



**2020 OWWA Water Efficiency Webinar: Water
Demand and Conservation Post Pandemic**

Thursday, October 22nd, 2020

12:50 p.m. to 2:10 p.m.

1:00 p.m. Opening Remarks

1:05 p.m. **Curbing the Summer Surge: Permanent Outdoor Water Use Restrictions in Humid and Semi-Arid Cities across Canada**

Nandita Basu, University of Waterloo

As urban droughts make headlines across the globe, it is increasingly important to critically evaluate the long-term sustainability of both water supply and demand in the world's cities. We examined daily water production data from 15 Canadian cities to determine if permanent water use restrictions have been effective in curbing summer water demands. We found that outdoor water use restrictions, which ranged in stringency from just six to 42 hours of permitted watering a week, had surprisingly little effect on average summer water use. The restrictions were however effective in reducing the variability of daily demands, and lowering demand spikes during periods of hot and dry weather. The existence of a visible drought, coupled with restriction reminders issued by cities when water levels are low, is likely what makes people take action.

1:35 p.m. **Water Demand Changes and Impact on Revenue**

Daniel Hsia, P.Eng., City of London

Urban water utilities are faced with unprecedented demand impacts with the societal changes brought on by COVID-19. A deep dive into water production and billing data show us market shifts, advise us of possible headwinds for the future, while also helping us understand our customer base. This data and visual driven presentation follows the changes in water demand from onset of COVID-19, to the present day. It will reveal which factors placed upward and downward pressure on demand, and the financial impacts it has had on the water utility.

2:05 p.m. Closing Remarks



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Featured Speakers



Nandita Basu

Associate Professor , Departments of Civil and Environmental Engineering and Earth and Environmental Sciences; Director of the Collaborative Water Program, University of Waterloo

Nandita Basu is an Associate Professor jointly hired between the Departments of Civil and Environmental Engineering and Earth and Environmental Sciences, and the Director of the Collaborative Water Program at the University of Waterloo. She studies the role humans play in modifying water availability and quality, with the overall goal of sustainable management of water resources given a changing climate and increasing demands. She is the Editor-in-Chief of the Journal of Hydrology and a Member of the Royal Society of Canada, College of New Scholars, Artists and Scientists.



Daniel Hsia, P.Eng.

Water Demand Manager, Water Engineering, City of London (Ontario)

Leveraging his Bachelor of Applied Science in Environmental Engineering from the University of Waterloo and certificate in Data Analytics, Big Data, and Predictive Analysis from Ryerson University, Daniel advances the programs and policies that optimize water use, improve drinking water accessibility, and ensures the long term sustainability of the City of London's water utility.

Utilizing data driven techniques and collaborations with academia, he has developed water consumption auditing programs using interval flow loggers, portable water dispenser units for accessible water at community events, an online interval water data portal that was awarded the 2019 Innovation in Digital Customer Engagement award by CSWeek in Phoenix, AZ, and a machine learning leak detection model that was recognized as a 2019 Clean50 top project.

He is also currently Chair of Toronto Green Community, a registered charity focused on building resilient neighborhoods in Toronto through rain-garden construction, eco-walking tours, and community gardens; and was formerly a Water Consultant with the City of Toronto, advising the Industrial, Commercial, and Institutional sectors on water efficient process upgrades, and an Environmental Consultant with Golder Associates Ltd.

Moderated by:

Lloyd Hipel, P. Eng.
Applied Solutions, Director
Enviro-Stewards Inc.



Registration can be found online at:

<https://owwa.ca/events-list.html>

Registration:

- Members: \$29 (+HST)
- Non-Members: \$49 (+HST)
- Students: Free

HST number: # R122057458

- Questions regarding registration should be directed to the OWWA office at (416) 231-1555 or waterinfo@owwa.ca
- Attendance is by advance registration only
- Webinar participants will be eligible to receive CEUs upon attending. Please provide your WWOCS numbers on the registration form
- Cancellation requests must be made in writing and sent to the OWWA office via email. Telephone cancellations will not be accepted.