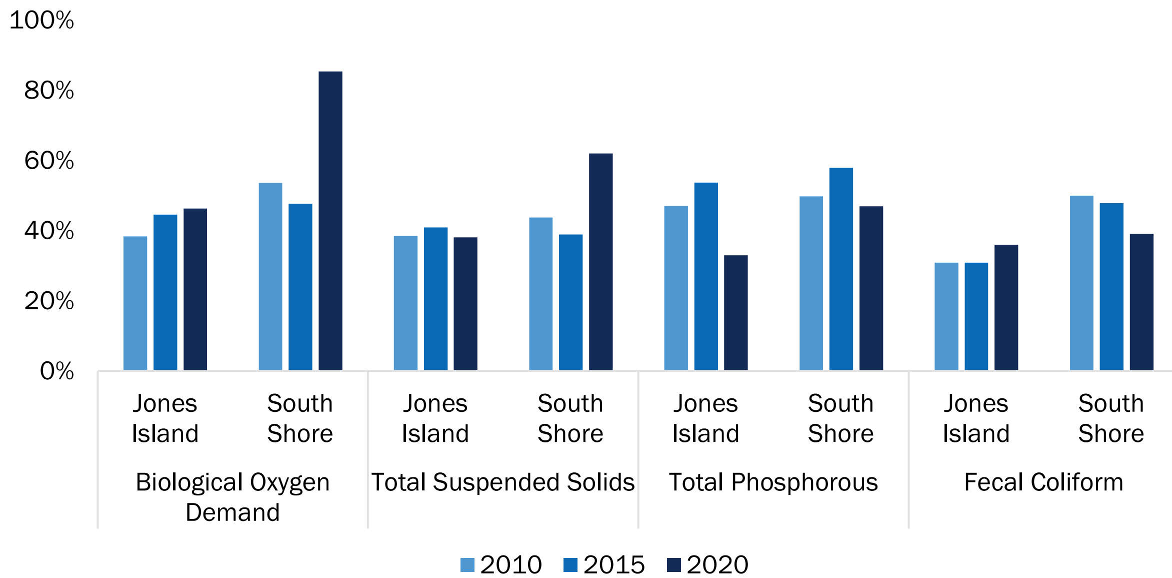
Operational Performance Trends

Per the contractual agreement, Veolia's performance on environmental matters generally is measured by its success both in meeting Wisconsin Department of Natural Resources (DNR) permit

[6] Spare parts are managed by Veolia but would be turned back over to MMSD should the contract be terminated or change hands after 2028.

standards and the considerably more stringent standards required by MMSD via the contract. **Chart 8** shows Veolia's annual average performance at the two water reclamation facilities in meeting the stricter contractual limits for four primary metrics pertaining to wastewater effluent that are regulated by DNR. These involve measurements of biological oxygen demand (BOD), total suspended solids (TSS), total phosphorous, and fecal coliform in plant effluent.[7] The percentages represent how close the presence of these materials came to the limit sets by the contract on average during the course of the year. Water quality tests are performed by MMSD staff.

Chart 8: Veolia water quality test results as a percentage of MMSD contract limits – 2010, 2015, and 2020 (annual average)



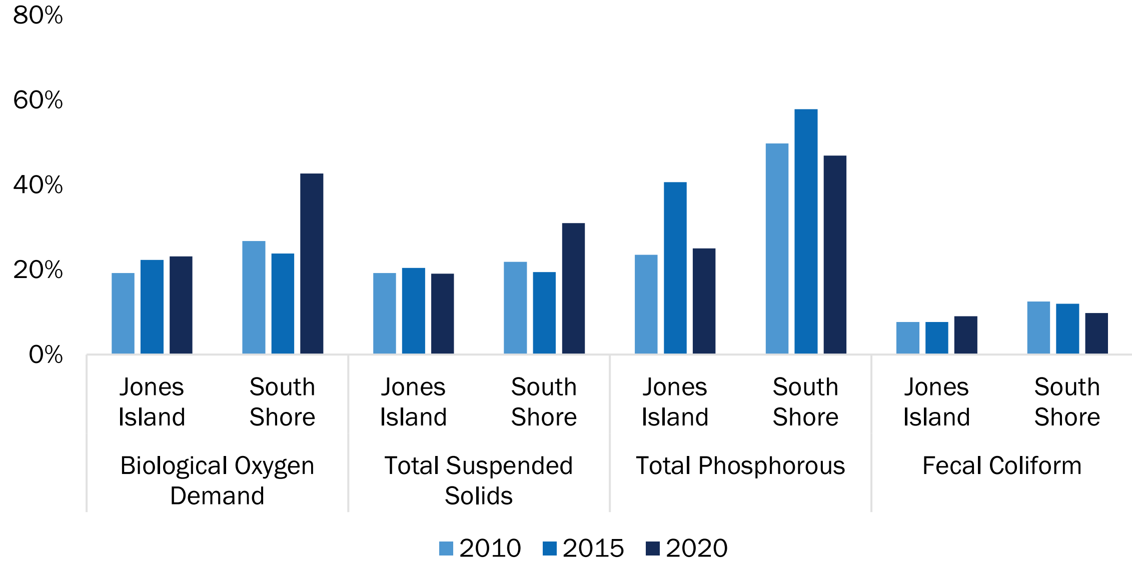
As shown in the chart, the performance of the two treatment plants generally has met the contractual standards by a considerable margin, though greater water quality issues have begun to emerge at the South Shore facility in recent years. In particular, 2020 saw relatively large percentage increases with regard to BOD and TSS test results over prior years.

In 2021, contract standards were breached a handful of times in the areas of BOD, fecal coliform, and phosphorous levels at the South Shore plant. However, MMSD did not levy fines to Veolia in those instances given that planned outages by MMSD were a contributing factor.

When the test scores are measured against permit limits set by DNR, Veolia's water quality performance looks even better. This is because, for the most part, DNR's limits are twice as high as those identified in the MMSD contract. **Chart 9** shows that in 2010, 2015, and 2020, water quality test results have generally been below 30% of the DNR standards. As with the previous chart, scores above 30% of the permit limit, and higher scores in general, tend to occur at South Shore.

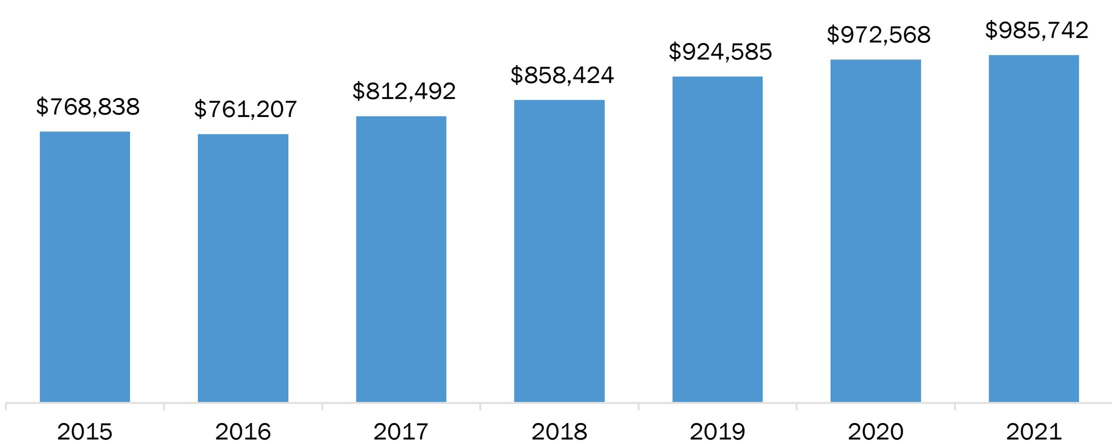
[7] Wastewater treatment standards are established to cap the amount of certain pollutants or other substances that are allowed in discharged wastewater. Further explanation can be found on the DNR website at https://dnr.wisconsin.gov/topic/Wastewater/WastewaterRules.html.

Chart 9: Veolia water quality test results as a percentage of DNR permit limits – 2010, 2015, and 2020 (annual average)



In addition to the notable difference in performance between the two wastewater treatment plants, the extent to which performance has crept toward contractual limits in three of the four categories from 2010 to 2020 is worth noting. MMSD officials note that as the numbers have moved toward contract and DNR permit limits, MMSD's costs have increased, as the district pays an annual environmental fee to the DNR based on a 5-year rolling average of water quality test results. **Chart 10** shows that since 2015, fees paid to DNR have grown by 28%, or $217,000, with the increase attributed to effluent quality results as opposed to changes in DNR's fee structure. Veolia officials say that recent challenges are caused primarily by increased organic loading in the wastewater coming into the plant. This issue may be resolved by two major capital projects the district is pursuing at the South Shore facility.

Chart 10: Annual MMSD payments to DNR for environmental performance



As fees have begun to rise, MMSD officials share that one of their few areas of contention with Veolia in recent years has related to the amount of chemicals used in the wastewater treatment process. Although Veolia is responsible for purchasing and using all chemicals and has clearly met DNR and contract standards, MMSD has at times suggested that additional amounts of ferric chloride should be used to achieve a higher level of treatment that MMSD staff feel is needed to appropriately maintain water quality. Veolia officials have disagreed with that assessment.

In light of this tension, and to remove cost concerns on the part of Veolia as a potential factor, the two parties recently reached agreement on a contract amendment that will have MMSD assume ferric chloride costs at the South Shore treatment facility (the annual line item payment for chemical costs also will be reduced based on the projected net impact). All other chemical costs still are the sole responsibility of Veolia. Should water quality test results begin to improve, then it is possible that MMSD's associated payments to DNR also could fall over time.[8]

[8] Though quite small in comparison to MMSD's fee payments, it should be mentioned that Veolia shares a portion of the fees. These are assessed based on effluent BOD and TSS levels. The fee is $48,000 per mg over 10 mg/L of BOD, and $48,000 per mg over 9 mg/L of TSS. This fee is unrelated to the environmental quality permit standards and fines previously described.

THE GENERAL BENEFITS AND DRAWBACKS OF PRIVATIZATION

The decision to privatize a government service is often contentious. This is particularly true for water and wastewater services, which many believe should not be subject to profit motives given their importance to sustaining public health. Since the 1990s, several municipalities across the country have privatized their water and wastewater systems, with varying degrees of success. This section provides a brief overview of the general benefits and drawbacks of privatization – gleaned through a review of national literature – and briefly reflects on MMSD's privatization experience in the context of other privatized wastewater operations.

Wastewater privatization can take a number of forms. A 2013 article in the *Journal of Law in Society* notes that these forms can include private provision of a narrow range of services or supplies (such as laboratory work or chemical provision); contracting for wastewater treatment plant and system operations as MMSD has done; contracting for the design, construction, and operation of a new facility; or the complete sale of wastewater operations and assets to a private company.[9]

MMSD's contract with Veolia is considered a public-private partnership form of privatization. While Veolia operates the entire wastewater system, MMSD retains a sizable staff and continues to play a prominent role in various operational aspects, as well as conducting other related activities including flood control and environmental protection. Also, the contract is structured according to IRS rules so that MMSD retains its tax-exempt status on municipal bonds that support capital investments related to the system infrastructure, which MMSD continues to own.

General Overview of Privatization

Often, privatization is promoted by its supporters as a means to increase a water or wastewater utility's operational efficiency and thereby reduce costs. In some cases, it is also seen as a way to shift responsibility for costly infrastructure maintenance and replacement needs to a private sector entity that may have greater workforce or technical capacity to perform the work at a lower cost. It can also be seen as a means of reducing or sharing the risk involved with operating costly and highly regulated infrastructure and systems, and as a way of tapping into the greater expertise of a private sector partner to address pressing technical challenges.

For some governments, privatization deals can provide an immediate short-term boost in revenues (particularly in instances where major infrastructure is leased to a private entity) – an opportunity that can be hard to pass up if they are facing budget shortfalls. Additional arguments in favor of privatization are more political in nature, as some suggest that the private sector operates more effectively and creatively than public sector entities, which must operate under bureaucratic rules and regulations that some argue are impediments to efficient management and operations. From the private sector's perspective, acquiring the right to provide public services like water and wastewater utilities has appeal given that they can be linked to consistent and growing demand.

There have been some well-documented examples of failed privatization efforts in which promises of greater efficiency and cost reduction have not panned out. In addition, for the wastewater industry,

[9] Mary Grant, "Water Privatization Overview: A Public Interest Perspective on for-Profit, Private Sector Provision of Water and Sewer Services in the United States, Journal of Law in Society 14(1), 2013.

the premise that competitive bidding will produce favorable contracts for governments is now challenged by the increased consolidation of potential bidders over the last several decades. In the 1990s, only a handful of major players existed. Primary among them were Veolia, United Water, and Suez. By early 2022, that list narrowed down to one: United Water was acquired by Suez in 2000, and Suez merged with Veolia Environnement in early 2022. A couple of other major players have emerged in the wastewater treatment market in North America over time, but given that competition remains somewhat limited, government providers of wastewater services are often one of the few sources of competition to private providers.

We conducted a broad scan of places that privatized operations of their wastewater systems over the past several decades and then took the operations back. Some examples include Atlanta, Georgia; New York, New York; Gladewater, Texas; Laredo, Texas; Edison, New Jersey; Gary, Indiana; and the Fairfield-Susan Sewer District in California. According to research we reviewed, concerns that contributed to decisions to take back operations include the following:[10]

- Large service fee increases for ratepayers
- Water quality concerns, including failure to meet environmental standards
- Lack of attention to repair and maintenance needs
- Large unforeseen costs, followed by a request by the private company for millions of dollars of additional support from the public sector entity as reimbursement
- Significant workforce reductions
- Employee safety concerns due to reduced workforce levels

MMSD's Privatization Experience

At the outset of this project, we were curious about the experience of other governments that had taken back the operations of their wastewater systems after privatizing them for some period of time. The premise was that if MMSD were to choose a similar path in future years, then this report could provide a handful of case studies that would offer insights into best practices for the takeback process.

However, we find that since partnering with Veolia, the types of contentious issues faced by other governments that chose to end contracts early or not to renew them either were not experienced by MMSD, or MMSD and Veolia officials were able to resolve them in a mutually amicable fashion. In other communities where takebacks occurred, the takeback process typically was initiated out of necessity, and often under strained or hasty circumstances. Conversely, MMSD's relationship with Veolia – while not without some tension – has remained largely positive and constructive. Consequently, we felt that past examples from other jurisdictions did not have immediate relevance to MMSD officials as they consider the future of the district's operations.

The strength of MMSD's contract with Veolia appears to be a primary explanation for its largely positive experience. The following is a list of strengths built into the contract, which become apparent when comparing the MMSD-Veolia partnership with the privatization failures we observed in other places:

[10] Sources for this summary include https://foodandwaterwatch.org/wp-content/uploads/2021/03/Suez-Report-May-2010.pdf, www.remunicipalisation.org and https://www.inthepublicinterest.org/wp-content/uploads/ITPI_WaterPrivatization_July2020_final.pdf.

- A limited, 10-year contract term
- Monthly reporting requirements on the part of the private contractor
- Retention of infrastructure ownership by the government
- An in-house engineering and legal team dedicated to monitoring the contract
- In-house water quality testing and monitoring
- Strict water quality standards and financial penalties for the private contractor when environmental standards are breached
- Collaboration with the private contractor for public education efforts
- Limits on annual operating cost increases
- In-house customer billing
- Incentives to attend to smaller capital repair and replacement needs

It should be noted, however, that while the contracts have been refined over time, each successive 10-year contract has diminished the favorability of financial terms for MMSD. One notable example is the change from MMSD paying no energy costs in the 1998-2008 contract to assuming 75% of those costs beginning in 2008 and then essentially covering the full amount through annual fee adjustments per the 2018 contract extension.

Still, our review of deliberations over each successive contract indicates that MMSD has continued to recognize at least some financial benefit. Moreover, the benefits of risk reduction have been apparent. For example, the cap on annual O&M fee increases gives MMSD leaders reasonable assurance that annual increases in their largest expenditure line item will not exceed the rate of inflation, shielding them for a multi-year period from sharp increases in areas like health care or pension costs that have been experienced by other large governments in Milwaukee and allowing for better budget planning. Moreover, this provision has become increasingly advantageous in light of the high inflationary climate experienced this year and possibly in future years.

There are also intangible benefits associated with "handing over the keys" to a private operator. For example, MMSD's leaders have been relieved of the burdens of human resources management for hundreds of employees as well as the complexities associated with managing day-to-day wastewater treatment operations. As a result, those leaders arguably have had greater capacity to focus on larger flood control and environmental initiatives, including integrated watershed management and climate change adaptation and mitigation.

Even with a strong contract, however, some downsides are evident. For instance, MMSD officials say the agency spends considerable time and resources ensuring contract compliance and deliberating with Veolia over the appropriate interpretation of certain contract terms. Some of those negotiations extend for several months or even years, creating a limbo over who is financially responsible for specific activities that have already occurred or are ongoing.

Officials also dismiss the notion that they have benefited significantly from Veolia's global expertise on wastewater treatment, pointing to disagreements they have had with Veolia regarding the use of chemicals in the wastewater treatment process and expressing confidence in their own expertise. They argue further that Veolia's decision-making must elevate considerations of cost and profit to a greater level than would be necessary if MMSD was solely in charge of its treatment operations.

Veolia officials, meanwhile, point to a number of elements in the partnership that have benefited MMSD but often are not acknowledged. Examples include a large network of administrative resources in areas like human resources and information technology that support the company's work but are not fully reflected in the contract. The company also stresses the value of its track record for employee safety (a point on which district officials concur). For example, there were no safety incidents in nearly two years working through the pandemic. Finally, Veolia officials attest that the technical expertise they provide is invaluable and could not be replicated under a takeback scenario without significant cost.

Just as there are benefits and drawbacks to privatizing operations, moving operations back in house would come with a different set of pros and cons. The next section details these considerations as MMSD considers whether to extend its contract with Veolia beyond 2028, put the contract out for bid, or resume operations once more.

TAKEBACK CONSIDERATIONS

In the months preceding the end of the past two 10-year contract periods in 2008 and 2018, MMSD officials conducted detailed financial analyses that compared projected fiscal impacts under various scenarios. A private consultant (Brown and Caldwell) was hired to conduct the 2016 analysis that was performed prior to the decision to extend the Veolia contract for another 10 years.

The crux of these analyses was line item comparisons that allowed policymakers to see the differences in projections for key expenditure items between either competing contract proposals (in the case of the 2008 discussion) or a takeback scenario versus a continued outsourcing scenario (in the case of the 2016 discussion).

While it is far too early to perform accurate cost projections and comparisons between a takeback scenario and continuation of the Veolia contract in 2028, this section provides a summary of the last takeback cost analysis and the key factors that will be most important for MMSD officials and commissioners to consider as 2028 draws closer. We begin the analysis exclusively with a fiscal lens but then also summarize key non-fiscal considerations.

2016 Takeback Analysis and Review in Today's Context

In 2016, two years before the end of Veolia's first contract period with MMSD, the company submitted an extension cost proposal to MMSD. MMSD's consultants and district financial staff used that proposal as a point of comparison with a takeback scenario for certain key items that feed into the annual O&M fee and other related fees paid to Veolia by MMSD.

Table 3 provides a snapshot of that analysis, which was presented to the MMSD commission in June 2016 and was based on the consultant's initial analysis plus supplemental work performed by MMSD staff. Though the contract is set for 10 years, the snapshot shows a comparison of estimated annual costs. It indicated that Veolia's proposal would produce an estimated annual savings for MMSD (and its ratepayers) of about $234,000 compared to a takeback scenario.

Table 3: One-year Cost Analysis for 2018 contract extension (2016)

Cost Category	Proposed VW Extension 2018-28	Takeback 2018-28
O&M Fee:		
Labor (salaries and wages)	$19,071,455	$19,187,129
Fringe Benefits	$8,212,183	$11,013,760
Chemicals	$3,234,386	$3,234,386
Operating Expenses (supplies, materials, etc.)	$462,885	$462,885
Maintenance, Repair, Replacements	$5,537,499	$6,576,499
Insurance	$974,746	$1,143,000
Corporate Overhead	$2,765,752	$0
Miscellaneous Other	$1,343,507	$2,351,954
Subtotal of all O&M Cost Items	**$42,550,032**	**$44,917,233**
Margin (5%)	$2,239,475	$0
Subtotal O&M Fee	**$44,789,507**	**$44,917,233**
MCRR & Utility Fees	$3,193,750	$3,400,000
District Take-Back Risk Factor (5%)	$0	$2,415,862
Total Service Fee	**$47,983,257**	**$50,733,094**
Additional Budget Impacts:		
Maintenance Transfer*	$1,039,000	
Fees, permits, misc.**	$1,507,000	
Total Budget Impact	***$50,529,000***	***$50,733,000***

** The maintenance transfer offsets the projected cost increase seen in the Maintenance, Repair, Replacements line under the Takeback scenario– it reflects the fact that under the original extension, MMSD reimbursed Veolia for its costs related to MCRRs and the expectation that the takeback of MCRR responsibilities would be cost neutral for MMSD.*
*** These include fees for various permits and inspections, landfill gas costs, and other minor cost items that would transfer back to MMSD under a takeback scenario, but that also needed to be added back to the Veolia side of the ledger because they are reimbursed by MMSD.*

Because we lack a contract extension proposal from Veolia for the 2028-2038 period and because several factors could change significantly in the more than five years that would elapse before initiation of a new contract, it is not possible for us to conduct a detailed line item analysis like this one. However, a line-by-line review of the 2016 analysis is instructive in considering the financial implications of a possible takeback scenario in 2028.

Below, we provide such a review of the line items we consider to be most significant in upcoming takeback deliberations, adding perspective derived from our discussions with MMSD and Veolia officials and factors that have materialized since the 2016 analysis was performed.

Salaries and wages

It is impossible to predict how quickly and by how much wages and benefits will need to increase between now and 2028 in light of an historically tight labor market and extreme levels of inflation. That is not the key question here, however, given that those increased costs would need to be borne either by Veolia or MMSD after 2028. Instead, the key question with regard to a takeback analysis is whether MMSD's staffing levels would be much different from Veolia's, and whether its salary and wage levels would be materially different.

The 2016 takeback analysis assumed that all 221 Veolia employees would transfer to the district and would receive approximately the same salaries and benefits as they were receiving prior to the transfer. The analysis further assumed that eight MMSD positions in the Office of Contract Compliance would no longer be needed and would be eliminated under a takeback, but that 20 new positions would be added over the course of 10 years as MMSD got back into the practice of operating the treatment facilities and discovered the need for at least some new personnel. The net result was that the salary and wages line item under the takeback scenario was estimated to be about $116,000 higher on an annualized basis.

We revisited those assumptions with MMSD officials and they perceived them to still be broadly accurate. They added that there was some uncertainty regarding the transfer of management positions, however, because Veolia has a bonus structure and it is not clear whether and how that might need to be replicated (or replaced with higher salaries) by MMSD. Also, most of the positions that would be transferred are unionized positions at Veolia but may not be under MMSD;[11] however, MMSD officials feel that should not be a deterrent to convincing most workers to transfer as long as salary and benefit levels are comparable, which would have to be the case given MMSD's need and desire to retain front-line staff.

Bottom line: It is highly speculative to project whether most Veolia workers would transfer to the district and what a loss of union membership or certain collective bargaining rights might mean to them, but the overriding premise that salary and wage levels would be similar for the two entities and that there would be a relatively small increase in net positions under the takeback scenario appear reasonable. ***Thus, because of a likely small net increase in the number of positions, this is an area where there may be a minor financial disadvantage for MMSD under a takeback scenario***.

Fringe benefits

This is the area that was most disadvantageous to MMSD in the 2016 takeback analysis and it holds potential to be even more disadvantageous in 2028. The added cost under a takeback scenario is largely linked to retirement benefits (both pension/401k and retiree health/life insurance), as opposed to health care benefits for active employees. For the latter, the 2016 takeback analysis assumed that the 200-plus workers who would transfer to MMSD would receive comparable health care benefits with similar costs. However, post-employment benefit costs would change substantially.

Currently, MMSD staff are part of the City of Milwaukee Employees' Retirement System (ERS), while Veolia employees can opt to participate in the company's 401k plan. According to the 2016 takeback analysis, the Veolia workers who would be transferred received an average employer matching contribution of 3.5% for their 401k. Under a takeback scenario, they would transition to ERS, which requires both an employee and employer match based on a percentage of their salary.

[11] Per Wisconsin Act 10, which was adopted by the Wisconsin Legislature and Governor in 2011, collective bargaining for most public sector unions generally is limited only to wages, and total wage increases generally cannot exceed a cap based on the rate of inflation as measured by the Consumer Price Index. A majority of the workers also must vote to recertify their union each year, with non-voting workers effectively counted as a "no" vote. Consequently, it is uncertain whether operations and maintenance workers under a takeback scenario would be represented by a union.

That employer match – which MMSD must pay for its own workers who are part of ERS – is currently 8.77% of salary but likely will increase substantially for 2023-2028.

The city's annual ERS employer contribution is projected to grow from about $80 million in 2022 to more than $120 million next year and continue at that level for the following four years. As a result, MMSD's own employer contribution to ERS almost certainly also will increase substantially – thus creating an even bigger gap between the amount the district would need to pay as an employer contribution for the transferred employees and the percentage currently paid by Veolia for the 401k match.

Compounding the pension disparity would be post-employment health care and life insurance benefits (also known as Other Post-Employment Benefits, or OPEB). MMSD offers some OPEB benefits (mostly related to retiree health care) to its workers while Veolia does not, which means MMSD would assume a liability for each transferred employee that is not currently borne by Veolia.[12] The 2016 takeback analysis estimated the annual cost of that liability to be about $1.9 million, and it would be logical to assume that it would still be in that range if estimated today (a full actuarial analysis would be required to calculate a solid estimate).

Bottom Line: The 2016 takeback analysis estimated that MMSD would incur an annual estimated added cost of $2.7 million for ERS and OPEB combined if it reassumed operations. Given the huge increase in the employer contribution anticipated for ERS, that gap likely would be considerably larger when a takeback is considered for 2028. ***This is perhaps the biggest area of potential financial disadvantage for MMSD from a takeback scenario***.

Chemicals

The use of chemicals in the wastewater treatment process is essential to operations and to meeting water quality standards. This has been a point of growing contention between MMSD and Veolia, with disagreements emerging about the amount of various chemicals to be used and who should pay for any increases. MMSD officials have argued for greater use of some chemicals, which would increase costs for Veolia, and Veolia's resistance to this suggestion has been attributed to cost concerns; Veolia officials counter that their expertise dictates decisions on chemical usage and that the increases advocated by MMSD have not been warranted from a scientific perspective.

The current contract includes a line item for chemicals that is folded into the O&M fee paid by MMSD to Veolia. That is an estimated amount, which means that Veolia has borne the risk associated with chemical cost overruns, but the company also recognizes a benefit if chemical costs come in below projected levels. According to Veolia officials, chemical costs have increased substantially in recent months in light of inflation and supply chain issues and it is beneficial to MMSD that the company is picking up those increased costs.

The 2016 takeback analysis assumed that chemical costs would be the same ($3.2 million) regardless of which entity operated the wastewater treatment facilities. Veolia likely would challenge that premise, as officials believe their ability to use the parent company's global procurement apparatus yields cost reductions that MMSD could not obtain on its own.

[12] MMSD placed new limitations on its OPEB benefits in 2002 for newly hired non-represented employees and extended those limitations to all newly hired employees beginning in 2012.

This point may now become partially moot. As previously mentioned, the contract was recently amended to specify that MMSD will begin directly reimbursing Veolia for the cost of a key chemical in the treatment process (ferric chloride) at the South Shore facility in response to disputes over the appropriate amount of chemical usage and in an effort to remove cost considerations from the equation. However, according to Veolia officials, more than 80% of chemical costs still will be originally assumed by the company.

Bottom Line: Veolia's ability to negotiate lower costs for chemicals than MMSD cannot be verified, but its current assumption of risk for cost overruns over the amounts projected in the contract is real and would disappear if MMSD takes back operations. It is also likely that the increased chemical prices Veolia is currently paying and projects paying in the future would be worked into the O&M fee in the next contract. ***Consequently, we consider this to be a minor potential area of fiscal disadvantage for MMSD but also a potential area of increased risk if its takes back operations.***

Corporate Overhead

An important factor for MMSD in considering the takeback option is what it would take to provide the additional human resources and "back office" administrative support for the 200-plus employees and major operational elements that would fall under MMSD's purview. Theoretically, this may be an area where contracting for services holds an advantage, as Veolia is able to tap into a large human resources (HR) and administrative infrastructure held by the parent company and use that infrastructure to service the Milwaukee contract. Among the services provided are not only HR (including payroll, benefits administration, labor relations) but also functions like accounting, risk management, information technology, and procurement.

While the company charges MMSD for use of that infrastructure as a corporate overhead line item that is built into the O&M fee, it is possible that the amount charged reflects economies of scale possessed by Veolia that could not be replicated as readily by MMSD (though it does possess an HR and back office infrastructure that already supports more than 200 employees). The 2016 takeback analysis cited an annual corporate overhead cost of about $2.8 million, which was based on a charge of 6.5% of total O&M costs. That cost undoubtedly would be much higher in 2028, but the key question is how would it compare to MMSD's cost to provide similar services on its own. Also, it should be noted that according to MMSD officials, an analysis conducted in 2016 indicated that Veolia's overhead charge was in line with other such similar contracts nationally.

The assumption (noted earlier) that MMSD ultimately would need to add 20 positions above the direct transfer of the 200-plus operations positions takes into account, to some extent, the need to accommodate this overhead. But Veolia officials point out that they dedicate 18 HR, health and safety, and other back office staff in Milwaukee to the MMSD contract, while they also tap into separate back office and IT personnel at offices in Wauwatosa and Greenfield and at the U.S. corporate headquarters in Boston to support the contract.

Another issue is quality – could MMSD obtain similar HR, IT, procurement, and other expertise on its own and to what extent would its services and costs be impacted if it could not? Yet, on the other hand, MMSD officials argue that Veolia's corporate overhead may have somewhat higher costs given the higher price of office space, salaries, benefits, etc. at its Boston headquarters.

Bottom Line: It is not yet possible to compare the cost of corporate overhead that would be charged by Veolia in 2028 to the cost that would need to be incurred by MMSD to replicate overhead services. Intuitively, one would imagine that Veolia's ability to tap into a large administrative infrastructure that already exists at the parent company would produce a lower cost and greater expertise, but Veolia's salary structure and its own overhead costs would need to be taken into account. ***Overall, we consider this to be a minor area of potential financial disadvantage for MMSD under a takeback scenario.***

Margin

Elimination of the profit margin built into the O&M fee by Veolia represents the largest single area of potential financial advantage for MMSD in considering the takeback scenario. As we discussed in an earlier section, that profit margin has not always been realized by Veolia, and it is assuming a level of risk every year given that unanticipated increases in areas like chemicals or staff recruitment and retention could eat into or eliminate the profit in any given year.

Nevertheless, the fact that this is a direct 5% add-on to the O&M fee (totaling $2.2 million in the 2016 analysis) means that it would "come off the top" under a takeback scenario and produce an immediate comparative savings. Moreover, while Veolia assumes risk each year that the anticipated profit will not materialize, it also enjoys a potential benefit should actual costs fall below projections. Indeed, as shown earlier, Veolia's annual net profit has hovered near or above $5 million in each of the past three years. Currently, that potential benefit accrues only to Veolia, but under a takeback scenario both the risk and potential benefit would fall to MMSD.

Bottom Line: MMSD's ability to eliminate a profit margin should it take back operations from Veolia represents a tangible potential benefit for the district and its ratepayers. How much of that savings would be offset by increased costs in other areas and increased risk is a key question mark, ***but overall this represents the largest potential financial advantage of a takeback for MMSD.***

Takeback Risk Factor

In light of the many uncertainties surrounding a potential takeback scenario – including unanticipated staffing and overhead needs, capital and maintenance expenses, etc. – MMSD officials built a 5% "risk factor" into the 2016 takeback analysis, which was valued at the time at $2.4 million. Essentially, this risk factor fully offset the savings anticipated from the removal of Veolia's profit margin.

This was a justifiable move by MMSD officials that presented the takeback comparison in a way that they felt would appropriately represent the increased risk that MMSD would assume and the inability of the district to precisely project what its cost of operations would be. However, it should be noted that it skewed the analysis in Veolia's favor at the time, as without it the comparative analysis would have shown about a $2.2 million annual financial benefit for the takeback, as opposed to the $200,000 financial benefit for the retention of Veolia as shown by the actual analysis.

Bottom Line: We believe that incorporating a 5% risk factor was the correct move, but we would note that some element of risk also was built into the estimated financial impacts of major line items discussed above. On the other hand, given that MMSD has not had direct experience operating its treatment facilities for more than two decades, it is difficult to predict what unanticipated costs may arise. ***We cannot opine on whether the incorporation of a 5% risk factor would pose either a potential minor financial advantage to MMSD or a minor disadvantage under the takeback scenario, as it is impossible to predict whether the 5% figure may be conservative in nature.***

Non-Fiscal Takeback Considerations

If takeback deliberations involved only a financial analysis, then the decision in the months leading up to 2028 would be relatively simple. MMSD officials – perhaps with consulting assistance – would again develop their best estimates for the costs associated with taking back services and compare those to Veolia's next 10-year contract proposal and/or bids received by other parties under a competitive bidding process. Whichever option came out on top financially would be the winner.

In the real world, however, several non-fiscal considerations must be taken into account, most of which are not quantifiable from a dollars-and-cents perspective. Below we briefly discuss those considerations that we deem most important and relevant.

- **Inflation and supply chain issues** – As noted above, Veolia officials say inflation and supply chain issues have caused chemical costs to skyrocket, but those issues are creating challenges that go beyond chemicals and cost. They impact the cost and timing of repairs and maintenance and even extend to the company's ability to provide office supplies and IT support on a timely and cost effective basis. It is impossible to predict whether these issues will exist in 2028, but it is worth noting that when it comes to MMSD's day-to-day wastewater treatment operations, Veolia currently has the first responsibility to address them and not MMSD. An advantage of outsourcing any major element of an organization's operations is that if the contract is structured correctly, day-to-day operational challenges that may result from uncontrollable societal circumstances often fall first to the vendor. In this case, that vendor is a large international company that may possess greater capacity to address such challenges than MMSD.

- **National worker shortage and human resources** – Worker shortages have emerged as a critical economic challenge both locally and nationally, and they are unlikely to significantly abate in the next few years given Wisconsin's aging population. Again, today those challenges are Veolia's, as it is responsible for ensuring there is a sufficient workforce to meet contractual obligations. MMSD officials also note that in the early months of the pandemic, Veolia was able to quickly and effectively implement COVID-related health and safety protocols by tapping into the expertise of its global HR staff; this amplifies the point that a large international company with a sizable HR operation may be better equipped to address the complex HR challenges and responsibilities that exist today, which take on increased importance when labor markets are tight.

- **Environmental standards** – Veolia has almost always adhered to and surpassed environmental standards set forth by the DNR, as well as the narrower limits contained in its contract with MMSD. Yet, in recent years, DNR fees have been slowly rising as effluent testing scores have declined. For example, from 2015-21, fee payments rose by $217,000 (28%). While MMSD officials do not question Veolia's environmental expertise and integrity, they suggest that the profit motive of a private contractor can influence decision-making to some extent and that an advantage to bringing operations back in house would be to reduce the impact of cost and profit on decisions that pertain to environmental quality and standards. They also attest that they have and can build the in-house technical expertise to handle the job effectively.

- **Maintenance and repairs** – The Veolia-MMSD contract has traditionally provided incentives to Veolia to encourage timely routine maintenance and repair activities that would lower the risk of larger capital repairs. A recently adopted contract change alters those incentives, but both parties generally agree that Veolia has responsibly addressed maintenance and repair needs over the years. MMSD clearly would have even greater incentive to act proactively and responsibly on maintenance and repairs than Veolia if it takes back operations given that it owns the capital assets, but whether it would be able to match Veolia's capacity to do so is a question mark. On the positive side, by taking back operations MMSD would eliminate the need to negotiate with Veolia over whether certain maintenance and repair projects are deemed Veolia's responsibility or the district's.

- **Managerial time and capacity** – An unquestionable non-financial benefit enjoyed by MMSD's top managers (including its executive director) has been their ability to leave the day-to-day responsibilities and headaches associated with the district's vast wastewater treatment operations and 200-plus staff members to the private vendor. This has freed up capacity to focus on other elements that are critical to MMSD's mission, like flood control, watershed management, climate change, and other environmental activities. In fact, arguably, those elements have risen to the forefront of MMSD's mission, in part, *because* of the outsourcing decision and the high-level staff capacity it freed up to focus on larger priorities. An offsetting factor is that minor contract issues and disputes that have arisen with Veolia on a relatively frequent basis have taken significant managerial time to negotiate and resolve (though not necessarily that of the executive director), and the absence of a contract with a private vendor would free up time currently spent by senior staff on those matters.

- **Start-up and uncertainty** – There would undoubtedly be certain start-up costs that would be experienced by MMSD under the takeback scenario, though it is possible those would be covered by any Takeback Risk Factor in a future financial analysis. Beyond financial impacts, however, are a variety of start-up operational problems and challenges that MMSD officials may not be able to predict and that may require considerable managerial time and effort to resolve. MMSD has lost institutional knowledge of the wastewater operating system over the last 24 years since it first privatized operations, and re-gaining that knowledge would be an immediate challenge even if the bulk of Veolia's existing workforce is retained. Veolia's very strong record on employee safety also should be noted, as achieving similar levels would need to be an immediate priority for MMSD.

- **Community benefits** – Veolia officials point to the company's contributions to the community, including its financial contributions to water quality research efforts, involvement with water quality education efforts through the *One Water, Our Water* multi-stakeholder initiative, and its active participation in efforts to support development of a pipeline of future wastewater industry workers, particularly from underserved communities. If Veolia's Milwaukee operations cease to exist, then those contributions may be lost. On the other hand, while Veolia has been an active partner in workforce development issues, MMSD officials point out that Veolia never knows if it will be in Milwaukee for more than 10 years and, consequently, its focus on hiring and retaining younger workers who can grow with the company over time may not be a priority but would be if MMSD was in charge of operations. Veolia officials disagree and attest that it is in their best interest to attract a young, diverse workforce because their goal is to continue handling operations beyond the length of any existing contract.

Overall, there are both financial and non-financial elements of the takeback decision that are impossible to quantify at this time but that will be paramount in making a takeback decision a few years from now. Those elements have been briefly summarized in this section. In the next section, we offer some concluding thoughts on the decision-making framework.

INSIGHTS AND CONCLUSION

Despite the prominent role of science in MMSD's wastewater treatment operations, the decision on whether to take back those operations will be far from scientific. In addition to assessing quantifiable factors like cost and performance, MMSD's leaders will have to consider murkier issues involving risk, managerial capacity and priorities, and the district's vision for the future.

Our high-level assessment of MMSD's privatization framework does not yield a firm conclusion, which is understandable given the early stage in which it was conducted and the fact that we do not yet know the features of Veolia's next contract proposal. However, it does produce the following key insights that should help to better frame the decision-making process for MMSD administrators and commissioners.

- **Cost is a critical factor in the decision-making process but the cost calculus has changed.** The *importance* of cost considerations has not diminished, but the potential financial "spread" between a takeback scenario and a third Veolia contract has diminished over time as contract provisions have changed that have arguably made outsourcing less financially advantageous for MMSD. This statement is not intended as a critique of either MMSD or Veolia – it largely reflects lessons learned by the company that justifiably have been reflected in successive contracts and contract amendments. However, because of adjustments to the O&M fee each year to reflect the previous year's actual experience in areas like energy costs and capital maintenance, as well as the delineation of operating margins in the contract, Veolia is assuming less financial risk with regard to unforeseen costs and (prior to this year) its recent profit margins have been in the $5 million range. That, in turn, means that MMSD would assume less financial risk in taking back operations and may have higher potential to benefit from elimination of a profit margin. However, this would only be the case if MMSD's labor costs are somewhat comparable to Veolia's.

- **While MMSD's shift of financial risk to the private operator has diminished, the shift of other risks has grown in importance.** No one could have predicted the human resources and supply chain issues that have materialized over the past year, and it is now impossible to predict how long they will continue. Still, MMSD clearly is benefiting from having staffing responsibilities and much of the onus for purchasing chemicals and supplies borne by Veolia. Not only is this a benefit for MMSD managers, who are relieved of the headache of addressing these issues, but it also arguably benefits the district as a whole given that Veolia may be better equipped as a large multinational corporation to address them. Also, notwithstanding our discussion above regarding financial risk, there is certainly value to MMSD in knowing that future annual O&M fee adjustments will be capped to at least some degree. The "soft" cap is 3.5%, but that number will be adjusted based on any real increase in the blended index that exceeds 5.5%. The bottom line is that MMSD's exposure, in an inflationary environment, is reduced by two percentage points from the actual rate of inflation as measured by the blended cost index.

- **There is considerable value to MMSD's senior leaders in not having to deal directly with operations.** It is not only MMSD's day-to-day managers who are largely relieved from the substantial human resources and supply chain challenges that are impacting its wastewater treatment operations, but also its senior leaders, who are responsible for helping to establish and ultimately implement the district's long-term goals and vision. Those goals and that vision have expanded dramatically in recent years to encompass watershed management and environmental protection in a way that may not be typical of most wastewater treatment agencies. There is no way to prove that this important evolution has taken place because MMSD's director and his leadership team are not consumed with treatment plant operations. However, our interviews and previous work analyzing the finances and performance of MMSD lead us to conclude that senior leadership capacity to pursue loftier environmental goals could be diminished under a takeback scenario.

- **Is now the time?** At a time of historic economic turbulence and intense employee recruitment and retention challenges, it is logical to ask whether now is the time for MMSD to consider a takeback given the importance of workforce stability and the protections offered by the contract with regard to the impacts of inflation and procurement difficulties. Of course, whether these challenges will be as severe in 2028 is unknown, although workforce challenges are unlikely to significantly dissipate given the state's aging population. Asking whether now is the time also is appropriate with regard to MMSD's prioritization of activities "to prepare for and mitigate the impacts of climate change," an endeavor that is growing in urgency every year and that may not receive as much attention if wastewater treatment operations are brought back in house. Finally, any major transition such as this one would bring a variety of other potential risks, from attempting to hire back Veolia staff to handling issues with the union currently representing them and the other administrative and IT hurdles that could surface. Handling such a transition without any hiccups would be an impressive feat.

- **Is the growing frequency of contractual disagreements an indicator of an increasingly unhealthy relationship?** Our interviews with MMSD and Veolia officials and review of recent contract amendments indicate that contractual disputes may be becoming more common and intense, and that they may be taking more time for MMSD attorneys and senior staff to resolve. We cannot determine, however, whether this development stems from differences that may ultimately become irreconcilable – particularly with regard to the wastewater treatment process and its impact on water quality – or whether it simply reflects the healthy disagreements that can emerge in a long-term relationship that otherwise remains strong and mutually beneficial. We also cannot predict what the state of the MMSD-Veolia relationship will be five years from now, but MMSD's leaders should be monitoring it and its potential impacts on leadership capacity and contract performance.

Whatever course is chosen, the public will need an approach that delivers both an acceptable cost and the assurance that these critical services will be delivered reliably and without any diminution in quality. We hope this analysis is helpful to MMSD leaders and stakeholders as they seek to meet these goals, and we would be happy to assist in any future endeavors to determine the appropriate path forward.