



Ontario Clean Water Agency 2021 Value-for-Money Audit

Why we did this audit

- OCWA's mandate is to provide water, wastewater and other related services in a manner that protects human health and the environment. In 2020, it operated 181 (27%) of the 679 municipal drinking-water systems in Ontario. In addition, it operated 167 Ministry of the Environment, Conservation and Parks-regulated wastewater facilities.
- OCWA's role is to fill gaps in the marketplace within the water and wastewater industry, especially for smaller, remote and First Nation communities where private operators are not willing to offer services.
- It has recently focused its strategic plans towards growing the business to \$303 million in revenue by 2026.

Why it matters

- About 30% of Ontarians (4.5 million people) rely on OCWA to provide safe and reliable drinking water.
- OCWA manages more than \$20 billion in municipal water and wastewater infrastructure for its municipal clients.
- Improperly treated or untreated wastewater has significant health and environmental impacts.

What we found

OCWA's Role Can Be Clarified

- OCWA's role in the water and wastewater industry can be further clarified.
- The Ministry of the Environment, Conservation and Parks (Ministry), notes that OCWA's role is to fill gaps in the marketplace, especially for smaller remote and First Nations communities where private operators are not available. However, OCWA has operating and maintenance contracts with only six of 133 First Nations to provide operating and maintenance services.

RECOMMENDATION 1, 2

Safe and Reliable Drinking Water Provided to Clients

- OCWA provides safe and reliable drinking water to its clients.
- For each of the last five years, Ministry-regulated municipal drinking-water facilities operated by OCWA had less adverse water-quality incidents than those run by other operators.
- In addition, OCWA-operated facilities have performed well on Ministry inspection ratings with an average four-year rating of 98.4%.
- Over the last five years, OCWA-operated facilities have had slightly more boil water advisories than those operated by municipalities or private operators and has resolved each advisory in less than 30 days on average, except in 2019/20.

RECOMMENDATION 3

Wastewater Services Had Fewer Incidents Than Other Operators

- OCWA provides reliable wastewater treatment services to its clients.
- From 2016 to 2020, the number of bypass/overflow incidents at OCWA-operated wastewater facilities was less on a per facility basis (1.20) than those operated by municipalities (2.76) or private operators (1.79).
- However, in 2020, OCWA took on average almost 15 days longer than municipal operators to resolve wastewater reported exceedances (50.2 days compared to 34.7 days).

RECOMMENDATION 5

Asset and Other Information Not Complete

- OCWA's asset management system lacks complete information on the age, criticality and performance of assets.
- As of July 2021, 71% of the assets in the system were missing an installation date, 42% were missing cost information, and no performance data was available for any of the assets.
- OCWA's monitoring system is unable to detect adverse test results because it does not contain maximum allowable limits for tested substances.

RECOMMENDATION 9, 11

Large Amounts of Biosolids Sent to Landfill by OCWA Clients

- Significant amounts of biosolids are being sent to landfills by OCWA clients which releases greenhouse gases (carbon dioxide and methane) into the air, which is a contributor to climate change.
- In 2020, for OCWA's 20 wastewater facilities serving the largest municipalities, over 4,000 tonnes of biosolids in solid form were sent to landfills and over 14,600 cubic meters of liquid biosolids were sent to landfills.
- Asset management plans with a focus on climate change impacts is provided on a fee-for-service basis; such plans were being developed for only 14 (7%) of clients.

RECOMMENDATION 6, 7

Most Income From Large Clients, Losses on Some Contracts

- OCWA generates most of its income from its largest clients, while it loses money on some smaller clients. In 2020, 30 clients accounted for 70% of OCWA's operating revenue and gross margin.
- On the other hand, OCWA experienced a combined loss of \$723,000 on income generated from the operations of 33 clients, primarily due to underestimating its costs on fixed price contracts.
- In 2020, there were no instances where OCWA knowingly entered into an operations and maintenance contract where it would not be able to recover its costs.

RECOMMENDATION 15

OCWA Operational Staff Mostly Assigned Using Historical Numbers

- Staffing allocation at OCWA-operated facilities has been determined based on historical staffing levels and request for proposals submitted to the client.
- OCWA does not assess staffing levels based on workload, such as through work orders, and has no workload stats to measure the efficiency and effectiveness of staff.

RECOMMENDATION 18

Performance Measures Do Not Include Quality

- OCWA's publicly reported performance measures do not measure drinking-water and wastewater quality.

RECOMMENDATION 14

OCWA Employees Do Not Undergo Regular CPIC Checks

- Ontario operators of water and wastewater treatment systems are not required to undergo CPIC checks. CPIC checks on employees who have access to critical assets and IT systems used for facility operations mitigate the risk of these systems being sabotaged.
- Ontario operators-in-charge can have a lower certification level than the facilities they operate, contrary to practices in some other provinces.

RECOMMENDATION 19, 20

Conclusions

- OCWA provides safe and reliable drinking-water and reliable wastewater treatment services in compliance with legislation.
- OCWA is not able to assess whether it is providing services cost-effectively and efficiently because it relies on historical information to allocate staffing resources and does not measure staff efficiency.
- OCWA's current asset management system lacks critical information about the cost, age and performance of its assets to assist OCWA in properly managing critical assets for its clients.
- OCWA does not publicly report on drinking-water quality and performance of its wastewater facilities.