



NEW YORK STATE WATER RESOURCES INSTITUTE

2020
REPORT



ACKNOWLEDGEMENTS

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Special thanks to mural collaborators: Norma Gutierrez, artist; Caleb Mitchell, Ithaca Murals organizer; Ed Gottlieb, IAWWTF employee; Cynthia Brock and Tee-Ann Hunter, members of the IAWWTF board.

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David Cutter and Leslie Schill at the Office of the University Architect



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YEAR OF WATER

The New York State Water Resources Institute (WRI) is partnering with Cornell Sustainable Campus, Design + Environmental Analysis students, and the Finger Lakes Institute at Hobart and William Smith Colleges to orchestrate the **Year of Water** initiative for 2020-2021.

WRI's role in this program includes:

- Introducing individuals in different disciplines.
- Providing an umbrella event for both those new-to and already-pursuing water-themed work, for promotion and branding purposes.
- Coordinating grant applications for new collaborations.

This report provides an overview of the Year of Water initiative and its objectives, as well as a summary of current projects.



OUR OBJECTIVES

Through this initiative, WRI **aspires** to:

- **Learn.** Increase awareness and knowledge of natural and built water systems and how they are intertwined with our lives.
- **Envision.** Celebrate our water resources and confront the challenges facing them, all toward answering the question: how can we act to preserve our water and ensure access for all?
- **Connect.** Create new collaborations and initiatives both within and across scales - Cornell, Ithaca, New York State, our world - to learn how water unites us and envision our future together.

WRI also **promotes**:

- Convening and introducing individuals in different disciplines and social spheres who are willing to work together, but wouldn't connect otherwise.
- Providing an umbrella organization for both those new to and already pursuing water-themed work for promotion and branding purposes.
- Helping to coordinate grant applications that emerge from new collaborations.



THE TEAM



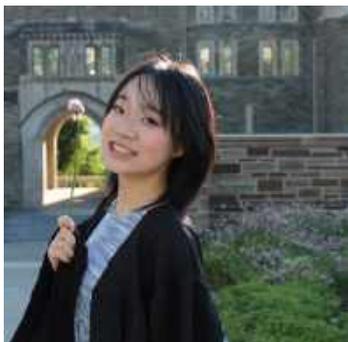
From Upstate NY, **Brian Rahm** started with NYSWRI in 2010. He has since worked on water resource infrastructure management and policy more generally, and enjoys the challenge of addressing the state's water issues via interdisciplinary research, institutional capacity building, and local stakeholder engagement.



From Brasília, Brazil, **Mariana Botão** started working with NYSWRI in 2019 during her second year as a graduate student at Cornell University. To accomplish her Master's Degree from the Cornell Institute of Public Affairs (CIPA), Mariana focused her studies on environmental, economic, and financial policy.



Born and raised in the Finger Lakes region, **Alyssa Marcy** began working with NYSWRI during her first year of graduate school at Cornell University. As a student of Public Administration, Alyssa studies the roles of policy, finance, and education in natural resource management.



Cissy Shen is a transfer student from China, and she joined the Year of Water team during her last semester at Cornell University. As a student studying Design and Environmental Analysis, Cissy endeavors to translate creative ideas into design language, and make real-world changes.

OUR PARTNERS

Year of Water began as a collaboration between the Finger Lakes Institute, Sustainable Campus Cornell, and students in the Design + Environmental Analysis (DEA) undergraduate program. Since then, partnerships have expanded to include municipal facilities, local nonprofits, and community organizations.

In 2019, DEA students designed prototypes for a Year of Water logo, which is now featured on our promotional stickers. They also began the design process for educational installations which will be finalized before the end of 2020.

Many of the partners listed below are working on their own projects that align with Year of Water objectives, and we collectively share our work and events through social media.



DESIGN + ENVIRONMENTAL ANALYSIS

College of Human Ecology



Discover
CAYUGA LAKE



FINGER LAKES
INSTITUTE



HOBART AND WILLIAM SMITH COLLEGES





THE PROJECTS

Since 2019, **Year of Water** began a series of projects in collaboration with our partners. These projects include:

- Campus-wide water droplet installations
- Trivia stickers for campus restrooms
- A wastewater treatment-themed mural
- PocketSights tours
- A podcast that explores water from different perspectives
- Launch of Year of Water on social media

Each of these projects are on-going, and work toward **educating** and **informing** the Ithaca community about the many aspects of Ithaca's water system.

Many projects, such as the mural, PocketSights tours, and installations are **semi-permanent**. We intend for these projects to reach a large portion on the population, from students to residents to tourists, and to last for years to come.

The remainder of this report provides details and visuals of each project.

INSTALLATIONS

Cornell University is home to its own **unique water system**. Water is sourced from Fall Creek, which stretches alongside the east of campus. This water is drawn from the creek and into Cornell's very own **water filtration plant**, before traveling through a network of pipes to the university's many buildings.

Fall Creek doesn't just provide water to Cornellians, it is also home to a historic **hydropower plant** that cleanly produces 2% of all campus electricity. Follow the creek down to Cayuga Lake to find another wonder: **Lake Source Cooling**, a scientific feat that utilizes lake water to cool Cornell buildings.

Over 32,000 students and staff enjoy the myriad of benefits of this precious resource. And yet, many spend their time walking Cornell's beautiful campus without truly understanding how this system works. As part of Year of Water, we worked with students of **Design + Environmental Analysis** to create a series of semi-permanent installations. These **water-droplet installations** stand just over 5 feet tall and feature an upside-down question to draw in passersby. Each droplet contains text and illustration about the history, function and role of three iconic components of the water system: (1) Hydropower, (2) Drinking Water, and (3) Lake Source Cooling.

Rendering of the Drinking Water Installation

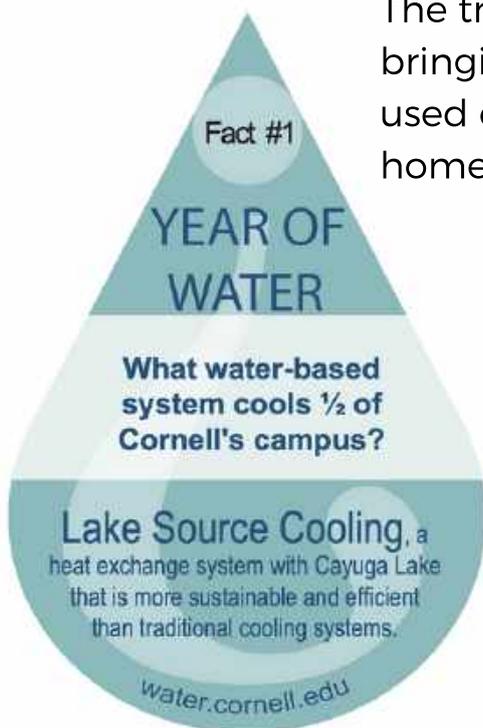


TRIVIA STICKERS

Where do students spend time with water multiple times a day? In bathrooms. And that is the precise location of this project.

Increasing **water literacy** requires providing information through different mediums. Our trivia stickers are designed for placement on mirrors in residential halls. We present 10 questions relating to water usage, the local history of water, and the local water system.

These questions intend to ground residents in the water system that surrounds them, asking students to think about the often unseen journey water takes to provide water to drink, shower, flush the toilet, and even keep us cool.



The trivia questions also broaden in scope, bringing to the forefront the amount of water used every day, from a single shower to a family home.

Beyond residing in university bathrooms, these trivia questions were also designed to be used in a more traditional sense - trivia.

Partnering with **Discover Cayuga Lake**, we have hosted trivia boat tours to help **inform** Ithacans and tourists, too!

MURAL

The Ithaca Area Wastewater Treatment Facility (IAWWTF) sits right next to one of the City's most popular spots - the Ithaca Farmers Market. Yet the treatment facility itself, which treats up to 6.5 million gallons of water every day, tends to blend into the background.

In order to bring attention to this vital piece of the local water system and educate residents about what the facility does for everyone, we chose an illustrative medium: the mural. Visual art catches the attention of passersby and can provide information that text cannot. We partnered with Ithaca Murals and IAWWTF to select a site, develop a request for proposals, and work together to create an accurate, locally inspired design.



The site, pictured left, is an unmarked IAWWTF building located within the Farmers Market. The site is a drain access building with an entrance on the top. The mural itself will wrap around all four sides of this site. It will be visible to anyone walking along the sidewalk and through the Farmers Market.

The **mural** was created by **Norma Gutierrez**, a local resident, Cornell Cooperative Extension employee, and artist. This design displays the complexity and connectedness of Ithaca's water systems, part of which is displayed below. The painting process began at the end of October 2020 and is expected to be finished mid-month.



POCKETSIGHTS TOUR

PocketSights Tour is an app that allows members to **create tours of the local landscape**. It has been utilized at the City of Ithaca and Cornell University to showcase the Botanic Garden, Beebe Lake, and historical landmarks in the region. Users can open the app and find a **local tour or trail** in the area, explore and discover places around while learning about history and culture.

“Out of sight, out of mind” - this describes how the American public thinks - or rather, doesn't think - about water infrastructure. In a national survey investigating how Americans relate to water, infrastructure was rarely mentioned by participants as something they had seen in the media or discussed with others. This, despite reports that \$472 billion in investment is required over the next 20 years to keep our drinking and wastewater infrastructure operational.



Tour Stop: The Waterfront at the Farmers Market

WRI harnessed PocketSights to **raise awareness about local water infrastructure**, creating two tours that take users to important water system structures on campus and in Ithaca. One takes you around Cornell University Campus and its most important landmarks when it comes to **water filtration, water cooling system, and hydroelectricity generation**. The second is dedicated to a walk around the City of Ithaca, starting at the beautiful Ithaca Falls, passing through Cayuga Lake at Stewart Park and ending at the Farmers Market. Through these tours, which encompass 4 miles in total, users learn about the function and history of each stop, increasing their water literacy and directly connecting them to their local environment.

PODCAST

The **Sound of Water** podcast developed out of a need to talk about water with community members. Water news and social media exist, but it often comes from experts. Instead, we wanted to talk about water from a different perspective, fostering conversations on a more intimate level with people from all sorts of backgrounds and from various places.

The podcast was born in the midst of COVID-19 and all of its production is, therefore, **completely virtual**. While this makes recording difficult, it allows us to bring in guest speakers from across the globe to discuss the complexities of our water systems. From engineers to policymakers, we search to connect people back to their communities, asking each one "**What is your fondest memory of water?**".



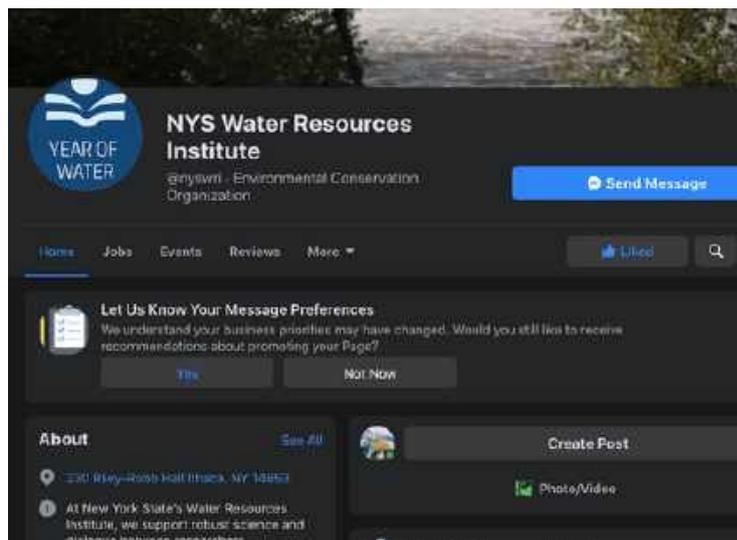
From there, we discuss a pre-selected topic - such as water rights or federal aid to water utilities - and explore the issue from different perspectives.

Our podcast features its very own music, written and performed by **Bobby Mathis**, a Tompkins County artist.

The podcast is available for download at water.cornell.edu and through iTunes and Spotify.

SOCIAL MEDIA

Prior to Year of Water, NYSWRI did not have a social media presence. In order to bolster awareness of the organization itself as well as Year of Water, the team developed a social media strategy and launched a Facebook page.



Our Facebook page is utilized as a tool to increase awareness of water issues and encourage engagement in educational activities. We post about water-related news, locally and beyond, and share information about our Year of Water partners. Moving forward, we intend to launch an page on Instagram in October 2020 to showcase the mural process.



You can find out more about Year of Water and the
New York Water Resources Institute on our website:
water.cornell.edu

