EXECUTIVE SUMMARY

TESTING THE WATERS

Should MMSD's Privatization Framework Be Revisited?

WISCONSIN POLICY FORUM

Eleven years ago, the Wisconsin Policy Forum published *Downstream Accomplishments, Upstream Challenges*, a report analyzing the fiscal condition of the Milwaukee Metropolitan Sewerage District (MMSD). A key finding 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 (UWS) to operate the district's sewers and two treatment plants. Two successive 10-year contracts with Veolia Water Milwaukee have followed.

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 continue to outsource the bulk of their operations. This report is the culmination of that broad analysis. 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

Veolia Water Milwaukee 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.

The current contract with Veolia is the third 10-year contract since 1998. UWS secured the first contract after a competitive bidding process involving three other bidders. Approximately 290 MMSD employees transferred from the district to UWS with the onset of the contract.

The bid for the second 10-year 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 for another 10 years (although with some modified terms) without a competitive bidding process.

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. Several years into the contract, MMSD found the savings were greater at $164.6 million. In our 2011 report, we explained that UWS anticipated an ability to recognize substantial efficiencies in MMSD operations, but it instead encountered an already-efficient operation. That factor, as well as unforeseen, rapid elevations in energy costs, made the UWS contract "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, which are summarized in the table on the following page.

The major changes cited in the table reflect certain lessons learned by both MMSD and Veolia as each contract played out. For example, given the realization that a substantial portion of UWS' losses 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.

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.)

Another change involved the annual increase 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.

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

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 contractual limits. Federal or state fines also passed through to Veolia
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 BLS indexes, with provisions as outlined in table 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	
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 repairs and replacements on assets related to its operations that cost less than $25,000 (per 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
Decisions to allow overflow	MMSD makes the ultimate choice, after consultation with Veolia	

This table shows some important areas in which MMSD experiences reduced risk and thereby benefits from 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 to 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.

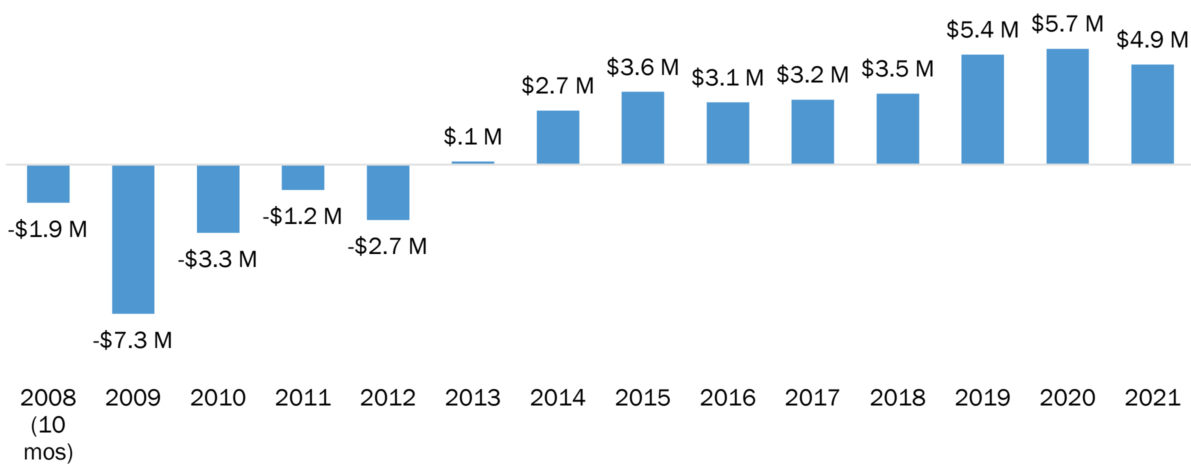
Another trade-off for MMSD is that it must cede some authority over the quality of operations to Veolia, although it has some leverage over contract performance through stipulations that Veolia pays damages or fees in the event of fines assessed to MMSD for operating infractions, or should environmental testing limits set forth in the contract be breached.

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, it is unknown whether MMSD would be able to achieve the same staffing efficiencies or technical expertise if it took back operations; if it needed to add staff or contracted technical support, then the benefit of eliminating a profit margin would be partially or fully offset.

Fiscal and Operational Impacts of Privatization

While Veolia has recognized some growth in its annual contract payments, the chart below shows that the company suffered a net operating loss for its first five years running MMSD operations, with an annual net profit not realized until 2013. Company officials say a number of factors played into the initial losses, including unanticipated events like chemical and utility price increases.

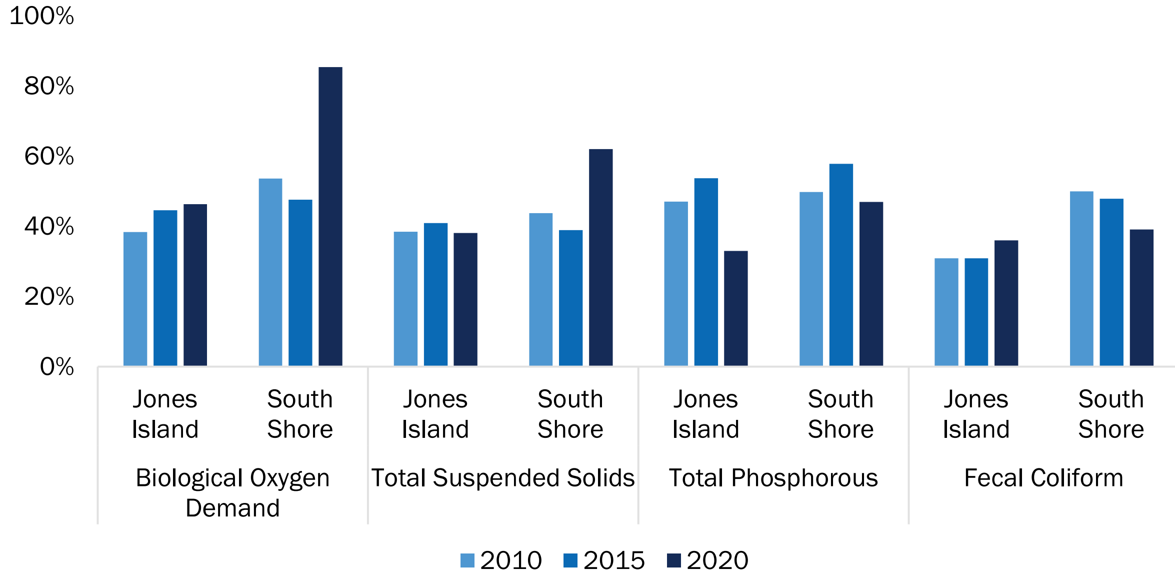
Veolia annual net gain/ loss, 2008-2018 (in millions)



With regard to operating quality, Veolia's performance generally is measured by its success both in meeting Wisconsin Department of Natural Resources (DNR) permit standards and the considerably more stringent standards required by MMSD via the contract. The chart on the following page 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. 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.

The performance of the two treatment plants generally has met the contractual standards by a wide margin, though greater water quality issues have begun to emerge at the South Shore facility in recent years (MMSD is pursuing a pair of major capital projects to at least partially address those issues). MMSD officials note that as the numbers move toward contract limits, MMSD's costs have increased, as the district pays an annual environmental fee to the DNR based on a 5-year average of water quality test results. Since 2015, fee payments have grown by 28%, or $217,000 (the growth is solely attributed to performance, as opposed to changes in DNR's fee structure).

Veolia water quality test results as % of contract limits – 2010, 2015, and 2020 (annual average)



As fees have begun to rise, MMSD officials share that one of their few major areas of contention with Veolia 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. 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. All other chemical costs still are the sole responsibility of Veolia.

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. Because we lack a contract extension proposal from Veolia for the 2028-2038 period and given that several factors could change significantly in the next five years, it is not possible for us to conduct a detailed comparative financial analysis. However, below we summarize the financial items we consider to be most significant in upcoming takeback deliberations.

- **Salaries and wages.** A key question is whether both MMSD's staffing and salary/wage levels would be much different from Veolia's if it takes back operations. In previous analyses, MMSD officials have assumed that most Veolia workers would transfer to the district, that salary and wage levels would be similar, and that there would be a relatively small increase in net positions under the takeback scenario. We find these assumptions to be speculative but 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. Currently, MMSD staff are part of the City of Milwaukee Employees' Retirement System (ERS), while Veolia employees may participate in the company's 401k plan. Veolia workers received an average employer match of 3.5% for their 401k according to the 2016 analysis. Under a takeback scenario, most of these employees would move to ERS, which currently requires an employer match of 8.77% of salary. That percentage likely will increase substantially next year because of ERS' financial challenges, and MMSD also would see added costs from assuming retiree health care responsibilities for transferred workers. ***This is perhaps the biggest area of potential financial disadvantage for MMSD from a takeback scenario***.

- Chemicals. The current contract includes a line item for chemicals that is folded into the O&M fee. The 2016 takeback analysis assumed that chemical costs would be the same ($3.2 million) regardless of which entity operated the wastewater treatment facilities, but 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. That ability is impossible for us to verify, but ***we consider this to be a minor potential area of fiscal disadvantage for MMSD and also a potential area of increased risk if its takes back operations.***

- Corporate overhead. MMSD must consider 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 its purview. The O&M fee includes an annual corporate overhead charge of 6.5% of total O&M costs. That cost 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. Veolia's ability to tap into a large administrative infrastructure that already exists at the parent company could 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. The 5% profit margin built into the O&M fee by Veolia has not always been realized by the company, and it is assuming risk given that unanticipated increases in areas like chemicals or staffing 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 means that it would "come off the top" under a takeback scenario. Moreover, while Veolia assumes risk each year, it also enjoys a potential benefit should actual costs fall below projections. It is difficult to estimate how much of the savings produced by elimination of a profit margin would be offset by increased costs for MMSD in other areas, ***but overall this represents the largest potential financial advantage of a takeback for MMSD***.

If takeback deliberations involved only a financial analysis, then the decision in the months leading up to 2028 would be relatively simple. However, several non-fiscal considerations must be taken into account, most of which are not quantifiable from a dollars-and-cents perspective. Below we summarize those considerations that we deem most important and relevant.

- Inflation and supply chain issues – Veolia officials say inflation and supply chain issues have caused chemical costs to skyrocket. They also 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 day-to-day operations, Veolia currently has first responsibility to address them and not MMSD.

- **National worker shortage and human resources** – Worker shortages have emerged as a critical economic challenge both locally and nationally. Again, under the current contractual relationship, those challenges are Veolia's, as it is responsible for ensuring there is a sufficient workforce to meet contractual obligations. Also, 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 contained in its contract with MMSD. Yet, in recent years, DNR fees have been slowly rising as water quality testing scores have declined. 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.

- **Maintenance and repairs** – The 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.

- **Managerial time and capacity** – A non-financial benefit enjoyed by MMSD's top managers has been their ability to leave the day-to-day responsibilities associated with the district's vast wastewater treatment operations 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, and climate change. Conversely, minor contract disputes that have arisen with Veolia with increased frequency have taken significant managerial time to resolve, and the absence of a privatization contract 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. Beyond financial impacts are a variety of initial 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.

- **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, 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.

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, but we do offer the following key insights to better frame the decision-making process.

- **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 and a third Veolia contract has decreased over time as contract provisions have changed that have arguably made outsourcing less financially advantageous for MMSD.

- **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 recently materialized 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 does this relieve MMSD managers from headaches, but it also may benefit the district as a whole given that Veolia may be better equipped as a large multinational corporation to address them.

- **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 operations, but also its senior leaders, who are responsible for helping to establish and ultimately implement the district's long-term goals and vision. 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 inflation and procurement difficulties. Asking this question 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.

- **Is the growing frequency of contractual disagreements an indicator of an increasingly unhealthy relationship?** Contractual disputes appear to be more common and intense and may be taking more time for MMSD attorneys and senior staff to resolve. It is uncertain 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 reflects the healthy disagreements that can emerge in a long-term relationship that otherwise remains strong and mutually beneficial.

Whatever course is chosen, the public will need an approach that delivers both an acceptable cost and the assurance that MMSD's critical services will be delivered reliably and effectively. We hope this analysis is helpful to the district's leaders and stakeholders as they seek to meet these goals.