

For Information

REPORT TITLE:	Public Works Education Program Updates
FROM:	Andrew Farr, Interim Commissioner of Public Works

OBJECTIVE

To provide an update on Public Works education programs.

REPORT HIGHLIGHTS

- The Region of Peel adapted to the closing of its schools due to COVID-19 by shifting traditional education program offerings to online, using existing resources for teachers and parents to access from home.
- The extended school closures provided an opportunity to examine the transitioning of all environmental based education offerings to a web-based online platform to improve access, enhance program resiliency and utilize staff resources more efficiently.
- Beginning in the 2020-2021 school year, new programming will include online teacher lesson plans, virtual lessons, virtual facility tours, online waste challenges and expanded Peel Water Story modules using a web-based StoryMap application.
- Transitioning education programs online will allow resources to be reinvested to enhance resident facing programs through an increased focus on customer service by increasing public communication and supporting customer service related to construction projects.

DISCUSSION

1. Background

The Region of Peel provides interactive and curriculum linked environmental education programs to teach students in grades K-12 about water, wastewater, and waste management services and topics. Topics cover water quality, water and wastewater treatment, and proper waste sorting practices including organics and the 3Rs (reduce, reuse, recycle).

Traditionally these education programs have been delivered in-person through onsite facility tours, in-school workshops and facilitated school challenges. In order to expand reach, improve program access, and support at home distance learning and real time distance learning, delivery of education programs has started to transition online with virtual workshops delivered by an external vendor and online lesson plans, virtual tours, and other programs and resources developed and delivered by the Region.

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Pre-COVID-19, the Region transitioned two programs, the Peel Water Story and the Whole School Secondary Waste Education Challenge program, to an online format and it was also in the early planning stages of a virtual tour for the Arthur P. Kennedy Water Treatment plant. Work is currently underway to develop virtual tours of water, wastewater and waste management facilities for use in 2021.

2. Adapting Education Offerings to Online

In the Spring of 2020, schools across Ontario closed due to the COVID-19 pandemic. The Region quickly adapted to the closing of Peel schools by providing education offerings online using existing resources. These offerings included the Peel Water Story Geographic Information System modules, videos and vignettes highlighting the Region of Peel's treatment and processing facilities, and online activities and lesson plans. This suite of resources gave teachers and parents a variety of options to use for home learning.

As school closures continued, it became apparent that students would continue distance learning for the remainder of the school year, and modifications to the 2020-2021 school year were likely. The extended closure provided an opportunity to examine the transition of additional education offerings to a web-based online platform.

The benefits of transitioning education programs to an online platform include:

- 1. Expanding education program offerings and improving access: virtual tours are more accessible to a range of audiences, have less risk associated and the timing and number of participants can be flexible.
- 2. Utilizing staff resources most efficiently and effectively by focussing on online learning.
- 3. Enhancing the resiliency of education programs to school closures (pandemics, labour disputes, etc.).
- 4. Continuing delivery of high-quality programs to support Peel teachers and students
- 5. Supporting the increased demand for use of technology in the classroom and adapting. programs to the technology available at home and school.

A framework was developed to guide the transition to online delivery. The framework included a review of strategic alignment with Regional priorities, review of existing program metrics and a research plan (including a best practice scan, teacher interviews and surveys).

Feedback acquired from teachers and school board representatives was positive. Teachers were interested in and supportive of online resources and programming, especially as a result of COVID-19 because they are lower risk, more accessible and have greater reach. Teacher feedback about the Region's traditional in-person programming was also positive but recognized that there may be some challenges participating in in-person programs going forward. Other important factors to teachers included: cross-curricular learning (curriculum connected programming for multiple streams), ease of understanding and use of online programs, and the connection and support for EcoSchool's certification.

3. Program Development

The new online education program format, informed by the framework, will be phased in over the 2020/2021 and 2021/2022 school years. During this time, transitioned programs will be monitored and evaluated, and modifications will be made to support this transition to a model that focuses more on online education.

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For the fall of 2020, in-person water and wastewater workshops will be replaced by online lesson plans, water tours will transition to a virtual format, and waste education workshops will transition to a combination of online lesson plans and live virtual workshops delivered by an external vendor, on behalf of the Region. School board partners will continue to be a part of the evaluation process to ensure programs meet the needs of teachers for in-class and online-learning. Program design is focussed on resilience and support for future education delivery. A modernized and engaging website will enable the Region to provide online programs that are aligned with teachers' and students' use of technology.

Based on the existing climate, the Region will solely offer online education programs until Public Health recommendations and school board policies allow the return to some in-person education.

4. Reinvesting in Customer Service

The transition of education programs to include online programming will require fewer resources. These resources will be reinvested to enhance resident facing programs through an increased focus on customer service for construction projects.

As construction projects can impact customer property, interrupt water services or impact traffic, resident notification processes will be augmented using electronic channels to provide timely updates. This project will also introduce multiple channels for receiving feedback from customers and will log customer inquiries to inform process and program improvements.

As construction project managers can receive hundreds of customer inquiries a year, the focus will be to proactively engage residents in answering common questions and enabling residents to receive immediate responses to these questions. This will allow technical staff to focus on the technical aspects of their work, thereby improving productivity.

To develop a customer service strategy, staff are collecting input from stakeholders, analyzing resident feedback, and conducting a jurisdictional scan. The strategy will support a future pilot beginning January 2021. The results of the pilot will be shared with Regional Council, with the goal to begin rolling out support across all construction teams in 2022. Staff will work with the local municipalities during the pilot to align customer service processes. Typical quality assurance and quality control through Region inspectors will continue throughout the pilot and Region-wide roll-out.

RISK CONSIDERATIONS

Several risks were considered during the development process. There are potential customer service impacts if the redesigned online program offerings do not meet the needs of Peel teachers, students and their families. This risk was considered and mitigated throughout the development process. Online programs have been designed with teachers in mind and will provide teachers with the flexibility to conduct learning at a time appropriate and convenient to them. The online platform is being designed for optimal use on a variety of devices to ensure teachers and students will have full access to resources in school or at home.

Another consideration was reputational risk to the Region by disrupting established relationships with school boards and teachers. To minimize this risk, teacher and school board feedback was

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gathered and analyzed to make informed program decisions. Surveys and ongoing feedback will help to further refine and ensure program offerings are high-quality and meaningful for use as education resources.

CONCLUSION

The COVID-19 pandemic resulted in a shift to online-learning at home and in the classroom. This, in combination with the public board's increased emphasis on technology in the classroom, provided an opportunity for the Region of Peel to evaluate how to best educate students about Public Works topics and priorities. This transition will also allow staff to re-invest resources to enhance resident facing programs through an increased focus on customer service. These programs will be monitored throughout the school year to ensure they continue to deliver value for money and support the community.

For further information regarding this report, please contact Steven Fantin, Director Operations Support, Ext. 4438, steven.fantin@peelregion.ca

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Department Commissioner, Division Director and Financial Support Unit.

Final approval is by the Chief Administrative Officer.

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