Freshwater’s mission is to inspire and empower people to value and preserve our freshwater resources.
letter from the director

Friends,

Could any of us have imagined 2020? For Freshwater, and countless communities, 2020 has tested us. In a year turned upside down, we have learned to adapt. We’ve also felt immense gratitude for community support – you.

The sampling of our work featured in this report began in July 2019 with lake coring, an international fellow, and plans for the 2020 State of Water Conference. It ended in upheaval that impacted us all. Thankfully, through it, the Freshwater team persists. Our work for clean, safe water continues.

We even made progress in key areas this year: we honed our values, launched a new strategic plan, adopted a new program, and provided financial support to artists. We made equity and inclusion a clearer focus. We pressed for stronger water policies statewide. We also practiced resilience, embracing new technology and work from home. Thank you for persisting with us.

Sincerely,

John Linc Stine, executive director

guiding values

- Safe and reliable water for all Minnesotans
- Equity and inclusion of diverse perspectives
- Community-led solutions
- Science and evidence-based principles
- Convening collaboratively
- Teamwork, transparency, integrity and shared leadership
- Sustainability in our operations

FY20 PROGRAM HIGHLIGHTS

Emerging Contaminants
Intern Rob McManus collects lake cores to examine contaminants of emerging concern

150 Donors gave $16,000 for our waters

9 years of Service
Freshwater wishes farewell to MWS leader Deirdre Coleman

12 Artists meet and create in the launch of Art for Water!

COVID19
Remote Office Freshwater staff begins working remotely

Strategic Plan Freshwater completes our new 2020-2025 strategic plan

Freshwater Equity Focus established by Board Chair Valery Forbes

International Groundwater Fellow
We welcomed Jambay, international fellow from Bhutan


COP25 Conference
Jen Kader attends the United Nations Climate Change Conference in Madrid

Clean Water Council Appointment
Governor Walz appoints Jen Kader to Clean Water Council

March 3 Legislative Hearing
Carrie Jennings testifies on HF3425

Water Connects Us
Freshwater hosts first ever virtual fundraiser, a video premiere event

47 New Water Stewards Graduate at Confluence
Groundwater, our invisible source of water, is difficult to understand. Yet as Minnesota’s reliance on groundwater increases, those charged with protecting it from pollution or depletion face the challenge of making this invisible resource visible.

In response, Freshwater led a team of groundwater and drinking water professionals from the Department of Health, Board of Water and Soil Resources, UMN-Water Resources Center, and the Department of Natural Resources to develop a basic groundwater science and communication course, “Groundwater Basics for Resource Managers.” The course connects groundwater and surface water resources as part of an interrelated system, equipping water professionals, decision-makers, and communities with the understanding they need to more effectively and confidently communicate groundwater challenges and initiate action towards solutions.

This multi-year project, completed this summer, was funded through an appropriation from the Clean Water Fund to the Minnesota Department of Health. The course is the first building block of a larger vision championed by the Interagency Groundwater Drinking Water Team to build capacity for groundwater and drinking water protection at the local level.
Freshwater research efforts stay up-to-date through intern program that helps launch careers

Brian Bohman is a PhD student in Water Resources focused on nitrogen management and has been with Freshwater for four years. We relied on him for a large part of Freshwater’s comment letter on the nitrogen fertilizer rule and he also contributed his research and organizational skills to the Minnesota Basin Water Storage and Banking Groundwater projects.

Rob McManus documented the history of an emerging contaminant by coring lake sediment. He jump-started his research on spring break, formalized a work plan, and budget in the first week and even raised money for sample analysis. He helped get permission to core, participated in field work and even researched the methodology to analyze the chemical of concern. Rob presented his results at the U of M Water Resources Conference in October.

Ethan Kurak worked throughout his undergraduate career at the U of M on the precipitation-driven landslide mapping for Hennepin County. He is now at Lehigh University working on a graduate degree in this area. Community Solutions Program intern Jambay from Bhutan had a four-month stay during which time he pursued how forests cycle groundwater. He opened our eyes to monitoring efforts in our forests to assess impacts of harvesting and climate change. Jambay was accepted to a PhD program at Clemson.

Three biology students interned this summer thanks to an alumna donation. Ashley Laskowski, Colin Vehmeier and George Roy addressed pharmaceuticals in manure and wastewater. They wrote a comment letter to the MPCA during review of feedlot standards and now that they are back on campus, we are meeting in person for the first time!

Galen Xiang literally wandered into our office asking how he could help. Between Conservation Corps and graduate school, he wanted to stay engaged. He researched the four areas we chose to study for the Banking Groundwater report. Carrie tried hard to recruit him to graduate school here but he has been accepted to an Applied Geophysics Program in Philadelphia and is currently working in Iowa.

These interns come and go quickly but become beloved by staff. They keep us up-to-date and explore critical issues for Minnesotans. The experience helps launch their careers.
Emergency Manager Eric Waage wants to anticipate the challenges that changing precipitation brings to the built and natural environment of Hennepin County. He has created an award-winning atlas series to make cities and watersheds aware of local hazards such as precipitation-driven landslides and bedrock collapse. The first atlas in their series has been released and has already been put to use in neighboring Dakota County as the residents of Mendota searched for resources to understand the risk of landslides on steep slopes above their homes.

The bedrock collapse atlas, currently underway, benefited from a well-timed MPR story by a former student of Carrie’s. Scores of residents called with credible reports of sinkholes in their yards. Increased rainfall intensity and undersized water infrastructure can lead to increased risk of bedrock collapse in the shallowly buried bedrock layers in parts of the County.

Banking Groundwater, a tool for groundwater sustainability in Minnesota?

Groundwater-dependent parts of Minnesota that anticipate population and land-use change may be facing threats from increased groundwater withdrawals. A tool not currently permitted in Minnesota is recharging aquifers to supplement the natural groundwater supply.

We studied four aquifers in Minnesota to evaluate when and where managing recharge is a feasible, economic approach.

During the project we were approached by a city that would like to recharge aquifers drained by 4 of their 7 wells and the subcommittee investigating solutions to PFAS contamination in Washington County. Recommendations will be presented during the 2021 legislative session.

Resilience for our built and natural environments in a changing water future

I appreciate your response ... which validated my concerns ... and lit the fire in me to speak up. Your guidance was critical ... The work you do is important ... in this critical river valley area.

Mendota Heights resident
Minnesota Basin Water Storage

The timeline from foundational research to legislation seems to be on the order of a decade or two. At least that is how long Carrie has been working on identifying the cause and effects from increases in flow from the Minnesota River. The solution to multiple problems seems to be to try to keep water closer to where it falls. We had legislation on its way to inclusion in an omnibus bill during the last session but it was disrupted by the pandemic. We will resume the final push for a pilot water-storage project in the Minnesota Basin during the 2021 session. We also look forward to solutions being implemented on the ground as the Le Sueur watershed begins its One-Watershed-One Plan process.

Here is a pictoral version of the steps from the research that Carrie participated in beginning in 2006, long before she joined us at Freshwater.

Foundational Scientific Studies 2006-2011
Motivated by need for MPCA to establish a sediment load for the Minnesota River

- Carrie mapped geology of Blue Earth County while with the Minnesota Geological Survey, 2006-2010
- Field work on cratering rivers, significant problems with erosion
- Proceeded by mapping of other counties comprising nearly the entire watershed

- Carrie recruited researchers from NSF’s National Center for Earth Surface Dynamics to track sediment, 2006-2011
- Over a million dollars in federal State, and corporate grants for the many-funded follow-up projects
- More than 6 years of additional work, still ongoing (Nitrogen tracking, Phosphorus-tracking, where to place wetlands for co-benefit of nutrient removal, cyanobacteria)

- Carrie recruits SCWRS Dan and Shaw to track upland sediment and find storage sites, $250,000
- Prior contracts leading to this: Sediment in Crow River watershed, $90,000, Redwood Lalias, $89,140: pilot project with my class, $150,000
- Link this work to Pepsin sediment record: update coring: pivotal publications
- Carrie supports Dylan Blumer/Miracle, who goes on to do PhD work with SCWRS help
- Follow-up work by Shaw and I on change in run-off ratio from fields (linked to soybean acreage, tile)
Stakeholder Engagement 2012-2017
To identify a strategy for reducing sediment loading

- Stakeholders convened for 4 years in watershed to get buy-in
- Develop menu of management options with associated costs
- Run various scenarios to optimize costs and benefits
- Freshwater convenes technical people from state agencies to demonstrate CSSRS tool.
- Scientists meet policy folks; policy folks get comfortable with science
- Report and software distributed
- Cozy, catered meet-and-greet (Happy Gnome)

Multiple outreach efforts:
- Copies sent to key actors across the watershed
- Copies given to water-related committees
- Staff in legislature

Directed communications 2016 – ongoing
Disseminate the results in plain language to get durable change

- Printed material:
  - Lower Minnesota River Watershed District to create flyer
  - Summary handouts for legislative visits

- Media:
  - Television
  - Documentary Films
  - Online video content
  - MPR

- Presentations and Field Trips:
  - Ditch Viewers Association
  - Women Farm Owners of Renville County
  - CURe members (Clean Up our River Environment)
  - Moos Family Speaker Series
  - Education: college; high school teachers
  - Flood Plain Managers
Political action and legislation
2019-2021

Develop Legislation
- Met with key legislators from both parties in Minnesota River Basin
- Drafted legislation—helped resolve conflict in two different bills
- Testified in committee hearings

Coordinate with Agencies
- Met with BWSR
- Developed framework for program they agreed to administer

Rally Stakeholder Support
- Worked with Minnesota River Congress, Coalition for a Clean Minnesota River
- Get on the platform of Association of Minnesota Counties

These and other Freshwater efforts helped shaped our legislative priorities for the 2021 session:

- Reporting on recommendations from the Banking Groundwater study
- Reintroducing the Water Storage Bill for the Minnesota Basin
- Stable Funding for the all-important implementation work of our Soil and Water Conservation Districts
- Support for the funding recommendations of the Clean Water Council
- Resilience for our built and natural environments in the face of a changing water future
Community Engagement

What’s in a name?

Our flagship volunteer program is now Minnesota Water Stewards! We changed our name from Master Water Stewards based on feedback from partners and program participants in an effort to align with our anti-racist values. We are committed to maintaining a high level of training for all Stewards. However, we are replacing the word “master” because of its deep, damaging connection to slavery in this country and the oppression of People of Color and Black and Indigenous communities. Adding “Minnesota” reflects our commitment to including ALL people of Minnesota in caring for water. Water is the root of the word “Minnesota” (mní is Dakota for water) and an important part of our state identity.

I believe steps like this are critical to addressing the systematic way we use our language — often unwittingly — in a way that creates barriers... My hope is that as we embrace new verbal identities that we find ways to embrace new audiences for our programs across the state.

2020 water steward

Freshwater adopts Adopt a River

We are thrilled to add Adopt a River (AAR) to our suite of programs that emphasize community leadership for clean water, and to continue to build on its legacy. Since 1989, AAR has facilitated more than 3,200 surface water clean-up initiatives, resulting in the removal of 6.5 million pounds of trash from 11,000 miles of Minnesota shoreline. True to its vision as a community-based initiative, more than 90,000 volunteers have taken part in AAR clean-up efforts. Along the way, AAR has developed long-lasting relationships with the communities it supports, never losing sight of the importance of fostering a shared sense of environmental concern and accountability. As an organization supported by Minnesota communities, Freshwater has long shared AAR’s dedication to empowering individuals as conservators of water. We’d like to thank Conservation Corps Minnesota & Iowa, who hosted the program starting in 2016, for engaging us in their search for the program’s new home. We are confident our cultures are perfectly matched and we cannot wait to begin this next chapter.
Community Engagement

Art connects us

Art has the power to inform and connect us, reaching across language and culture, in ways that facts and figures cannot. This was the inspiration behind Freshwater’s new Water Steward program, Art for Water. With support from Hennepin County Green Partners and Rice Creek Watershed District, Freshwater trained twelve artists, equipping them with information and tools to create art that engages their neighbors and inspires behavior change to improve the health of our waters.

After completing the science-based curriculum, the artists are developing interactive public art experiences with the challenge of doing so in a pandemic. Their projects range from a coloring book based on a local creek to a large, mobile puppet that can travel through neighborhoods sharing a water message. Freshwater is proud and grateful to be able to support and empower artists at a time when many of them have lost much of their expected work. Artists and their creations hold the power to unite, inform, and inspire us, particularly in times when we need them most.

“Thank you all so much for the opportunity to work with a cool organization on a meaningful cause! I hope that the experience is a good one for you all as well and that you are able to continue to empower more artists in the future that we can take part in the amazing work you do.

Art for Water water steward
Numerous studies document the disproportionate impact environmental degradation and the resulting public health threats have on low income communities and communities of Black, Indigenous, and People of Color (BIPOC). Yet in Minnesota, water resource organizations, state agencies, and local units of government are largely white, affluent, and based in urban areas. Initiating effective, adaptive, and collective action to address these issues and their disparity in impact is both the challenge and an opportunity for Freshwater.

At Freshwater, through the generous support of the Marbrook Foundation we are developing our intercultural competence so we can more effectively engage and include all voices in water quality and sustainability conversations and decisions. The insights we are gaining and relationships we are building guide us as we reshape our internal practices, programs, and services to better serve the increasingly diverse communities of Minnesota. Our vision is to strengthen how systems work together in Minnesota for clean, reliable water and, as needed, participate in creating new ways of working together.
Facilitation and Participatory Engagement

**Strategic approaches to limit damage and loss of life from flooding**

In 2019, Freshwater’s facilitation program flowed downstream to support the Iowa Floodplain and Stormwater Management Association in developing their first strategic plan. Founded after the floods of 2008, IFSMA has engaged in promoting flood risk education and helping stormwater and floodplain managers share and grow in their skillsets. They were looking to define “what’s next” for IFSMA.

After meeting with the board to scope out the planning effort, Freshwater designed and hosted a day-long workshop to clarify the organization’s purpose, identify challenges, and define actions that can be taken. The iterative process led to the creation of:

- a refined vision statement,
- articulation of organizational values,
- creation of program areas,
- a clear two-year action plan to guide IFSMA through their transition and begin pursuing identified goals, and
- a strategic plan adopted by the membership in spring 2020.

You skillfully took care of the structure of the day, so each of us could spend time thinking about strategy, vision and mission. Your experience and leadership were invaluable as we look to solidify the necessary direction for our organization moving forward.

Sandy Pumphrey, Chair of the IFSMA Board of Directors
Dakota County gets 90% of its drinking water from groundwater sources, so a clean and reliable supply of water is critical for the future of Dakota County’s residents, businesses, and the environment. In the spring of 2019, Freshwater was contracted by Dakota County to lead the stakeholder engagement efforts that would inform the update to their Groundwater Plan, and immediately got to work co-designing a process that would meaningfully engage stakeholders in shaping the county plan through multiple phases.

Freshwater created an engagement plan for the multiphase project based on conversations with County staff—detailing a robust effort to learn about the goals, concerns, and ideas stakeholders have regarding groundwater—and led the facilitation for each part. More than 300 people representing a variety of interests and spread across the county participated in the first round, and their input (some of which surprised or was new to County staff) informed plan’s goals and actions. In the second phase, all participants from the first plus anyone else who was interested was invited to provide feedback on the draft and suggest priorities. Their input uncovered values, clarified strategies and actions, and garnered support.

The final plan will be adopted in the coming year.
Financial Summary
FY 2020

Balance Sheet

Assets
Cash/Cash Equivalents $541,162
Receivables 130,089
Prepaid Expenses 14,598
Inventory 31,887
Investments 4,988,220
Fixed Assets 22,099
Total Assets $5,728,055

Liabilities and Net Assets
Accounts Payable $44,339
Accrued Liabilities 49,327
Payroll Protection Program Note Payable 148,300
Total Liabilities $241,966
Unrestricted Net Assets $5,359,098
Temporarily Restricted Net Assets 68,616
Permanently Restricted Net Assets 58,375
Total Net Assets $5,486,089

Income Statement
Support and Revenue $1,295,171
Program Expenses $863,558
Management and General Expenses 264,522
Fundraising Expenses 133,924
Total Expenses $1,262,004
Change in Net Assets $33,167

Expenses
Programs 68%
Management & General 21%
Fundraising 11%

Thank you for investing in healthy water for future generations.

Donors from July 1, 2019-June 30, 2020

Corporations, foundations, and organizations

- Minnesota
- Minnesota
department of Health
- Minnesota
environmental fund
- Mississippi
watershed management organization
- National financial services llc
- PayPal
- Ramsey county
swcd
- Ramsey
washington
metro watershed district
- Rice creek
watershed district
- Riley purgatory
bluff creek
watershed district
- South Washington
watershed district
- Sunleaf naturals
- The benedict
community impact fund
- The contended cow
company
- The mcknight
foundation
- The mosaic
company
- Uponor
- Vadnais lake
area water management organization
- Valley branch
watershed district
- WSB
- Zero-Max Inc.

Individuals and members

- Anonymous
- Alden Abraham
- Elizabeth abraham
- craig & patty
- acomb
- Gilbert Ahlstrand
- betsy aird
- Allan
- Jim almendinger
- sue amundson
- tamra andersson
- Charles andersson
- dale & nancy
- andersson
- paula andersson
- teresa & doug
- andrys
- jeffrey angel
- rich ball
- Gary t. bank
- vicki barker
- Michael barrett
- Sara barsel &
- Randy neprash
- Malcolm Bastron
- marilyn bayer
- Judith beckman
- sara beckstrand
- joanne bedeman &
- Barb tretheway
- Carmen bell
- Carolyn belle
- bonita benson
- Mary Ann & Ronald
- Bergantine
- Robert Berger
- Eric berglund
- bette
- Roger & Dallas
- betz
- Beth bird
- Archie black
- Temple blackwood
- Lorraine boedeker
- Todd & Terry Bolin
- Margit bonnema
- Gina bonsignore &
- Rick garber
- Gary botzek
- Keith boulais
- Cheryl & Bill Brady
- Katherine braeung
- Corliss brecht
- Michael Briggs
- Cliff brittain &
- peggy ladner
- Lynn broadus
- Blyth brookman
- Conley Brooks
- Tara brown
- Brown Robert
- Laurie Bruno
- Kate bryant
- Craig & Linda
- Buchholz
- David buerkle
- Sharon buffington
- Denis burand
- Amy burg
- Howie Burke
- Tom burton
- Terry butter
- Janice cahill
- Andrew calkins
- Barbara Ann callet
- Amy carlson
- Beth carreno
- Heather carver
- Hahn chang
- Whitney & Sarah
- clark
- James colten
- Julie comfort
- Mary conway
- Heather cook
- Paula corsi
- Brad coulthart
- Craig cox
- Karen cox
- Stoddard crane &
- Margaret lanik
- Mike & Becky
- creglow
- Robert & Gretchen
- crosby
- Lee & Anne
- cunningham
- Lisa cunningham
- Mary curran
- Liz curran
- Cyndi m.
- Maia dalager
- Harris Darling
- Don Davies
- James davis
- Davison family /
- David davison
- Jim & Erika de
- Lambert
- Janine decoster
- Nancy deever
- Kate dehmer
- kathy delaney
- Anne delvecchio
- Vanessa demuth
- Roger denlinger
- Kathleen digiorno
- Mairi doerr
- Janine doer
- Jim donehower
- Mark doneux
- Jean doolittle
- Doug
- John a. downing
- Ms. robin draves
- Henry drewes
- Virginia k. driggs
- Anthony drollinger
- Tim dykstal
- James earp
- Edward egan
- Dr. ed ethinger
- Edward egan
- Eric o. ellifson
Water is life and Freshwater advocates on my behalf to leave water and life healthier than we found it.

Freshwater member