



April 1, 2019 – March 31, 2022 Business Plan

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Executive Summary

The Walkerton Clean Water Centre (Centre) was established in October 2004 in response to Associate Chief Justice Dennis O'Connor's recommendations in the Report of the Walkerton Inquiry. As a board governed agency of the Government of Ontario, the Centre's activities align with Ontario Regulation 304/04 made under the *Development Corporations Act*, a Memorandum of Understanding with the Minister of the Environment, Conservation and Parks (Minister), the Agencies & Appointments Directive, and other applicable government directives. The Centre provides education, training, information and advice to drinking water system owners, operators, operating authorities and the public, and through partnerships, has training opportunities available to 133 First Nations communities across Ontario.

During the 2018–19 fiscal year, the Centre continued to deliver on the objects laid out in Ontario Regulation 304/04 and met a number of targets. The mandatory courses required by the Ministry of the Environment, Conservation and Parks (Ministry) were administered and delivered across Ontario. Specialized training, including hands-on workshops for small drinking water systems, Drinking Water Quality Management Standard workshops, Maintenancefest events, a seminar on the management of cyanotoxins in drinking water, and more than 50 specialized courses provided information on specific topics of importance to drinking water system operators. Since its inception, the Centre has provided training to more than 81,000 participants.

The Entry-Level Course for Drinking Water Operators for First Nations was delivered to operators of First Nations drinking water systems, a management course for First Nations communities was developed and implemented, and a leadership course was planned.

The Centre also continued to provide information and advice to clients across Ontario through demonstrations and tours of the Technology Demonstration Facility, pilot testing projects, the Helpline and the online Drinking Water Resource Library.

Important goals have been set for the future. The Centre will continue to provide education and training while maintaining quality standards and offering more practical training options each year. New curriculum will be developed and new training delivery methods will be explored. Drinking water technologies will continue to be demonstrated in the Technology Demonstration Facility and the Helpline and Drinking Water Resource Library will be used to share information. Pilot testing services will be offered to clients throughout the province. The Centre's programs will continue to provide education, training, information and advice to owners, operators and operating authorities of drinking water systems, including First Nations systems, and the public.

This business plan outlines the Centre's direction for the future and illustrates its commitment to continual improvement in support of Ontario's drinking water sector.

Mission

The Centre exists to educate and support our clients as they address their water system risks in order to safeguard Ontario's drinking water.

Vision

The Centre is an agency known for its innovative and practical approach to building knowledge and capacity for those responsible for water systems, emphasizing system vulnerabilities.

Objects

Ontario Regulation 304/04, made under the *Development Corporations Act*, documents the Centre's objects. The objects of the Centre are to do the following, either alone or in conjunction with other organizations:

- To co-ordinate and deliver education and training for owners, operators and operating authorities of drinking water systems.
- To provide information, education and advice to owners, operators and operating authorities of drinking water systems and to the public about,
 - i. the treatment of water necessary to ensure that drinking water is safe,
 - ii. the equipment and technology used to ensure that drinking water is safe,
 - iii. the operational requirements necessary to ensure that drinking water is safe, and
 - iv. other environmental issues related to drinking water.
- To sponsor research into any activities related to its objects.
- To provide advice to the Minister on research and development priorities to achieve and maintain safe drinking water.
- To conduct such further activities, consistent with its objects, as are described in any policy direction issued by the Minister or as set out in any agreement with the Minister.

Strategic Direction

The Centre will continue to augment existing programs, and develop new initiatives, in support of the drinking water goals and objectives of the Government of Ontario. Strategic directions include:

1. Education and Training: Coordinating and delivering a comprehensive range of education and training to drinking water system operators, including operators of First Nations drinking water systems, with a focus on addressing system vulnerabilities and contributing to the improvement of drinking water across the province, including in the 133 First Nations communities
2. Information and Advice: Providing the information and advice necessary to ensure that drinking water is safe, and supporting clients through the Helpline and Drinking Water Resource Library
3. Applied Research: Assessing research gaps and needs and conducting pilot testing for drinking water systems throughout Ontario to mitigate potential weaknesses, particularly in small and First Nations drinking water systems

1. Education and Training

The Centre's training supports drinking water system owners, operators and operating authorities across Ontario, including First Nations communities, by providing technical, scientific and regulatory information related to drinking water. The Centre will continue to develop, administer and deliver the Ministry's mandatory courses, which are required for drinking water system operator certification in Ontario, and will work with the government as drinking water regulations and practices change. The Centre will also develop and offer specialized training and events that provide the continuing education units required for certification renewal. Specialized training will focus on addressing drinking water system vulnerabilities that have been identified by the Centre and stakeholders. Hands-on training will remain a focus for the Centre.

The improvement of drinking water in First Nations communities is a priority for the Centre. The Centre has implemented a memorandum of understanding with two partners, the Ontario First Nations Technical Services Corporation, and Keewaytinook Okimakanak, and with support from the Ministry is carrying out an initiative to facilitate the provision of drinking water training and continuing education to operators of First Nations drinking water systems and First Nations administrators. The project is funded by the Government of Ontario. Top priorities are:

- a. the delivery of the Entry-Level Course for Drinking Water Operators for First Nations
- b. the development of training and outreach for First Nations managers and leadership
- c. the development of individualized training plans for operators of First Nations drinking water systems
- d. the delivery of continuing education to fill gaps that are present or may occur

2. Information and Advice

Information and advice is provided through the Centre's Helpline and Drinking Water Resource Library. The Helpline, developed during the 2016–17 fiscal year, allows knowledgeable Centre staff to respond to technical calls from clients and the public. Details of each call received are recorded in an easily-accessible database. The Drinking Water Resource Library, developed during the 2017–18 fiscal year, is an online reference library containing information vetted by Centre staff for use by operators, owners and operating authorities of drinking water systems in Ontario. It contains thousands of referenced documents from around the world that address common issues encountered by drinking water system owners and operators. The Small Systems Zone and First Nations Zone of the Centre's newly-enhanced website will continue to provide technical resources and information specific to these audiences.

The Technology Demonstration Facility, featuring conventional and advanced drinking water treatment systems, monitoring and control instruments, a Supervisory Control and Data Acquisition (SCADA) system, a distribution system and other equipment used to treat and distribute drinking water, will continue to be used to demonstrate drinking water technologies and train drinking water professionals. New technologies will be installed to address client and stakeholder needs. The Centre will provide tours of the facility and technical and scientific information and advice to drinking water system owners, operators, operating authorities and the public.

3. Applied Research

The Centre's Technology Demonstration Facility is also used as the centre for pilot testing projects that find solutions to specific client challenges and requests for assistance, and fill information gaps regarding the treatment, technology and operational requirements that ensure drinking water is safe. Pilot testing results may be used to improve existing training, contribute to new courses or be shared through conference proceedings, articles in relevant publications or fact sheets that summarize technical information with the objective of improving knowledge transfer. Clients that participate in pilot testing projects can use the practical advice provided to engage further with professional engineering firms and consultants to address their system vulnerabilities.

The Centre will continue to assess research gaps and needs across the province to achieve and maintain safe drinking water and may advise the Minister on research priorities as requested. It will also maintain strong relationships with centres of excellence and postsecondary institutions in the province.

Overview of Current and Future Programs and Activities

1. Education and Training

Mandatory Training

Mandatory training is required to become a drinking water system operator in Ontario. The Centre will continue to develop, administer and deliver the Ministry's three mandatory courses:

- Entry-Level Course for Drinking Water Operators. This course provides new operators with a basic understanding of water characteristics and pathogens, treatment and distribution processes, and the regulations that govern water quality. It complements the on-the-job training that new operators receive from their employers.
- Safe Drinking Water Operator Essentials. This is the current version of the mandatory certificate renewal course that the Centre has developed. It will be offered until December 2020, when it will be replaced with an updated course.
- Operation of Small Drinking Water Systems. This course allows participants to meet the training requirements for a trained person as identified in Ontario Regulation 170/03 made under the *Safe Drinking Water Act, 2002* and is a requirement to obtain a Limited System Certificate under Ontario Regulation 128/04 made under the *Safe Drinking Water Act, 2002*.

Specialized Training

The Centre's Training Advisory Committee will provide input into specialized education and training programs. The committee provides advice to the Centre and reviews the annual training plan, including training priorities and direction for the development of new training. The committee is comprised of drinking water specialists with many years of experience who volunteer their time and expertise. With the committee's input, the Centre will continue to develop and deliver specialized training and events to meet drinking water system operators' needs for continuing education.

One focus for curriculum development is to address drinking water system vulnerabilities that have been identified by the Centre and stakeholders, including: subject-matter-expert instructors; drinking water sector associations and committees; students and faculty from colleges and universities; municipal training coordinators and compliance officers; course evaluations; pilot testing and literature reviews; and the Ministry. New curriculum may cover topics such as regulatory compliance, energy management, advanced information regarding groundwater, changing climate effects on drinking water systems, emergency watermain repair and new watermain commissioning procedures. A new online training program aimed at small drinking water systems is also under development.

The Centre will continue to deliver existing specialized training, including:

- A revised Standard of Care — Safe Drinking Water Act course, tailored to municipal councillors and decision-makers in municipalities that own drinking water systems.
- An annual Maintenancefest event, held in Walkerton, to maximize access to the Technology Demonstration Facility and enhance practical skills for participants. Several new two-hour training modules will be added each year, based on client

feedback, to ensure that this event remains popular and relevant. Regional Maintenancefest events will be delivered as requested, and a First Nations Maintenancefest is planned for the North.

- In-kind support to students enrolled in Ontario colleges that have agreements with the Ministry to deliver the Entry-Level Course for Drinking Water Operators as part of their curriculum. This support will allow students to access practical training at the Technology Demonstration Facility. Training may also be provided to other interested postsecondary institutions.
- More than 50 specialized courses covering a wide variety of topics.

First Nations Training

The 133 First Nations communities in Ontario have specific challenges related to drinking water. The Government of Ontario has embarked on an initiative to work with all First Nations in the province to address those challenges from the provincial perspective. The Centre, with funding from the Government of Ontario, is working with the Ministry, the Ontario First Nations Technical Services Corporation, and Keewaytinook Okimakanak to build capacity in First Nations communities through drinking water system operator training and certification. Training is provided at no cost to participants, including all expenses associated with attending the training. Wherever possible, training is delivered in locations that minimize travel for operators and is delivered by instructors who are Indigenous or have extensive experience training operators in First Nations communities. The Centre's goal is to equip First Nations to provide safe drinking water to their communities.

The Entry-Level Course for Drinking Water Operators for First Nations is tailored to reflect the needs of drinking water system operators in First Nations communities. It is currently delivered to operators of First Nations drinking water systems. Each course delivery is a two-week initiative with one week of supervised self-study and one week of hands-on training using portable equipment purchased by the Centre and based at Keewaytinook Okimakanak offices in Dryden.

The first Entry-Level Course for Drinking Water Operators for First Nations was delivered in the late fall of 2017. A total of eight courses were delivered by the end of 2018 with more than 70 participants successfully completing the course to date. The exam pass rate is very high and it is expected to continue to be.

The Managing Drinking Water Systems in First Nations Communities course, under development in 2018, was launched early in 2019. The target audience is those in management and supervisory positions in drinking water along with those interested in becoming managers and supervisors. The one-day course focuses on components of effective drinking water system management, resources and practical tools.

The effort to provide outreach to leadership in First Nations communities, namely Chiefs and Councils, is under discussion by the partners. This initiative will involve consultation with leadership to ensure that any activity developed fits the needs of the leaders in the communities and provides an opportunity to discuss their roles in relation to the drinking water systems in their communities.

As the need for individual training plans and continuing education unit (CEU) training arise, plans will be developed to assist communities in meeting their training needs.

During the 2018–19 fiscal year, the Centre undertook telephone surveys to gather information about training needs and challenges. The survey results will be valuable to the Centre as it explores how to support First Nations communities further. The Centre will continue to provide support through the Helpline, Drinking Water Resource Library and pilot testing services with the aim to facilitate drinking water system improvements in First Nations communities.

Modernization of Training

The Centre will continue to modernize its training approaches and methods. The Centre implemented a standardized approach to curriculum development and review. Research regarding new training delivery methods, e-learning opportunities and virtual classroom training is ongoing. An e-learning pilot project is underway and the costs and benefits of virtual training will be assessed using project feedback.

Training for Small Drinking Water Systems

Education and training for small drinking water systems regulated by Ontario Regulation 319/08 made under the *Health Protection and Promotion Act* will be a focus. The Practical Training for Small Drinking Water System Owners and Operators course, geared toward small drinking water systems regulated under Ontario Regulation 170/03 made under the *Safe Drinking Water Act, 2002*, and Ontario Regulation 319/08 made under the *Health Protection and Promotion Act*, and the Basics for Small Drinking Water Systems course will launch across Ontario. Two new courses have been developed to meet the specific needs of clients — Basics for 319/08 Systems and Advanced for 319/08 Systems. In addition, an annual workshop for small drinking water systems will provide hands-on training and information related to the operation and maintenance of small drinking water systems.

2. Information and Advice

Drinking Water Resource Library and Helpline

The Centre will support drinking water system owners, operators, operating authorities and the public through the online Drinking Water Resource Library and the Helpline. The Drinking Water Resource Library is an online reference library containing information vetted by Centre staff for use by operators, owners and operating authorities of drinking water systems. The Drinking Water Resource Library includes fact sheets produced in-house that summarize technical information with the aim of improving the Centre's knowledge transfer capabilities. Evaluation of a pilot version of the Drinking Water Resource Library by a broad range of stakeholders was undertaken to determine the utility of the project and staff time required to support it. Results were positive and a full-scale pilot of the Drinking Water Resource Library launched during the 2017–18 fiscal year. The Drinking Water Resource Library is now a permanent program with a dedicated coordinator. The Helpline, developed during the 2016–17 fiscal year, allows clients and the public to contact the Centre by telephone or email with technical questions related to drinking water treatment, equipment, operational requirements or environmental factors. Knowledgeable Centre staff respond to questions free of charge in an effort to improve clients' understanding of drinking water issues.

Technology Demonstration Facility

The Centre will continue to use the Technology Demonstration Facility to demonstrate drinking water technologies to drinking water system owners, operators, operating authorities and the public through hands-on training and tours. The facility features conventional

and advanced drinking water treatment systems, monitoring and control instruments, a distribution system and other equipment used to treat and distribute drinking water. During the 2018–19 fiscal year, the Centre augmented its technical capacity to address the issue of high-level natural organic matter by adding a fluidized bed magnetic ion exchange pilot system. The Centre has developed a technology demonstration master plan to address clients' feedback and fill gaps identified by a risk-based gap analysis. Pursuant to this master plan, the Centre will invest in, and install new technologies at the Technology Demonstration Facility, including dissolved organic carbon analyzers and online monitoring instruments.

3. Applied Research

Pilot Testing

The Centre will continue to complete pilot testing projects to address information gaps regarding the treatment, technology and operational requirements necessary to help ensure that drinking water is safe across Ontario. The initiation of pilot testing may be in response to client inquiries or identified gaps, with a focus on issues faced by small and First Nations drinking water systems. The Centre will prioritize pilot testing using a risk-based approach to address drinking water system vulnerabilities. When complete, final reports will be prepared and the results will lead to improved existing training or contribute towards new courses. Conference proceedings, articles in relevant publications or fact sheets support the dissemination of information. Uploaded results of pilot tests to the Drinking Water Resource Library assist others with similar challenges. This ensures information sharing with the operators and decision-makers overseeing drinking water systems in Ontario. Due to the success of the program, the Centre will likely continue to receive multiple pilot testing inquiries each year.

During the 2018–19 fiscal year, the Centre worked on 12 inquiries for pilot testing, including three projects for First Nations communities — one under a long term boil water advisory. Six of the requests involved relatively high levels of natural organic matter and disinfection by-products issues in smaller drinking water systems. Eight pilot testing projects were completed during the fiscal year.

Research Advisory Committee

The Centre's Research Advisory Committee, comprised of volunteers who contribute their time and expertise, meets periodically to provide advice to the Centre on Ontario's drinking water research priorities. Committee members were selected from applications received through calls for interest in 2011, 2014, 2015 and 2018. The group will review the Centre's annual research plan, which identifies research priorities necessary to achieve and maintain safe drinking water and provides status updates on the Centre's ongoing pilot testing, and suggest improvements. The Centre will continue to assess research gaps and needs regarding safe drinking water and may advise the Minister on research priorities.

Resources Needed to Meet Goals and Objectives

The Centre relies upon funding from the Government of Ontario to deliver its programs and services. Although internal controls effectively regulate overall expenditures, the Centre's focus on vulnerable small drinking water systems results in training delivery costs that exceed revenues. This is a direct result of the financial challenges faced by small drinking water systems. For example, to ensure that a comprehensive range of training is available to operators across Ontario, the Centre delivers training under circumstances where the low number of participants does not cover the cost to deliver the training. Private sector training providers are not interested in delivering training under these circumstances due to the associated costs. The Centre discounts training registration fees for courses geared to small drinking water system owners and operators to make training more accessible.

Provincial funding allows the Centre to install new technologies in the Technology Demonstration Facility as they become available and adopted by drinking water treatment facilities. Through the Technology Demonstration Facility, the Centre offers unique education and training opportunities to owners, operators and operating authorities of drinking water systems. The facility allows the Centre to demonstrate leading-edge drinking water treatment technologies and carry out the popular pilot testing program. Continual upgrades and maintenance of the asset require significant resources.

The First Nations training program pays all costs of students including registration, meals and travel from their communities. The larger the program becomes, the more financial resources will be required. Currently the program operates from a one-time commitment of \$1.85 million.

Risk Identification, Assessment and Mitigation Strategies

The following tables highlight some of the risks identified by the Centre as well as mitigation strategies for each risk.

Risk Category	Objective	Potential Risk Source	Potential Impact	Mitigating Action			Assessment of Risk (High/Medium/Low)
				Description	Current/Planned	Mitigating Action Owner	
Strategic	The Centre will operate in alignment with its legislated objects and direction from the Minister.	The Centre may misunderstand or not fulfill its objects or direction from the Minister.	The Minister may take formal action that may include adjusting the composition of the board of directors or issuing a policy direction requiring the Centre to act.	<p>The Centre and the Ministry have a Memorandum of Understanding that is periodically reviewed and updated. Any changes are communicated to Centre employees.</p> <p>The Centre prepares and submits to the Minister an annual three-year business plan that aligns with legislated objects and an annual report that details the progress toward reaching those goals.</p> <p>The board of directors reviews the Centre's strategic direction on an ongoing basis.</p> <p>There is ongoing communication between the Centre and the Ministry. The Centre's CEO and the Ministry's Director of the Business and Fiscal Planning Branch meet quarterly. Centre employees and Ministry employees communicate regularly.</p>	Current	The Centre and the Ministry	Low

Risk Category	Objective	Potential Risk Source	Potential Impact	Mitigating Action			Assessment of Risk (High/Medium/Low)
				Description	Current/Planned	Mitigating Action Owner	
Strategic	The Centre will maintain public trust.	There may be confusing or insufficient communication with stakeholders.	Any loss of public trust may have a lasting negative impact on reputation and decrease demand for the Centre's services.	<p>The Centre follows the guidelines of the public communications protocol held with the Ministry.</p> <p>The Centre updates its website with relevant information, including its business plan and annual report.</p> <p>The research and training advisory committees add another level of stakeholder interaction and accountability.</p>	Current	The Centre	Low

Risk Category	Objective	Potential Risk Source	Potential Impact	Mitigating Action			Assessment of Risk (High/Medium/Low)
				Description	Current/Planned	Mitigating Action Owner	
Governance	The Centre will comply with the Memorandum of Understanding, all applicable Ontario Public Service directives, policies and procedures, and applicable legislation.	<p>The Centre may not be aware of new or revised Ontario Public Service directives, policies and procedures, and legislation.</p> <p>There may be inadequate guidance regarding the actions required to comply.</p> <p>The Centre may not have sufficient resources to ensure compliance or there may be non-compliance by choice.</p>	<p>The Centre may lose the confidence of the Ministry, stakeholders, the public and employees.</p> <p>Legal costs could be incurred.</p> <p>There may be a lasting negative impact on the Centre's reputation.</p> <p>There may be changes to the composition of the board of directors or management.</p>	<p>Applicable directives are reviewed regularly and are available to employees. The Ministry provides clarification if required.</p> <p>The Centre follows customer service guidelines and employees are trained on the <i>Accessibility for Ontarians with Disabilities Act, 2005</i>.</p> <p>The Centre meets the requirements of the <i>French Language Services Act</i>.</p> <p>The Centre has an employee handbook that must be reviewed by all new employees. Annually, all employees must certify that they have read and fully understand the handbook.</p> <p>The Minister may request an audit of the Centre at any time and the Centre's operations are reviewed by the Ministry at least once every three years.</p> <p>The Centre has a financial delegation of authority that specifies authorization limits.</p> <p>A third party audits the Centre's financial statements every year.</p>	Current	The Centre and the Ministry	Low

Risk Category	Objective	Potential Risk Source	Potential Impact	Mitigating Action			Assessment of Risk (High/Medium/Low)
				Description	Current/Planned	Mitigating Action Owner	
Operational	The Centre will meet the needs of clients.	<p>Programs may not be updated with relevant new information.</p> <p>The Centre may not meet demand for alternative forms of training delivery, such as e-learning.</p> <p>The Centre may not deliver on its legislated objects.</p>	The Centre may lose the confidence of the Ministry, clients, the public and stakeholders, resulting in decreased demand for services.	<p>The Centre has reviewed course curriculum to ensure that relevant information is provided, including new Ministry guidelines and policies, and topics of importance to operators of drinking water systems.</p> <p>The Centre maintains currency of training content through literature reviews, pilot testing and professional development for employees.</p> <p>The Centre has hired additional temporary staff to help update courses.</p> <p>The Centre's research and training advisory committees review the annual research and training plans and provide input on programs and priorities.</p> <p>The Centre's Helpline allows knowledgeable staff to respond to calls from clients and the public and the Drinking Water Resource Library provides easily accessible vetted information.</p> <p>The Centre is piloting e-learning programs.</p> <p>The Centre continually tracks and reports performance indicators to monitor service delivery.</p> <p>The Centre continues to deliver training to remote and underserved areas within Ontario.</p>	Current	The Centre	Low

Risk Category	Objective	Potential Risk Source	Potential Impact	Mitigating Action			Assessment of Risk (High/Medium/Low)
				Description	Current/Planned	Mitigating Action Owner	
Operational	The Centre will meet the training needs of drinking water system operators in First Nations communities.	Operators in First Nations communities may be unable to access training due to lack of resources or funding for back-up operators.	Operators of First Nations systems may not be able to access training to obtain certification, resulting in lost confidence from the Ministry, clients, the public and stakeholders.	<p>The Centre has partnered through a Memorandum of Understanding with Ontario First Nations Technical Services Corporation and Keewatinook Okimakanak to provide training to drinking water system operators in First Nations communities. Initial funding has been established to facilitate the provision of training.</p> <p>Training is delivered in locations that minimize travel for participants and curriculum has been tailored to reflect the needs of First Nations communities.</p> <p>The Centre's website is regularly updated with technical resources and information specific to drinking water systems in First Nations communities.</p> <p>The Centre works with First Nations partners and other government organizations to identify potential barriers to training.</p>	Current	The Centre, its partners and the First Nations leaders (Chiefs)	High

Risk Category	Objective	Potential Risk Source	Potential Impact	Mitigating Action			Assessment of Risk (High/Medium/Low)
				Description	Current/Planned	Mitigating Action Owner	
Human Resources	The Centre will hire and retain employees, including executives, and instructors who are adequately qualified and trained.	<p>Employees or instructors may not be adequately qualified, experienced or trained to fulfill the Centre's objects.</p> <p>Negative actions of a Centre employee may affect the public perception of the Centre.</p> <p>Current executive compensation rates may impact the Centre's ability to attract and retain the best talent.</p>	<p>A lack of adequate employee skill sets may affect the Centre's ability to perform duties and deliver services.</p> <p>Inadequately qualified or trained employees or instructors may cause clients to lose confidence in the Centre, which may decrease demand for services.</p>	<p>The Centre advertises job opportunities to a wide audience, hires through rigorous competition and provides mandatory training and orientation for new hires, following Ontario Public Service standards.</p> <p>The Centre is committed to professional development and considers opportunities for relevant continued learning in conjunction with employee performance planning reviews.</p> <p>The Centre has established job classifications, salaries, benefits and other remuneration that are similar to those established for public servants employed under Part III of the <i>Public Service of Ontario Act, 2006</i>.</p> <p>Compensation practices at the Centre are reviewed annually to ensure compliance with the <i>Pay Equity Act</i>.</p> <p>All instructors who deliver training on behalf of the Centre are required to complete the Centre's mandatory train-the-trainer program.</p> <p>The Centre has an internal human resources function and maintains up-to-date human resources policies and procedures.</p> <p>The Centre provides guidance to employees on appropriate customer service practices and procedures.</p> <p>Executive compensation rates currently reflect last year's levels. The rates for the Broader Public Service executives will be reviewed within the planning horizon.</p>	Current	The Centre	Low

Risk Category	Objective	Potential Risk Source	Potential Impact	Mitigating Action			Assessment of Risk (High/Medium/Low)
				Description	Current/Planned	Mitigating Action Owner	
Technology	<p>The Centre will ensure reliability, security and integrity of data and information technology systems.</p> <p>The Centre will ensure compliance with privacy and security laws and adhere to industry lead best practices for reliable data storage and network communications.</p>	<p>There may be unauthorized access to data, Centre financial information, and destruction of personal information or information technology systems.</p> <p>There may be less than expert oversight over information technology systems.</p> <p>System failure, such as fire, virus or prolonged power failure, could cause risk to the Centre.</p>	<p>Loss or theft of personal and Centre information would result in the violation of privacy laws, discrediting the Centre and potentially resulting in litigation.</p> <p>Employees may be unable to perform day-to-day job functions.</p>	<p>An Information Technology Specialist manages information technology systems.</p> <p>The web/database server containing client information is physically secured in a locked cabinet at a tier 1 data centre. Only registered staff of the information technology provider are able to access the cabinet and are subject to key card and finger print reader access.</p> <p>All web forms that clients access require a secure encrypted connection to the web server.</p> <p>The web server is protected from Internet traffic with a dedicated firewall.</p> <p>Web server data is backed up to a remote physically secured server at another data centre facility so data can be recovered quickly in the event of a catastrophic failure.</p> <p>Files, folders, and emails stored on servers are backed up nightly to a local storage device. The local storage device is replicated every 24 hours to an offsite data centre.</p> <p>All client credit card information is securely passed to a third party company that specializes in secure financial transactions. No clients' personal financial information is stored on the Centre's web server.</p> <p>There is restricted, password protected access to the Centre's database, which includes course registration information.</p> <p>Workstation passwords are updated regularly and enforced by a network password policy for length and complexity.</p> <p>There are surveillance cameras at the main entrances to the Centre and security card access to the office.</p>	Current	The Centre	Low

Environmental Scan

The following table summarizes the most important strengths, weaknesses, opportunities and threats in the Centre's business environment that may affect operations. The Centre has tailored the programs and services described in this business plan to address the identified internal and external environmental factors and ensure that it will be able to continue to deliver on its objects.

Analysis of Strengths, Weaknesses, Opportunities and Threats	Internal Strengths (S)	Internal Weaknesses (W)
External Opportunities (O) <ol style="list-style-type: none"> Steady demand for training from drinking water system owners, operators and operating authorities and opportunities to deliver new training Opportunities to provide information and advice through the Helpline and Drinking Water Resource Library Opportunities to support drinking water systems through pilot testing 	Areas of Future Growth (S/O) <ol style="list-style-type: none"> S1/O1. Market training opportunities to maintain demand and offer new training opportunities S1/O2. Publicize Helpline and Drinking Water Resource Library to elevate profile and build awareness S2/O1. Maintain the satisfaction of existing clients through the quality assurance program S3/O3. Promote pilot testing services to maintain demand 	Strengthen Internally (W/O) <ol style="list-style-type: none"> W1/O1. Offer training through various formats to manage costs and meet client expectations W1/O2. Provide information and advice through the Helpline and Drinking Water Resource Library, accessible across Ontario W2/O3. Prioritize pilot testing projects and address requests from drinking water systems with the highest risk
Potential External Threats (T) <ol style="list-style-type: none"> Decreased demand for training due to client dissatisfaction or budget constraints Lack of demand for Helpline and Drinking Water Resource Library Lack of demand for pilot testing services 	Address Potential External Threats (S/T) <ol style="list-style-type: none"> S1/T2. Build on experience and positive reputation when marketing Helpline and Drinking Water Resource Library S2/T1. Uphold training quality standards through the quality assurance program to ensure client satisfaction. Attend industry events to promote experience and stimulate demand for training S3/T3. Advertise pilot testing success stories to generate demand for services 	Address Areas of Potential Decline (W/T) <ol style="list-style-type: none"> W1/T1. Explore cost-effective training methods such as e-learning to ensure client satisfaction and availability of training W1/T2. Market the Helpline and Drinking Water Resource Library, available across Ontario, to stimulate demand for these cost-effective services

Performance Measures

The following are performance indicators and targets for the Centre's key programs and services. These focus on the Centre's objects and help to measure success meeting targets. The Centre also uses a more comprehensive set of measures internally.

Initiative	Goal	Performance Indicators	Targets
Education and Training	The Centre will meet the needs of drinking water professionals by coordinating and delivering a comprehensive range of education and training across Ontario.	<p>Training participants This performance indicator measures demand for specialized training and the Ministry's mandatory courses. The estimated number of training participants during the 2018–19 fiscal year was 8,200. The number of training participants fluctuates due to variable registration for the mandatory certificate renewal course.</p> <p>Training quality — Quality Assurance Index (QAI) The QAI is calculated through two equally weighted phases: evaluations distributed at courses/training events that allow participants to rate (very poor, poor, satisfactory, good, or excellent) the overall course, instructor, and course content; and audits by Centre employees and instructors of courses, instructors and adult education principles. Good (G) and excellent (E) ratings form the basis of the index (QAI = (%G+E overall + %G+E instructor + %G+E content)/3/100). The maximum score of 1.000 indicates all evaluations were good or excellent in terms of overall course, instructor and course content. The estimated index for all courses during the 2018–19 fiscal year was 0.900.</p> <p>Hands-on courses This performance indicator measures the number of hands-on courses offered. The Centre offered 32 hands-on courses during the 2018–19 fiscal year.</p> <p>Training for operators of First Nations drinking water systems Training for operators of First Nations drinking water systems will continue over the next three years.</p>	<p>2019–20: 7,800 training participants 2020–21: 7,800 training participants 2021–22 : 8,400 training participants</p> <p>2019–20: QAI >0.850 2020–21: QAI >0.850 2021–22: QAI >0.850</p> <p>2019–20: 36 hands-on courses 2020–21: 40 hands-on courses 2021–22: 44 hands-on courses</p> <p>2019–20: Four entry-level courses Four management courses 2020–21: Three entry-level courses Three management courses Four specialized courses 2021–22: Three entry-level courses Three management courses Four specialized courses</p>

Initiative	Goal	Performance Indicators	Targets
Information and Advice	The Centre will provide information and advice about drinking water and will use the Technology Demonstration Facility as a platform for hands-on training.	<p>Technical tours of the Technology Demonstration Facility This performance indicator measures the number of individuals, including owners, operators and operating authorities of drinking water systems, and the public, who visited the Technology Demonstration Facility for information and advice regarding drinking water technologies. It includes participants from hands-on training and technical tours. The estimated number of individuals provided with technical tours during the 2018–19 fiscal year was approximately 400.</p> <p>Publications This performance indicator measures the number of Centre publications, including fact sheets, refereed publications and external presentations. Publication ensures information is shared with the operators and decision-makers overseeing drinking water systems in Ontario. The estimated number of publications during the 2018–19 fiscal year was 12.</p> <p>Pilot testing Pilot testing projects are conducted to fill information gaps regarding the treatment, technology and operational requirements necessary to ensure that drinking water is safe. Pilot testing results may be used to improve existing training, contribute to new courses or be shared through conference proceedings, articles in relevant publications or fact sheets that summarize technical information with the aim of improving knowledge transfer. During the 2018–19 fiscal year, eight pilot testing projects were completed.</p>	<p>2019–20: 440 individuals 2020–21: 460 individuals 2021–22: 480 individuals</p> <p>2019–20: 10 publications 2020–21: 10 publications 2021–22: 10 publications</p> <p>2019–20: Six projects completed 2020–21: Six projects completed 2021–22: Six projects completed</p>

Initiatives Involving Third Parties

Contract Instructors

Contract instructors play an important role in the Centre's ability to fulfill its objects. The Centre maintains a Vendor of Record list of individuals qualified to provide training services on behalf of the Centre and has entered into Vendor of Record agreements with each of these individuals to ensure accountability. These vendors provide services related to the development, review and delivery of training materials and ensure flexibility in the delivery of a wide range of subject matter over a wide geographical area.

Postsecondary Institutions

Practical training at the Technology Demonstration Facility is offered to students enrolled in Ontario college programs that include the delivery of the Ministry's Entry-Level Course for Drinking Water Operators as part of their curriculum. The Centre also provides training to students of Ontario universities. Delivery of this training to postsecondary students will continue when requested.

The Centre is currently working on a pilot project with Centennial College to develop and deliver e-learning. The costs and benefits of virtual training will be assessed based on feedback from the project.

Memorandum of Understanding: Ontario First Nations Technical Services Corporation and Keewaytinook Okimakanak

The Centre operates through a Memorandum of Understanding with Ontario First Nations Technical Services Corporation and Keewaytinook Okimakanak to provide training to administrators and operators of drinking water systems in First Nations communities. Through this collaborative effort, training delivery tailored to reflect the needs of participants and course content closely relates to the experience of operators in First Nations communities. Ontario First Nations Technical Services Corporation is the founding organization in Canada whose purpose is to provide technical and advisory services to all First Nations communities in Ontario, and to foster self-reliance for its people. Keewaytinook Okimakanak is a non-political Chiefs Council serving Deer Lake, Fort Severn, Keewayin, McDowell Lake, North Spirit Lake and Poplar Hill First Nations.

Implementation Plan

Subsequent to Minister approval, the business plan is shared with Centre employees. Once received, the Centre's CEO holds a meeting with all staff to outline the key objectives, risks and proposed plans of action for the next three years. The Centre designed steps to optimize the plan's implementation, as follows:

1. The Centre's management team uses the information provided in the business plan to develop departmental work plans that track program progress against performance targets.
2. The management team meets monthly to review the work plans and performance measures and receives feedback on progress.
3. Managers use the departmental work plans to develop individual objectives for their direct reports.
4. Objectives form a major component of the performance planning and review process for each employee. Objectives help to ensure that the responsibilities of employees align with the Centre's objects. They also engage employees by illustrating how they contribute to the success of the Centre.

Communication Plan

Each year, the Centre prepares a communication plan that focuses on external communications initiatives that build awareness of the Centre's services and helps develop relationships with target audiences. The Centre's target audiences include: owners, operators and operating authorities of drinking water systems — including small drinking water systems; municipal councillors and decision-makers in municipalities that own drinking water systems; First Nations communities and operators of First Nations drinking water systems; and the public. Following is a summary of the communication plan.

Marketing and Outreach

The Centre's communications build knowledge about the Centre as a provider of drinking water education, training, information and advice for owners, operators and operating authorities of drinking water systems, and the public. The Centre will continue to use traditional and digital media to promote its programs and connect with target audiences. Targeted communication materials, such as print and digital advertisements, articles and email, promote the Centre and raise awareness of its programs. If necessary, communications are tailored to address client feedback and focus on specific client needs.

Centre employees will attend conferences, trade shows and events related to drinking water, including those specific to small drinking water systems and First Nations communities, to interact with target audiences and share information at the Centre's trade booth and through presentations.

Memberships with both the Walkerton and Hanover chambers of commerce will be renewed and the Centre may participate in local events to increase awareness in the community. Local media may be contacted regarding potential interviews, advertising, or speaking opportunities.

The Centre will meet the requirements of the Open Data Directive by maintaining an inventory of its datasets and publishing data in a manner that is consistent with the Open Data Directive, the *Archives and Recordkeeping Act, 2006*, the *Freedom of Information and Protection of Privacy Act*, the *French Language Services Act*, the *Accessibility for Ontarians with Disabilities Act, 2005*, and other applicable legislation.

Website and Social Media

The Centre's website will be updated as necessary with relevant information, including technical resources and information specific to small drinking water systems and First Nations communities. The Centre will promote its website by including website links in print and digital advertisements.

The Centre will maintain its social media presence and will continue to use LinkedIn and Facebook to share relevant information in a timely manner. Social media accounts will be updated as necessary, providing easily accessible information to target audiences across Ontario.

Sponsorships

The Centre may support important events in the drinking water sector and local community by providing funding or in-kind contributions to organizations. Sponsorships raise awareness of the Centre within the drinking water sector and local community. Funding allocations are determined by the Chief Executive Officer following set criteria. The Transfer Payment Accountability Directive applies to sponsorship activities.