IMPACT REPORT

A WATERSHED YEAR

# Current

Current is a water innovation hub working to grow an inclusive blue economy, accelerate innovation, and solve global water challenges. Chicago is our sweet, freshwater home, but our cross-sector partnerships stretch across Illinois, the Great Lakes region, and the world.







SOLVE PRESSING WATER CHALLENGES

Since our founding in 2016, Current has helped bring water front and center as a critical pillar of our region's climate and innovation strategies. We've raised \$28M+ dollars for the region to support water innovation and inclusive economic development; launched 9 pilots; supported the commercialization of 30+ innovative water technologies, and educated more than 30,000 people through our events and convenings.









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Dear Friend,

Welcome to Current's first Impact Report! Your care and concern for water – and the people, ecosystems, and economies that depend on it – make you a valued partner, the renewable resource that keeps us flowing.

I've had the privilege of leading Current for four of the nearly 20 years I've spent building more equitable, inclusive, and resilient economies. In this work, I'm accustomed to the long game. Decades-long challenges aren't solved overnight.



But in the world of water and climate, the pace is accelerating. Risks are increasing, awareness is building, and the costs of inaction are mounting. Just four years ago, the idea of climate migration to the Great Lakes seemed distant and dystopian; today it is part of the conversation about adaptation to our changing world.

Here in the Great Lakes, I believe we have the power, potential, and responsibility to speed up solutions to the world's water challenges. We also can build an inclusive water innovation ecosystem that strengthens our nation's industrial and climate leadership and brings economic opportunity to the people and places that need it most.

Christiana Figueres, the architect of the Paris Agreement, called for "stubborn optimism" in the search for climate solutions. If you've met me and my wonderful team, you know that stubborn optimism is a quality we share. And we need it as we pursue our ambitious goal to position the Great Lakes as one of the world's water solutions engines.

This Impact Report is an invitation to join us. Water needs champions. Help us keep water where it belongs: front and center on our region's climate investment and innovation agenda. I hope that these highlights from Current's year, and the culmination of efforts over the last four, will boost your O.Q. (Optimism Quotient). In this work, it's the resource we all need in abundance.

In partnership, **Alaina Harkness Executive Director** 



January

## BUILD TO SCALE VENTURE CHALLENGE KICKOFF

Planning for water technology accelerator kicks off, supported by the U.S. Department of Commerce EDA. Stay tuned for launch news in 2024!



## CURRENT TAKES MANHATTAN

We celebrate our Chicago Innovation Award for H2NOW Chicago with a trip to NYC to ring the Nasdaq bell with the Chicago Innovation community.

# EPA ENVIRONMENTAL FINANCE CENTER

Current joined partners Delta
Institute, Center for Neighborhood
Technology and American Society
for Adaptation Professionals as the
EPA Region 5 Environmental Finance
Center to support communities with
their water infrastructure.

February

March

April

May

June

July

August

September

October

November -

#### YEAR IN IMPACT

## UPSTREAM ILLINOIS RELEASED

This first-in-the-nation statewide **blueprint** to boost the inclusive blue economy cements Illinois' right to compete and win in water innovation and workforce development.



# GREAT LAKES RENEW NAMED NSF FINALIST



The Current-led proposal to boost a circular water economy in the Great Lakes advances to finalist status in the inaugural Regional Innovation Engines competition.

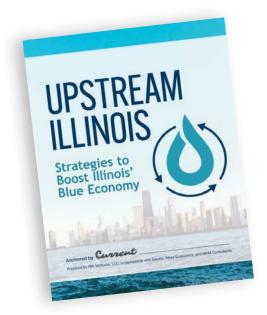
## H2NOW EXPANDS TO CALUMET RIVER

Current's real-time water quality monitoring platform expands from the Chicago River to the Calumet River, providing more data about changing conditions in regional waterways.



Photo courtesy of Antonio Perez/Chicago Tribune Photos

December -



# Nation-leading Blue Economy Strategy for Illinois

Current released Upstream Illinois: Strategies to Boost Illinois' Blue Economy.

This report aligns more than 50 cross-sector partners around

5 key actions to grow an inclusive blue economy by 2030.



Upstream Illinois is a blueprint for Illinois and the Great Lakes, grounded in the Chicago region, to grow and sustain a globally significant Inclusive blue economy. With the right leaders rallying behind this vision, Illinois can support a greater volume of environmental and public health solutions, while narrowing opportunity gaps and centering jobs and economic growth on the people and places who have long been underrepresented and underserved. Water-using industries, governments, and other partners

must seize this opportunity to place this region at the center of a climate and industrial transition. This blueprint activates these assets and to build economic and environmental resilience in the Great Lakes region.

Upstream Illinois was developed with support from the US Department of Commerce EDA Region 5 and in collaboration with an advisory group of civic and industry leaders. It was also featured in **Crain's** and **Bloomberg**.

### Galvanizing partners to advance key strategies:

# Industry-Led Collaboratives

To make Illinois a competitive global center for water innovation, enabling innovation and commercialization.

#### Employer-Led Workforce Development

To reform workforce systems to be more skills-based, responsive and targeted, specifically for women and people of color.

#### Testing, Certification, and Demonstration

To accelerate market integration of new technologies and increase the availability of piloting opportunities.

#### Business Growth Assistance Programs

To provide sophisticated business support services for founders and firms and increase inclusive pathways to entrepreneurship.

## Manufacturing Initiatives

To establish a hub for companies capable of manufacturing water technologies, strengthening regional supply chains in the blue economy.

# Our Future Workforce



## **BLUE JOBS**

Current organized partners to accelerate the development of inclusive workforce pathways in water careers. We received a congressional appropriation from the Office of US Senator Tammy Duckworth to build wastewater epidemiology training programs and convened over 50 partners to problem solve lead service line replacement career pathways.



Current partnered with CPS Infinity High School for River Lab, Current's innovative, Chicago River-centric STEM challenge about water quality and career exploration. Current also purchased a van for our new Mobile Lab, coming soon in 2024 to help communities connect to real science and innovation work.





MSI photo courtesy of Museum of Science and Industry/Steven Koch

## MSI WE RUN STEM EVENT

Current joined the Museum of Science and Industry for We Run STEM, where girls and gender-expansive youth from the South Side explored STEM careers and connected with scientists. With Current, participants engaged in the design and engineering process by crafting, building, and testing mock water samplers created from recycled materials.



### Water Tech Accelerator

Current is building a water technology accelerator supported by the EDA Build to Scale Venture Challenge and the Pritzker Traubert Foundation. In partnership with Further Faster Ventures, we are creating an innovative program structure that will support educational modules, industry connections, and mentorship opportunities for founders of technologies related to water and resource recovery. This program will launch in 2024, with an emphasis on engaging founders from underrepresented communities.

# EPA Environmental Finance Center

Current is a key partner with Delta Institute on the EPA Environmental Finance Center (EFC), Regional Water Infrastructure. Our partnership delivers technical assistance to underserved communities that struggle to access federal water infrastructure funding and receive the support they need to access resources for water infrastructure improvements. Ultimately, we plan to assist communities in securing at least \$250,000,000 of SRF, BIL and other public/private funding for resilient water infrastructure.

### MachH2 Midwest Hydrogen Hub

The Midwest Alliance for Clean Hydrogen MachH2 effort, of which team Current is a partner, was selected by the U.S. Department of Energy Office of Clean Energy Demonstrations as a regional clean hydrogen hub. Current will help MachH2 realize its full potential as a driver of inclusive economic growth and innovation across the Midwest, spurring development of technologies to conserve and manage water resources throughout the hydrogen production chain.

# Pilots Expand in the Field

### H2NOW and Wastewater-Based Epidemiology Thrive in 2023

#### **H2NOW**

In 2023, our Chicago Innovation Award-winning project, H2NOW Chicago, extended its reach to the Calumet River, broadening access to real-time water quality data for more Chicagoans. Highlighted on the front page of the Chicago Tribune in August, H2NOW garnered increased visibility, furthering awareness of this initiative backed by the Chicago Community Trust Great Rivers program. Additionally in August, Team Current traveled to NYC to ring the Nasdaq Stock Market Opening Bell along with other Chicago Innovation Award winners.

#### **WBE**

The CDPH-DPI led Wastewater-Based Epidemiology Program supported by Current added three new sites in 2023—pumping stations—for broader, multi-neighborhood coverage. DPI's testing scope included RSV, setting the stage for further advancements in 2024. Continued growth in site coverage and expanded testing signifies a proactive approach to public health surveillance.



Photo courtesy of Antonio Perez/Chicago Tribune Photos





# Industry Stewardship and Innovation

Current kicked off the year by partnering with the **Consulate General of Canada**'s Lead Trade Commissioner for Clean Technologies and Infrastructure to host a two-part technology challenge series in collaboration with our corporate partners at **Ingredion** and **ADM**.

We continued our international engagement efforts and co-hosted a Welcome Reception with Northwestern University, World Business Chicago, and the Office of the Consulate General of Israel to the Midwest to meet and greet the visiting delegation of the Israel-U.S. Collaborative Water-Energy Research Center (Israel-U.S. CoWERC) during its inaugural convening in July.

Through **Great Lakes ReNEW**, we expanded our roster of industry leaders to refine research, innovation and workforce priorities for the region.

#### **LOOKING AHEAD**

### Launching the Industry Consortium in 2024

In 2024, Current will launch the Industry Consortium (CIC). CIC will provide strategic direction and guidance from industry and corporate leaders on Current's water technology commercialization, workforce, entrepreneurship and inclusive innovation ecosystem, education, policy, and advocacy initiatives. CIC is comprised of leaders representing various industries (e.g., food/beverage, manufacturing, agriculture, tech) based in the Great Lakes Region. Additionally, CIC will tackle challenges faced by members across water strategy, ESG reporting and disclosure requirements, review of new water technologies, review/publication of use cases, and water policy issues, providing direction and oversight of Current's pursuit of government funding opportunities.

# Growing Our Diverse Community of Water Leaders

### **SPRING**

#### **UN Water Week**

In March, all the world's water leadership converged on New York City for the first UN Water Conference in a generation. Current submitted commitments to the UN Water Agenda and joined a Chicago delegation to the Megacities Alliance for Water and Climate (MAWAC) Euro-North American Region (ENAR) Water Research & Innovation (WRI) Workshop.





## **SUMMER**

#### **H2NOW Partner Celebration**

Current celebrated the kickoff of the 2023 H2NOW season by hosting a summer celebration at the McCormick Bridgehouse & Chicago River Museum. Partners had the opportunity to catch up on Current's work and get the latest news on H2NOW. The team and partners enjoyed connecting with each other on the riverfront and exploring the bridgehouse museum.

#### Illinois Workforce Innovation Board

Alaina Harkness was recently nominated by Governor Pritzker to the Illinois Workforce Innovation Board (IWIB). IWIB includes leaders from state, business, industry, labor, education, and community-based organizations with the goal of evaluating and meeting the workforce needs of Illinois' employers and workers.



#### **Chicago Climate Connect**

In September, Chicago Climate
Connect, a network of current or
aspiring climate professionals, convened
over 100 people at Current HQ to hear
from our very own Alaina Harkness
and Argonne's Seth Darling about the
promise of Great Lakes ReNEW, the
water-energy nexus, and the fascinating
history of the City of Chicago and water.

### **SUMMER**

#### Chicago Innovation Nasdaq Bell

In celebration of Current winning the Chicago Innovation Award for H2NOW Chicago in 2022, Alaina Harkness and Kalindi Parikh represented the team in New York City to ring the NASDAQ with other Chicago Innovation Awardees. Nothing like seeing Current's logo in the bright lights of Times Square!

#### CoWERC delegation visit

Strategies for enhanced water security are the focus of a new report from the Engineering Research Visioning Alliance (ERVA), an initiative funded by the U.S. National Science Foundation. Our Alaina Harkness contributed to the report, which identifies engineering research priorities to address this complex issue.



## FALL

#### Inaugural Climate Tech Venture Summit

Current shared the stage with leading climate innovators at the inaugural Chicago Venture Summit Future-of-Climate-Tech by World Business Chicago. It was a strong showing for women in water, from Dr. Bianca Bailey (Agriwater) to Manuela Zoninsein (Kaydeya) and our Alaina Harkness. Current joined regional climate tech ecosystem partners in launching the Chicagoland Climate Investment Alliance.



# One Water Summit

Current attended The US Water Alliance's One Water Summit in sunny Tucson, Arizona in November. Team members Melissa Pierce and Kalindi Parikh met with peers in workforce development and water reuse and equity.

#### WEFTEC

We welcomed WEFTEC back to Chicago in the fall, hosting a reception with friends from Imagine H2O, BlueTech, and WEF. We gave a spotlight talk with partner water hubs at Cleveland Water Alliance, Georgia's Water Tower, and Milwaukee's Water Council, cheered on MWRD in the Ops Challenge, and mingled with water entrepreneurs at the Innovation Pavilion.





#### World Water-Tech North America

Alaina Harkness was a speaker at World Water-Tech in Los Angeles this October where she discussed building planet-friendly water systems with fellow 'Decarbonizing Water' panelists.



# Save the Date: Chicago Water Week 2024

One week. Dozens of events. Hundreds of voices inspiring action. During Chicago Water Week, the critical role of water in Chicago's environment, communities, and economy takes the spotlight. With a mix of virtual, hybrid, and in-person formats, Current and our partners will host a series of events highlighting all things water featuring regional leaders, policymakers, innovators, researchers, advocates, industry veterans, recreation enthusiasts, artists, storytellers, and more. Chicago Water Week will drive action by bringing focus to our most precious resource.

May 5-11, 2024

#### How to engage

Host an Event During CWW-24! Submit details: **bit.ly/3N61N5c** by March 8, 2024.

Attendee registration begins in March 2024.

Chicago Water Week 2024 is generously supported by a grant from the **Charles Stewart Mott Foundation**.

Made for the World



# A Resource Recovery Revolution

### Our regional engine for climate resilience and resource recovery



Great Lakes ReNEW is a six-state, crosssector collaborative with an ambitious plan to accelerate resource recovery from wastewater and transition the Great Lakes region to a decarbonized circular water economy. Resource recovery (nutrients, critical

minerals, energy, water) may enable energy-neutral or energypositive wastewater systems and support domestic supply chains for critical minerals needed for battery production and electrification.

ReNEW was developed in response to the National Science Foundation's (NSF) Regional Innovation Engines program, a national competition to catalyze inclusive innovation

ecosystems. As one of only 16 finalists, Current convened 100+ partners for a site visit to demonstrate ReNEW's strength as an engine, with support from the Just Transition Fund and Innovate Illinois. Follow us for updates as we await the outcome!

ReNEW boosted Current's ability to work across the Great Lakes region, adding partners and growing the Current Research Consortium to now include University of Michigan and Purdue University as new members, alongside existing members University of Illinois Chicago, University of Illinois Urbana-Champaign, University of Chicago, Northwestern University, and Argonne National Laboratory.

Stay tuned for the outcome!



Thanks to the Just Transition Fund, Exelon Foundation, and Innovate Illinois for supporting the site visit.

# currentwater.c

# The People and Partners Fueling Water Innovation

#### **Government Partners**

**City of Chicago** 

**Department of Water Management** 

**Consul General of Canada** 

**Metropolitan Water** 

**Reclamation District of Greater Chicago** 

**U.S. Department of Commerce** 

**Economic Development Administration** 

U.S. Department of Labor Workforce Innovation and Opportunity Act

# Foundation and Nonprofit Supporters over \$1,000

**Allstate Foundation** 

**Amazon Smile** 

**BIRD Foundation** 

**Chicago Community Trust** 

**Chicago Public Schools Foundation** 

**Delta Institute** 

**Exelon Foundation** 

**Innovate Illinois** 

**Just Transition Fund** 

**Charles Stewart Mott Foundation** 

**McDougal Family Foundation** 

Once Upon a Time Foundation

**Pritzker Traubert Foundation** 

**Yagan Family Fund** 

#### **Research Partners**

**Argonne National Lab** 

**Discovery Partners Institute** 

**Northwestern University** 

**Purdue University** 

**University of Chicago** 

**University of Illinois** 

**University of Michigan** 

#### **Board Members**

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**Chris Sosnowski** 

Dr. Dev Gavaskar

**Dr. Rafael Simon** 

Pierre Côté, Ph.D.

Dr. Kam Law

# THE Current TEAM



# Water Innovation, Powered by Partnerships

Thank you to all of our partners and supporters who made this watershed year possible.

