

A hand wearing a black sleeve and a brown watch holds a clear glass bottle with a faceted stopper. The bottle is partially filled with water and has some sediment at the bottom. The background shows a wide river under a clear blue sky, with a sandy bank and some bare branches in the foreground.

# ISSUE 28 : WINTER/SPRING 2025

## OPEN RIVERS : RETHINKING WATER, PLACE & COMMUNITY

# MISSISSIPPI RIVER OPEN SCHOOL

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from multiple perspectives within and beyond the academy.

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The cover image is courtesy of Michelle Garvey from her article in this issue.

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TEACHING AND PRACTICE

# MISSISSIPPI AS METHOD

By Michelle Garvey

## Praxis of Place

**W**hen I think about the kinds of praxis—the application of theory—that enable liberatory movements, I remember bell hooks. Her work teaches the reciprocal relationship between theory and practice: “Theory emerges from the concrete, from my efforts to make sense of everyday life experiences, from my efforts to intervene critically in my life and the lives of others. . . . Personal testimony, personal experience, is such

fertile ground” (hooks 1991, 8). Alongside those of other Black feminist and Chicana intellectual trailblazers, hooks’s observations stand as a major corrective to the way academia has historically valued theory over practice, implying the presumed objectivity a thinker could possess by virtue of being an unbiased, hands-off, passive observer.



*HECUA Environmental Justice student Claire Cambray paddles past the Flint Hills oil refinery at Pine Bend along Mississippi, fall 2020. Image courtesy of Michelle Garvey.*



I am a feminist-trained scholar organizing for and teaching environmental justice (EJ), a social movement that challenges dominating systems of power such as colonialism, white supremacy, anthropocentrism, and capitalism, which render expendable both nonhuman ecosystems and the politically vulnerable communities embedded in those ecosystems. Alongside the theories of EJ, I

make it a point to teach students the biographies of EJ founders and first-person testimonies of people on the frontlines; these illustrate personal-to-political experiences of environmental injustice, as well as personal-to-political strategies to achieve liberation. Like hooks, they show us that who we are impacts how we think.



*HECUA Environmental Justice student Trinity Ek on the banks of Mississippi River at Akiing Welcome Water Protectors Center in fall 2021. Image courtesy of Michelle Garvey.*



A critical feature of EJ—and a sign of its conceptual efficacy, gathering, as it does, the realms of both nature and culture within its reach—is its recognition that who we are determines the uneven siting of environmental harms and benefits. This is why calls for liberation predominantly come from Black, Brown, Indigenous, and working-class communities. Clearly, “environmental” in EJ’s namesake signifies place in a geographical, material sense. But “justice”

does, too. For example, Carolyn Finney employs David Delaney’s idea “geography of experience” to amplify shared experiences of racism across space (2014, 54). In further recognition that land is inextricably tied to collective identity, Malcolm X famously argued, “Revolution is based on land. . . . Land is the basis of freedom, justice, and equality” (1963). Indeed, *who* we are, and therefore how we think, cannot be distinguished from *where* and *with whom* we are.



*On a weeklong paddle for the fall 2019 HECUA Environmental Justice program, Joseph Underhill interviews Michelle Garvey about river-based experiential education. Image courtesy of Linda Buturian.*



I am further shepherded in these considerations by Indigenous researchers and educators whose relational perspectives ground place-based praxes. Linda Tuhiwai Smith instructs that a decolonial approach to scholarship necessitates resisting the colonial impulse to equate distance—both spatial and temporal—with objectivity (2012, 58). Robin Wall Kimmerer approaches plants as subjects, not objects, inviting us to scientific

inquiry with neither the impersonal “what is it?” nor the reductionist and mechanistic “how does it work?” but rather the relational “who are you?” and the deferential “what can you tell us?” (2013, 42). Shawn Wilson (2008) reminds us that good research is about accountability to all our relations, human and more-than-human; we are *within* our relations, rather than outside of them.



*Michelle Garvey facilitates an environmental justice tour of campus for students in the spring 2024 “Environmental Justice” course at UMN. Image courtesy of Artie Hillman.*



This is why I believe that doing EJ education requires not just gesturing toward nor “studying about” place, but rather being *with, in, alongside, and of* place. If we are concerned with communicating EJ faithfully to the movement, grounded as it is in place-based experience, EJ’s content and methods—what we study and how we study—require alignment. We must cultivate a praxis of place. What follows is my attempt

to elucidate several approaches to teaching EJ with, in, alongside, and of Mississippi River<sup>[1]</sup>, a site of deep historical, cultural, and ecological importance to members of its watershed. I begin by recounting my own teaching encounters with/ in this river, and close by offering a sampling of activities curated from community partners deeply engaged with EJ through Mississippi-based education.



*For Minnesota Transform's Summer Environmental Justice Institute facilitated by Michelle Garvey, students toured sites of EJ struggle, like the Upper Harbor Terminal, pictured here in the summer of 2023. Image courtesy of Michelle Garvey.*



## With/In River

What might it mean to learn not just *about* Mississippi River—as storied, mythologized, scrutinized, celebrated, abused as the river has been—but *from within* Mississippi? *Alongside* Mississippi? Indeed, *as* Mississippi, the life-giving force upon which every one of us not just in the Twin Cities but up- and downstream depends?



*Images from the 2019 River Semester, when Michelle Garvey accompanied the crew from Baton Rouge to New Orleans. Image courtesy of Michelle Garvey.*



Professor Joseph Underhill facilitates a unique learning experience that gestures toward answers. On Augsburg University's River Semester, when students and various river folk paddle from Mississippi River's headwaters to the Gulf over the course of one hundred days, the river is instructor. [2] Syllabi, course schedules, and projects emerge as winds, temperatures, currents, and climates shift. Encounters with place-specific

flora and fauna heighten sensory sensitivity. The ever-moving and constantly reconstructed makeshift classroom forces students to grapple with real-life conundrums, contend with discomfort, and problem-solve with ingenuity. Exchanges with diverse peoples and cultures along their path weave an evolving "co-created community" (Underhill 2017). River Semester embodies a praxis of place—indeed, 2,350 miles of place.



*Images from the 2019 River Semester, when Michelle Garvey accompanied the crew from Baton Rouge to New Orleans. Image courtesy of Michelle Garvey.*



Though far less intensive than River Semester, I've also facilitated and been gifted opportunities to learn EJ with/in Mississippi River over the years. Among fond impressions of riverbank slop lining our boots, boats clanging into each other, windburned cheeks, and laughter carrying across the water, I also recall several poignant moments enabled by river engagement alongside those who live, work, play, or pray with/in Mississippi: listening by firelight to researcher Margarida

Mendes' terrifying underwater recording of the industrial cacophony in constant play below our canoes floating through Louisiana's chemical corridor; Nibi Walker Sharon Day's riverside prayer with dozens of Water Protectors at Akiing as giant snowflakes fell around us; the muskrat building their nest with plastic refuse washed ashore as students and I watched sadly from our boats alongside paddle guides Lee Vue and Natalie Warren; learning how to twist



*Images from the 2019 River Semester, when Michelle Garvey accompanied the crew from Baton Rouge to New Orleans. Image courtesy of Michelle Garvey.*



dead stinging nettle into rope from Seneca elder Hope Flanagan, educator with Dream of Wild Health, on the floodplains of Bdote, or witnessing the variety of edible plants and medicines she foraged in the so-called dead of winter; the rhythmic spoken word spontaneously bellowed by Project Sweetie Pie's Michael Chaney into the echo chamber of a once-standing Upper Harbor Terminal dome silo; somberly floating over

Dakota burial mounds flooded by Lock and Dam 3 at Prairie Island; witnessing animals—squirrel and deer—most of us never before realized could swim, making their way across the channel; restlessly camping next to alligator-filled swamps where we'd arrived for the night after Louisiana's Poche family came to greet us with cold drinks and freshly baked pralines.



*The collection of edible and medicinal plants foraged by Hope Flanagan at Crosby Farm, March 2021. Image courtesy of Michelle Garvey.*



While facts, dates, and figures may fade from memory, the sentiment (sediment?) persists—emotional impacts and sights-smells-sounds-feels-tastes. In addition to the proven effectiveness of experiential learning, learning with/in Mississippi River can also promote low-or-zero carbon, decolonial projects and modes of transportation.[3] Because of the river's longevity, scale, and significance across cultures, learning with/in Mississippi invites interdisciplinarity. It can therefore welcome a plurality of knowers, cultivate collaboration among educators, and accommodate ancestral to cutting-edge analyses,

which simultaneously increase educational accessibility and foster cultural competency among learners.

Critically, river encounters do not only bring EJ to life; they can protect and nurture life itself. As Amy Powers' preliminary studies have shown, place-based experiences paired with skill-building can produce a positive feedback loop where attachment to place and enhanced self-efficacy foster community engagement.[4] Community engagement can strengthen our resolve to value, heal, steward, and take pleasure in water, which can in turn produce healthier ecosystems.



*A student of Garvey's HECUA Environmental Justice program floats across Mississippi River near Prairie Island Indian Community, spring 2021. Image courtesy of Michelle Garvey.*





*Guided by conservation biologist Carolyn Carr on behalf of Friends of the Mississippi River, students seed the Mississippi River gorge as part of Michelle Garvey's HECUA Environmental Justice program, fall 2020. Image courtesy of Michelle Garvey.*



## Toolkit

The Mississippi River Open School for Kinship and Social Exchange community of activists, artists, Water Protectors, and scholars celebrates and inspires engagement with/in Mississippi

River. One of the greatest joys of taking part in this team has been coming together for “confluences” to develop praxes of place and to practice and experiment with Mississippi-inspired



*For the second Mississippi River Open School confluence in May 2023, participants tour Wakan Tipi Awanyankapi, Dakota sacred site and nature sanctuary on Mississippi River floodplains. Image courtesy of Michelle Garvey.*



activities. In the spirit of these confluences, I've gathered a toolkit—a list of activity summaries—meant to spark the imagination for meaningful EJ learning with/in Mississippi. In many ways, the toolkit is also a celebration of the creative

river people whose pedagogies have fueled me. May it inspire your own place-based practices of hope, healing, and appreciation of water's human and more than human communities.



*The Mississippi River Open School visits UMN's Indigenous Futures Lab. Here, visitors engage with a 3D virtual reality model of Mississippi River. Image courtesy of Michelle Garvey.*





*Members of the Mississippi River Open School gather at Wabun Picnic Area above Lock and Dam 1 to personalize plant medicine kits gifted by Stephanie Lindquist. Image courtesy of Michelle Garvey.*



## CMEJ Environmental Justice Tours

Adapting a popular consciousness-raising method in the U.S. EJ movement to the context of North Minneapolis, Community Members for Environmental Justice (CMEJ) hosts bus tours for learners to bear witness to the consequences of racist zoning policies, industrial pollution, and land theft. While the tours explore greater North Minneapolis, many of the stops occur along Mississippi River's corridor. Here, highway I-94 segregates majority-Black

neighborhoods from water access, the bank is lined with emissions-heavy industry like GAF Roofing and Northern Metals Recycling (recently shuttered thanks to the organizing work of CMEJ), and the city bungled community engagement for a once-in-a-generation opportunity to redress environmental injustice through redevelopment of the 48-acre former Upper Harbor Terminal site.



*Guides from CMEJ welcome the Mississippi River Open School to the Terrell Mayes Garden, May 2023. Image courtesy of Michelle Garvey.*



CMEJ's tours, led by EJ leaders like Roxxanne O'Brien and Justice Jones, attach names, faces, and places to stories and histories that could otherwise remain abstract for students, politicians, and health professionals learning about EJ. Crucially, they also engage tour-goers with sites of resistance and healing, including the Terrell Mayes Jr. Memorial Garden, created to honor

victims of gun violence. CMEJ's first-person testimonies contribute to movements not just for justice and ecological health in North Minneapolis but, as CMEJ member Danielle Swift reminds us, for everyone and everything downstream. Request a tour, and donate to support CMEJ's advocacy.

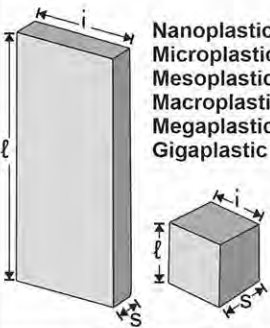
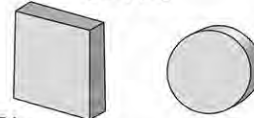
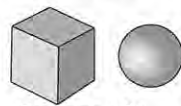
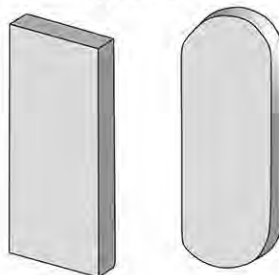
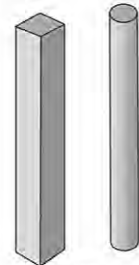

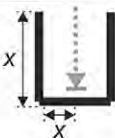


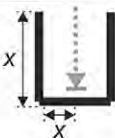


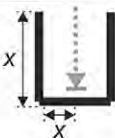

## Anthropocene Sediment Sampling by Catherine Russell

River Semester facilitator Joseph Underhill employs geoscientist Catherine Russell's plastic sediment sampling protocol, inviting students to consider river ecology in the Anthropocene. Using a relatively accessible set of field research methods to engage Mississippi River as citizen scientists, students sample river sediment to both categorize plastic particles following Russell's classification system, and attribute their presence to particular petrochemical facilities. Required materials include glass bottles for gathering specimens, measuring tape to gauge the distance of samples from shorelines, and a smartphone microscope. Beyond observing the site-specific implications of plastic proliferation and

toxicity at various points along Mississippi River, Underhill encourages students to contextualize their investigation by applying Max Liboiron's idea of pollution as colonialism.

Additionally, this activity pushes the boundaries of geology, which has traditionally been based on studies of the physical structures and processes of the more than human world. Russell argues that we need to consider the increasingly human influences constructing Mississippi River, the largest sediment transportation system on the continent.



<b>Summary sheet for classifying plastic as a sediment</b>						Item 1	Item 2	Item 3																															
Multiple joined plastic particles are a "compound" item. Describe each item separately and indicate that they are related through using the narrow column on the log sheet. In a set of 3 (or more) items, the first and second boxes will be filled in the lower and upper halves respectively and the middle box(es) entirely filled.																																							
<b>Dimensions</b>   <p> <b>Nanoplastic</b> (<math>\leq 1 \text{ nm} - 1 \mu\text{m}</math>)  <b>Microplastic</b> (<math>1 \mu\text{m} - 5 \text{ mm}</math>)  <b>Mesoplastic</b> (<math>5 \text{ mm} - 5 \text{ cm}</math>)  <b>Macroplastic</b> (<math>5 \text{ cm} - 1 \text{ m}</math>)  <b>Megaplastic</b> (<math>1 \text{ m} - 10 \text{ m}</math>)  <b>Gigaplastic</b> (<math>\geq 10 \text{ m}</math>)                 </p>				<div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> <p><b>A</b> <math>l = i \neq s</math></p>  <p><b>Disc (D)</b></p> </div> <div style="width: 48%;"> <p><b>B</b> <math>l = i = s</math></p>  <p><b>Sphere (S)</b></p> </div> </div> <div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> <p><b>C</b> <math>l \neq i \neq s</math></p>  <p><b>Blade (B)</b></p> </div> <div style="width: 48%;"> <p><b>D</b> <math>l \neq i = s</math></p>  <p><b>Rod (R)</b></p> </div> </div>																																			
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<b>Surface texture</b> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;"></th> <th style="width: 15%;">Very angular</th> <th style="width: 15%;">Angular</th> <th style="width: 15%;">Sub-angular</th> <th style="width: 15%;">Sub-rounded</th> <th style="width: 15%;">Rounded</th> <th style="width: 15%;">Well rounded</th> </tr> </thead> <tbody> <tr> <td style="writing-mode: vertical-rl; transform: rotate(180deg);">High sphericity</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="writing-mode: vertical-rl; transform: rotate(180deg);">Low sphericity</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>					Very angular	Angular	Sub-angular	Sub-rounded	Rounded	Well rounded	High sphericity							Low sphericity							<b>Material Properties</b> <table border="1" style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td style="width: 50%; vertical-align: top;"> <b>O - Opacity</b>                      No light can penetrate the polymer itself.                 </td> <td style="width: 50%; vertical-align: top;"> <b>T - Transparency</b>                      Some to almost all light can penetrate the polymer.                 </td> </tr> <tr> <td style="vertical-align: top;"> <b>B - Brittleness</b>                      Breaks under stress without significant deformation.                 </td> <td style="vertical-align: top;"> <b>P - Plasticity</b>                      Can be permanently deformed without breaking.                 </td> </tr> <tr> <td style="vertical-align: top;"> <b>S - Softness</b>                      Can be readily marked by another object.                 </td> <td style="vertical-align: top;"> <b>H - Hardness</b>                      More able to withstand surface indentations.                 </td> </tr> <tr> <td style="vertical-align: top;"> <b>F - Flexibility</b>                      May be repeatedly stretched without breaking.                 </td> <td style="vertical-align: top;"> <b>E - Elasticity</b>                      Returns to original size and shape post deformation.                 </td> </tr> <tr> <td style="vertical-align: top;"> <b>St - Static Electricity</b>                      May have a tendency to attach to other materials.                 </td> <td style="vertical-align: top;"> <b>Hy - Hydrophobicity</b>                      Where the item properties seemingly repel water.                 </td> </tr> </tbody> </table>					<b>O - Opacity</b> No light can penetrate the polymer itself.	<b>T - Transparency</b> Some to almost all light can penetrate the polymer.	<b>B - Brittleness</b> Breaks under stress without significant deformation.	<b>P - Plasticity</b> Can be permanently deformed without breaking.	<b>S - Softness</b> Can be readily marked by another object.	<b>H - Hardness</b> More able to withstand surface indentations.	<b>F - Flexibility</b> May be repeatedly stretched without breaking.	<b>E - Elasticity</b> Returns to original size and shape post deformation.	<b>St - Static Electricity</b> May have a tendency to attach to other materials.	<b>Hy - Hydrophobicity</b> Where the item properties seemingly repel water.
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*Russell's summary sheet is employed by River Semester students to classify plastic sediment samples collected along Mississippi River.*  
*Image via Russell et. al. "Plastic as a Sediment" (2025) (CC BY 4.0).*





*A collection of nurdles—microplastic pellets indicative of petrochemical manufacturing and transport—littering the river shoreline in “Cancer Alley,” Louisiana. Image courtesy of Michelle Garvey.*



## Buckthorn Ink Paintings with Kimberly Boustead and Christine Baeumler



*Mentored by Boustead, students harvest, process, and paint with buckthorn and other plant-derived inks in Dr. Baeumler's "Art and Ecology" course. Image courtesy of Christine Baeumler.*





*Mentored by Bousted, students harvest, process, and paint with buckthorn and other plant-derived inks in Dr. Baeumler's "Art and Ecology" course. Image courtesy of Christine Baeumler.*





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For the fall 2022 Art and Ecology course at the University of Minnesota Twin Cities, Professor Christine Baeumler partnered with artist Kimberly Boustead and the Minneapolis Park and Recreation Board (MPRB) to explore the intersection of invasive species, water ecology, and art. In preparation, students watched *Know Where You Are: Bdote* (courtesy of the Minnesota Humanities Center) as a way to understand the history and significance of Mississippi River to Dakota people, and to acknowledge this place as Dakota land. Then, students met along Mississippi's east bank with MPRB staff to learn how buckthorn outcompetes native plants that retain rainwater, prevent erosion, and filter pollutants before they can reach the water (FMR n.d.). To mitigate buckthorn's negative impacts on water quality, MPRB engaged students in a buckthorn removal and berry harvest. Boustead then facilitated an ink-making workshop using

the leaves and berries collected, creating what she calls a "place-based palette" that reflects a certain time and place. Finally, students painted with buckthorn and other botanical inks, such as sumac and wild grape. They used baking soda and vinegar to change the inks' pH values, altering colors and textures.

*See the video *Know Where You Are - Bdote*.*

A multi-step activity like this can inspire several considerations for learning with/in Mississippi River, including: How do normative approaches to invasive species limit our ability to engage creatively with them, and how does reframing the concept of invasives—perhaps as displaced relatives—impact our relationships with them? And as Boustead suggests, how can invasives—so often perceived as "excess"—be reconceived as a resource?

## Tarpee with Paul Cheoketen Wagner, Sebastian Müllauer, John Kim, Molly Reichert, and Community

Originally designed by Paul Cheoketen Wagner (Saanich First Nations), the tarpee is a conical tent that honors traditional teepees but is constructed with the low-cost, widely available materials of tarps and poles. Wagner was inspired to house Water Protectors at Standing Rock in 2016, and since then, tarpees have been constructed across the continent to relieve housing insecurity and support resistance movements in need of shelter.

For students of EJ, many of whom accompanied Macalester Professor John Kim and me to the Welcome Water Protector Center at Akiing throughout ongoing struggles to resist Enbridge's Line 3, tarpees can prompt learning at

the nexus of Indigenous sovereignty, Land Back, water protection, and housing justice. Akiing is one of three locations where Line 3, a conduit for Alberta tar sands oil to Superior, Wisconsin, crosses Mississippi River, endangering Anishinaabe treaty rights, sensitive ecosystems, climate stabilization, and drinking water downriver. Akiing was one of many Indigenous-led community-building and mutual aid sites, embodying something between an upstart and a prefigurative community, centered around resistance to pipeline proliferation and mining. Thousands of Water Protectors across the region converged here between 2020 and 2021, and these often-emergent gatherings required emergent shelter. During many months of community



building, Kim, along with Sebastian Müllauer, Professor Molly Reichert, and Reichert's students at Dunwoody College, worked with Wagner to refine the tarpee design. To learn more about the process, read Kim's article "Action Camps Everywhere: Solidarity Programs in the Anthropocene" in this issue of *Open Rivers*.

Tarpee-inspired EJ inquiry could center on sustainable, affordable housing design; best practices

for accomplic-ing social justice movements; and the construction of shelters responsive to cultural traditions, climate-changed weather, or transportability. Project-based courses could adapt the tarpee design to fit contextualized needs and locations; fulfill community requests for tarpee construction labor; or conduct fundraising campaigns to supply tarpee materials.



*Tarpee prototype design submitted by John Kim. Image courtesy of John Kim.*



## Healing Circles, a Project of Society of Mother Earth

When is the last time you were welcomed to grieve in community, or share your fears and frustrations openly, in response to climate change? How do you cope with the daily onslaught of devastating climate news? To support those of us “processing [our] emotions surrounding the climate crisis and dreaming what will follow” (Oyate Hotanin 2025), Strong Buffalo, Laura LaBlanc, Ben Weaver, and Jothsna Harris—the people behind Oyate Hotanin, Buffalo Weavers, and Change Narrative—collaborated for a year-long project entitled Society of Mother Earth (S.O.M.E.) to facilitate community healing circles.

S.O.M.E.’s healing circles blend ancient practices of Indigenous talking circles with those taught by the National Association of Community and Restorative Justice, privileging listening over questioning, or as Harris says, “uncorking, not responding.” Participants are encouraged to both take up space sharing and practice deep listening.

Methodologically, these healing circles weave sharing with music, spoken word, quiet reflection time, and collectively created art, such as mandalas crafted of nearby natural objects. Pedagogically, they are adaptable, accessible, and



*Image via Mississippi Park Connection and Grace Generous.*



possible to practice almost anywhere. While the circle I attended occurred at East Side Freedom Library, former Change Narrative intern Grace Generous attended a circle in the floodplains of Bdote at Crosby Farm Regional Park alongside Mississippi River. In “Cracking Open the Possibility of Joy” (2022), she recounts several powerful moments that might be instructive for educators seeking to facilitate healing circles with/in Mississippi:

Buffalo’s voice filled the clearing,  
while the clear twang of Ben’s banjo carried  
across the field.  
You could feel everyone’s presence  
as we collectively processed what we had  
shared.  
As the day turned to night,  
the cool air seemed to decompress the  
tensions  
we had each spoken out loud.

A film depiction of S.O.M.E.’s healing circles can be [viewed here](#).

## Safe Water with Roopali Phadke and Stephanie Lindquist

Professor Roopali Phadke writes in reference to her fall 2023 Water and Power course at Macalester College, “we are a community nested in a much larger community—and what we do here matters to that larger community. Water is a perfect vehicle for making that apparent” (Macalester n.p.). Indeed, because water transgresses boundaries across built environments, ecosystems, and property lines, it embodies the fundamental interdependence of life on Earth.

As the saying goes, “we’re all downstream.” Yet because water also reveals uneven distributions of pollution, climate impacts, and resource ownership, EJ offers the valuable qualification “some are more ‘downstream’ than others.”

To investigate the concept of safety versus risk in that context, artist Stephanie Lindquist facilitated an activity for students at Macalester’s Idea Lab that was inspired by the water safety fact



sheet disseminated by the Centre for Affordable Water and Sanitation Technology. Students built their own biofilters from scratch, critically assessing which natural and synthetic materials filtered water from Mississippi River's stream, lake, and spring tributaries most effectively. To complement this activity, the class toured the City of Minneapolis drinking water treatment facility, which processes nineteen billion gallons of Mississippi water every year.

Of course, effective filtration systems equitably distributed across geographies can only ensure safety with respect to sanitation and drinking, one of the many ways water governs our lives. Attention to power distribution and watershed inputs "upstream" is required to ensure just access to, and governance of, water. Safe Water, then, can be a springboard to engage students in lessons on water sovereignty, fair distribution, and stewardship of commonable resources.



*Students assemble materials to create bio filters as part of Lindquist and Phadke's Safe Water activity. Image courtesy of Stephanie Lindquist.*





*Students assemble materials to create bio filters as part of Lindquist and Phadke's Safe Water activity. Image courtesy of Stephanie Lindquist.*



## Fabric Flood Installation, Facilitated by Michelle Garvey's Spring 2021 HECUA Environmental Justice Students

During the height of the Line 3 resistance movement, my Environmental Justice Program at the Higher Education Consortium for Urban Affairs (HECUA) joined advocates from Health Professionals for a Healthy Climate and students from UMN, Macalester, and HECUA's Art for Social Change Program in accepting an invitation from organizers of the Water Protector Welcome

Center in Akiing. The snowy winter day included prayer on the riverbank, a pipeline tour followed by a symbolic body movement session facilitated by artist-educator Marcus Young, outdoor fires around which we gathered to share hot drinks, stew, and stories, direct action education, and performances from Ananya Dance Theatre and Ananya Chatterjea's UMN students.



*Gatherers of the February 2021 day of community building at Akiing affix personal messages of gratitude to branches along a highway where Line 3 crosses Mississippi River. Image courtesy of Michelle Garvey.*



My class desired to offer a public art installation that would engage gatherers and demonstrate solidarity with frontline Water Protectors. What emerged from this cohort's creativity, resourcefulness, compassion, and intellect was the Fabric Flood: a collection of strips of fabric in blue hues—to indicate allegiance to water—upon which participants could pen messages of solidarity with and gratitude for Mississippi River and Water Protectors. Students then invited the community to fasten their fabric messages to the branches of trees and shrubs lining the highway where Line 3 crosses before it bores underneath the river. In this way, passersby could witness

a flood of support for treaty rights, ecological integrity, and climate justice every day.

As for the project itself, I believe the power embodied in this simple activity lies in its simultaneous accomplishment of several goals: to enact consciousness-raising, build community, consider the strategical efficacy and ethics of direct action and public art, and contribute to a justice movement. Pedagogically, the project demonstrates the potential ingenuity of students, if supported in their endeavors to apply EJ theory toward self-expression, gift-giving, and change-making.

## Weekly Water Blessings Offered by Joseph Underhill for River Semester

Though punctuated by emergent weather and site-specific learning opportunities, there is a rhythm to most of the one hundred days that students, educators, artists, and researchers spend on Augsburg University's River Semester. Together, they assess winds, complete chores, share meals, learn lessons, set up camp, break down camp, stoke fires, pack boats, unpack boats, and paddle miles.

Yet each Sunday morning, the expedition pauses to perform a ritual that honors the water responsible not just for the journey, but for life itself. Inspired by the Nibi Walks grounded in Ojibwe water ceremony, River Semester joins water blessing rituals conducted at several points along Mississippi River—like the weekly ceremony led by Sharon Day at Hidden Falls Park—to acknowledge the Indigenous lands through which they travel and to offer gratitude to the water. Often the Wishita (Water) Song is sung in seven rounds:

*Wishita do ya do ya do ya  
Wishita do ya do ya hey*

*Wishita do ya do ya do ya  
Wishita do ya do ya hey*

*Whisha tenaya hey a hey a  
Whisha tenaya hey a hey  
Whisha tenaya hey a hey a  
Whisha tenaya hey a hey*

*(Last round) Hey Hey Hey hey hey*

During the 2019 trip, Saundi McClain-Kloeckener gifted River Semester with a copper cup, which each expedition now uses as a vessel to hold, and then release, river water for the ceremonies. In a related ritual, a bottle of water from the headwaters is gathered at the beginning of each voyage and carefully shepherded along Mississippi River for release into the Gulf of Mexico at the journey's completion. Upon arriving at the Gulf, the water is given back to the sea, and seawater is gathered to be brought back to the headwaters, where the cycle can begin again. These practices, which are widely accessible, can connect us with enduring rituals of gratitude and foster a valuation for Mississippi River that propels future water advocacy and stewardship.





*Glass bottle filled with water from Lake Itasca before a backdrop of the “Cancer Alley” stretch of Mississippi River on the 2019 River Semester expedition. Image courtesy of Michelle Garvey.*



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## Footnotes

[1] To reinforce the idea of more than human creatures and entities as active partners in EJ learning (rather than as passive objects about which students study), I employ "Mississippi River" without the definitive article "the." This decision is inspired by Kimmerer, who writes, "we never refer to a member of our family, or indeed to any person, as *it*. . . . *It* robs a person of selfhood and kinship. . . . So. . . . we use the same words to address the living world as we use for our family. Because they are our family" (2013, 55).

[2] To learn more about students' experiences on the Fall 2023 expedition, see the "[Big Muddy](#)" map facilitated by political ecologist [Brian Holmes](#).

[3] See, for example, Powers (2004), who concludes that place-based learning increases levels of attachment to place, improves academic achievement, and strengthens students' motivation to learn.



[4] In particular, community-engaged experiential learning has been shown to promote a “prosocial, active conception of citizenship” in students (Powers 2004, 18). Gavillet’s (2018) summary similarly demonstrates that experiential learning both leads to “behavior that enhances social well-being within communities” and improves students’ abilities to influence their community (142).

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