# ISSUE 22 : FALL 2022 OPEN RIVERS : RETHINKING WATER, PLACE & COMMUNITY

# **WOMEN & WATER : CONFRONTATION**

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The cover image is sunset in Seoul along the Cheonggyecheon stream. Image by Stefan K on Unsplash.

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# CONTENTS

Introduction	
Introduction to Issue 22   Women & Water: Confrontation, by Laurie Moberg, Editor	4
Features (Peer Review)	
Storying the Floods: Experiments in Feminist Flood Futures By Caroline Gottschalk Druschke, Margot Higgins, Tamara Dean, Eric G. Booth, and Rebecca Lave	7
Formless Like Water: <i>Defensoras</i> and the Work of Water Protection By Natalia Guzmán Solano	27
Women and Urban Waterways in Korean Modernist Literature By Anne Whitehouse	44
Features	
Washed Up By Shannon LeBlanc	62
Open Water	
By Aizita Magaña	72
Geographies	
Resonant Rivers: Water, Indigenous Relationality, and Other Futures By Caroline Fidan Tyler Doenmez	86
In Review	
We Are On Dakhóta Land: A Review of Diane Wilson's <i>The Seed Keeper</i> By Racquel Banaszak	93
Perspectives	
Water Memories: Exploring Our Relationship With Water By Lee Vue	. 100
Primary Sources	
Women & Water: Inspiration and Resources By Racquel Banaszak, Caroline Doenmez, Caroline Gottschalk Druschke, Becky Jacobs, Shannon LeBlanc, Phyllis Mauch Messenger, Lee Vue, and Anne Whitehouse	. 115
Teaching and Practice	
Fisher Women and Job Insecurity in West Africa By Ifesinachi Okafor-Yarwood	125
Editorial	
Thank You, by <i>Open Rivers</i> Editorial Staff	. 130

# FEATURE (PEER REVIEW) **STORYING THE FLOODS: EXPERIMENTS IN FEMINIST FLOOD FUTURES** By Caroline Gottschalk Druschke, Margot Higgins, Tamara Dean, Eric G. Booth, and Rebecca Lave

### Editor's note: This feature article has been peer reviewed.

Residents of the steep, unglaciated Driftless Area in the Upper Mississippi River basin have a long history with floods. This region was already prone to flooding, but the dramatic conversion from native vegetation to agriculture by white settlers in the late 1800s increased its severity. The introduction and spread of soil conservation practices in the mid-1900s mitigated some of these impacts, but severe flooding has increased again over the last 15 years because of the increasing frequency of heavy rainfall in the region prompted by a warming climate. Life in Wisconsin's Kickapoo River and Coon Creek watersheds, the focus of our Driftless work, has been punctuated by major floods in 2007, 2008, 2016, 2017, and the worst in recorded history in 2018. As flooding becomes more frequent and more severe across these watersheds, community members are working together to re-imagine ways to live well together with worsening floods.



Fortney Farm in Soldiers Grove. Image courtesy of Tim Hundt

Here we look to our experience collaborating with a community-driven oral history effort in southwestern Wisconsin called Stories from the Flood, and to the work it inspired developing participatory flood models in Driftless watersheds, to consider the importance of feminist approaches for building more equitable flood futures. As we highlight below, the oral histories gathered in the Stories from the Flood archive-a largely women-created, women-led, and women-sustained project-chronicle the ways that much of the informal infrastructure that supported community members as they moved through the 2018 flood and towards longer-term recovery came together through feminist (i.e., sometimes women-driven, but, especially, non-hierarchical, extemporaneous, grassroots, experimental) approaches towards what is typically framed as "women's work": cleaning, feeding, clothing,

tending, gathering, supporting, storytelling, and also organizing others to respond flexibly and collaboratively. That includes the work of Stories from the Flood itself; by gathering over 100 stories of flood impacts and responses across the region, the project has supported individual and community healing and built a pool of textured wisdom for future flood response that highlights the power of feminist methodology, emphasizing the importance of place-based narratives for responding to an accelerating future of flooding.

In light of that work, we argue here for the power of feminist praxis—with a strong emphasis on narrative—to help navigate the present and future of flooding in the Driftless Area and beyond. In the essay that follows, we detail the forces that have created and sustained these precarious flood conditions in the Driftless Area, situate our work



Students recording a story for Stories from the Flood. Image courtesy of Sydney Widell.

within feminist theories of climate justice, then feature passages from Stories from the Flood that detail what we refer to as feminist responses to the increasing reality of flooding. We leverage the example of Stories from the Flood—both the project itself, and the stories amplified within it—to close the essay with a wider argument about the importance of feminist interventions in flooding, which we insist must embrace flexibility, place-appropriateness, and narrative. We see these feminist interventions as central to working towards more equitable, justice-oriented futures for communities living in the midst of climate-exacerbated flooding.

# An Accelerating History of Flooding and Response in the Region

While flooding has shaped the biophysical and cultural landscape of the Driftless Area for thousands of years, its magnitude and frequency have shifted in response to changes in climate, land use, and land cover. Due to the region's steep, unglaciated landscape, even subtle changes in these interdependent drivers led to noticeable changes in flooding even before the forced removal of Indigenous peoples-including the Ho-Chunk, Sauk and Fox, Santee Dakota, and Kickapoo-by Euro-Americans beginning in the 1830s (Knox, 1985; 1993). But the widespread settler conversion of prairie, oak-savannah, and forest ecosystems to cropland and pasture-including on steep hillslopes-triggered a devastating cycle of increased runoff, erosion, gullying, and downstream flooding and sedimentation. By the early 20th century, the erosion and flooding crisis had grown into an existential one for both the region's farms and its floodplain communities, threatening their very existence: upstream farmers were losing an intolerable amount of soil, the same soil that was literally burying communities downstream. The situation was so dire that conservationist Aldo Leopold (1935) lamented after a visit to Coon Valley, Wisconsin in the 1930s:

> Gone is the humus of the old prairie which until recently enabled the upland ridges to take on the rains as they came... Every rain pours off the ridges as from a roof. The ravines of the grazed slopes are the gutters. In their pastured condition they cannot resist the abrasion of the silt-laden torrents. Great gashing gullies are torn out of the hillside. Each gulley dumps its load of hillslope rocks

upon the fields of the creek bottom and its muddy waters into the already swollen streams. (pp. 205–208)

Initial responses to this devastation were private, uncoordinated, and short-lived, and, as early as 1907, included elevating homes in the floodplain only to be flooded again by the next larger event (Trimble, 2013). Growing calls to state and federal agencies for more holistic and effective solutions, along with a national recognition of soil erosion as a "national menace," helped usher in a new era of soil and water conservation (Bennett, 1934). While funded primarily through New Deal programs and led largely by federal and state soil and water scientists and technicians, new knowledge and practices related to land management were co-developed with local progressive farmers, mediated by the unique regional physiography, and tested in real time (Nygren, 2015).

The Coon Creek watershed—its lands and its people—were the subject of the first experiment in watershed-scale implementation of practices such as contour strip cropping to alleviate soil erosion and flooding in the 1930s (Anderson, 2002). And while this was a federal intervention in the form of the new Soil Conservation Service, the project's success—and it *was* successful—was largely the result of a network of committed farmers throughout the region willing to experiment together on innovative solutions to what must have seemed a completely overwhelming problem on land they knew well. This experimental, community-driven, locally appropriate approach is something we return to below, as it inspires the

work we are invested in today. While the success of this watershed-scale project in the 1930s came in large part from male farm owners and federal conservation agents, we want to argue that this is exactly the kind of intervention that we see in keeping with a feminist response: collaborative, experimental, place-appropriate, and radical.

In the wake of the adoption of soil conservation measures in the region, evidence began to accumulate showing the benefit of these land management changes on individual farms, but their widespread adoption by private landowners and the subsequent reduction in downstream flooding took many more decades to materialize and document (Trimble and Lund 1982). During the interim period, from the 1940s to the 1970s, as floods slowly moderated but continued, the patience of local residents understandably wore thin. In response to repeated calls from the region and across the country for more immediate solutions, the federal government greatly expanded its flood mitigation role from a focus on land management to include large structural interventions via levees and dams. The USDA Small Watershed Program initiated by Public Law 566 (1956) funded the construction of thousands of dams throughout the country; in the 1960s, fourteen of these PL-566 earthen dams were constructed in the Coon Creek watershed, regulating flow from a full quarter of the watershed above Coon Valley, with another nine of these structures constructed in the West Fork Kickapoo River watershed, regulating 35 percent of its flow.

This dam-building era was founded upon what Joshua M. Nygren (2016) called an "ethic of control" over land and water resources that has been a longstanding characteristic of federal flood prevention efforts since the early twentieth century and is embodied in agencies like the US Army Corps of Engineers. This attitude is still pervasive today as communities begin to battle another major driver of flooding: climate change, and specifically the increasing frequency of heavy rainfall. But a growing recognition of the limits of structural measures and their unintended consequences downstream (Williams, 1994; Pinter and Heine, 2005) has provided an opening for more serious consideration and, in some cases, implementation of nonstructural and low-tech measures under banners such as natural flood management and nature-based solutions (Lane, 2017; Gonzalez & Kuzma, 2020; Chiu et al., 2021).

In the Coon Creek and Kickapoo River watersheds these shifts have prompted renewed interest in dynamic land management practices like managed rotational grazing and agroforestry, along with stream-floodplain restoration, while reinvigorating pride in the conservation successes of the 1930s. But growing interest in these watershed-wide approaches linking land management practices with stream health exist alongside an enduring reliance on structural solutions like levees and dams. This is in part because of limited rural community capacity to experiment with alternatives solutions like floodplain reconnection and restored wetlands (Consoer and Millman, 2018), and in part because of a near century of policy and implementation that has favored structural intervention (Nygren, 2016). We argue that the narrative-centric feminist approach we advocate for here is in keeping with other nonstructural interventions in flooding: dynamic, emplaced, and experimental strategies for changing landscapes and conversations.

# A Feminist Approach to Flooding

Since 2019, Stories from the Flood has gathered over 100 community stories of flooding in hopes of supporting community healing and serving as a resource for future conversations about flood recovery and resilience (Wilson, 2021; Wisconsin Humanities, 2021; Gottschalk Druschke et al., 2022a; 2022b). Inspired by our experiences with Stories from the Flood, we argue for the importance of narrative as a feminist methodology for intervening in flooding: a technique both for recovering from the material and psychic damage of past flooding and for envisioning possible strategies to alleviate these devastating impacts from future floods. Stories convey important nuance, including emotional and affective experiences, that can supplement and complicate scientific data. As Cleo Wölfle Hazard (2002) suggests, "Data are imbued with feeling, and that feeling can change data's meaning and how it is taken up in river management" (p. 85). Anna Tsing (2015) writes of the methodological possibilities of story for the kind of work we propose: "To listen to and tell a rush of stories is a *method*.... A rush of stories cannot be neatly summed up. Its scales do not nest neatly; they draw attention to interrupting geographies and tempos. These interruptions elicit more stories" (p. 37). Stories defy control, they multiply, they link to the specific, in keeping with the sorts of nonstructural flood management approaches we highlighted above that offer dynamic, tailored approaches to flood response adapted to the particular circumstances of the individual, the community, and the landscape.

We find much in this perspective that resonates with Farhana Sultana's (2022) feminist framing of "critical climate justice," work that, as she explains, "encourages policymakers and citizens to approach climate change in more comprehensive ways. It calls for accountability to intersectional feminist analysis, so that lived experiences and wisdom of differently situated subjects are heard and heeded, and appropriate

and inclusive policies and programs are planned" (p. 5). And we would add the importance of *telling* these stories. The feminist participatory approach we propose makes space for community members to heal through the sharing of their own stories, often setting the stage for others to feel more comfortable adding their own stories, while also providing an opportunity for essential, nuanced understanding from those who hear and heed those narratives. We see narrative-centric approaches as part of configuring this pathway forward, building from feminist scholars who have insisted that disaster response should be understood as intersectional, in terms of both overlapping identities and material well-being and lived experience (Ranganathan, 2019; hooks, 2016; Taylor, 2017).

Stories from the Flood—as a project in its own right, and in terms of the stories it contains-highlights feminist, experimental, collaborative, community-grounded responses to living together with floods. This work is built from the understanding that sharing stories can be powerful for both the individual and the community, especially in the absence of formalized support. Community storytellers have reported that their contributions to Stories from the Flood have helped them work through the repeated traumas of frequent flooding, alongside the traumas prompted by persistent State neglect. Paying deep attention to these stories requires moving beyond disciplinary biases to take a more generous, radically empathetic view of what these blended practices might offer, where "radical empathy," as Isabel Wilkerson (2021) describes, "means putting in the work to educate oneself and to listen with a humble heart to understand another's experience from their perspective, not as we imagine we would feel." We have written elsewhere about the importance of narrative for individual and community healing from the trauma of flood events (Gottschalk Druschke et

al., 2022a; 2022b), and we want to point to this dual contribution of story: story offers a method for healing from flood-related trauma and also for imagining how to live well with future floods. It is no surprise, then, that we take inspiration from related projects like the Houston Flood Museum, a story-centered project related to flooding in the wake of Hurricane Harvey. As founder Lacy M. Johnson has explained, the point of that project is "to discover and collect these histories, as many as we can, about this storm and all the others, about the flooding to which this city is exceptionally prone, and to think in a critical way about the city and its heroes and its flaws" (p. 7). This is messy work, and we argue that this messiness and multiplicity is central to its importance as a flood management technique that exceeds control. And this work can have larger political and institutional impacts.

Dylan Harris (2017) has pointed to the ways that stories can bring climate change policy into focus. As he argues, "Storytelling makes the symbolic visceral, creating a material experience. In many ways, stories connect the 'out there' to the here and now, while at the same time inspiring the critical capacity necessary to imagine a then and there, a task critical to policymakers" (Harris, 2017, p. 179). In later work, Harris leans on narrative to advocate for experimentation, building from conversations in feminist political ecology that emerge from community-based work. He argues for an experimental approach linked to scholar-activist research, in which researchers

# Stories From the 2018 Flood

Taken together, the more than one hundred community members who contributed their stories to Stories from the Flood offer a wide-ranging, nuanced, visceral retelling of the ways that flooding was experienced across the Coon Creek and Kickapoo River watersheds in 2018. We highlight some of these stories here to demonstrate how narrative methodologies can provide an urgently

"work alongside the communities in which they study, allowing the community's needs to inform their research rather than approaching them with a specific research agenda (Nagar & Shank, 2013, Routledge & Derickson, 2015). In doing so, research questions and answers emerge through collaboration, creating more equitable forms of environmental knowledge (Sundberg, 2004)" (Harris, 2021, p. 333). By working in collaboration, with an intentional concern with equity, we hope this methodology works to resist the kinds of extraction that are so common in academic research (Tuck & Yang, 2013; Itchuaqiyaq, et al., forthcoming). This community-driven approach is a continued goal for our shared work and continues to be inspired by the lessons of our community collaborators from Stories from the Flood.

In the following section, we offer a suite of passages from the Stories from the Flood archive that demonstrate the power of the feminist flood methodology we propose: this "rush of stories" that "draw attention to interrupting geographies and tempos," in Tsing's (2015) words; that amplify the "lived experiences and wisdom of differently situated subjects," as Sultana (2022) puts it; and that "make the symbolic visceral," and "creat[e] more equitable forms of environmental knowledge," as Harris (2017, 2021) suggests. We propose that Stories from the Flood offers important lessons for other narrative-centric feminist interventions in climate-exacerbated flooding.

critical way of understanding the asymmetric impacts of flooding on marginalized communities and offer insights into rich and creative models for justice-oriented response.

On Monday, August 27, 2018, around 10:00 p.m., after several hours of steady rain, Judy Mixter accompanied her husband Richard into

their basement in Coon Valley, Wisconsin, near the banks of Coon Creek, to check on the water seeping through the walls. As Judy recounted:

> We got halfway down and both of the basement windows, the back windows, had busted in and the mud and the water was gushing in. It was like geysers. [...] And we were just kinda like in shock and you couldn't go down into the basement. By that time there was probably, I don't know, about six-seven inches on the floor and you couldn't go down there to put anything up because the electricity was still on and we didn't know if we'd get electrocuted.

They abruptly headed back upstairs to get dressed and consider what to do next as rushing water surrounded the house. As she continued:

> And then it just started—it must've been around midnight, I think it was, it was just rapids. I mean we were just...I...I can't even describe it. 'Cause we...we would go out on the porch and you couldn't go anywhere. You couldn't get off the porch because it was just going so fast. And it started coming up the deck steps. It got up to the deck and I—then I kinda started to panic a little bit. Electricity was still on and I said, "What do I save?" You know, you look around your house.

As water seeped up through the floor on the main level, they grabbed the dog and a few important documents and moved out to the porch, where they tried to get the attention of a fire and rescue team. The house shuddered, followed by a large crash, as an exterior basement wall caved in. Soon after, a backhoe scooped the Mixters and their dog off the porch and carried them to the post office, where police transported them to shelter at the local school.

Scenes of extreme flooding occurred through the night and following day all over the Coon Creek and Kickapoo River watersheds when more than 11 inches of rain fell in some locations in just 24 hours. Foundations collapsed. Hillsides crumbled. Earthen dams liquified. Barns and outbuildings washed away. Volunteer firefighters woke sleeping families and carried them by backhoe and boat to safety. The widespread devastation was exacerbated by a second flood the following week.

The 2018 floods compounded existing challenges in this rural and under-resourced region, a multi-county area with a higher poverty level than the state average; limited access to public transportation, health care, and high wage employment; and some of the highest levels of chronic homelessness in the state (Couleecap, 2019; Institute for Community Alliances, 2020). But in the days and weeks that followed, community members came together to find creative ways to respond. Women led much of that informal but critical work, addressing emergency needs like clothing and food, while building and sustaining broader networks of economic and emotional support. Time and time again, women across these watersheds felt called to address the question "What can we do?" They experimented with a variety of responses, inviting others into their shared work.

Two miles outside of Coon Valley, Peggy Way found herself downstream of two major dam breaches. Her log cabin home of 35 years sat alongside Timber Coulee Creek but had never previously flooded. As water rushed around and up to the porch of her home, elevated four feet off the ground, Way finally decided to call for help. She was rescued by raft, along with her three dogs, and returned the next day to survey the damage. Because the flood water did not quite reach her elevated first floor, Way called herself "extremely lucky," but she described all of the wiring and ductwork in the ceiling of her basement as "wet, hanging with debris, soybeans" and chronicled losing furniture, televisions, a microwave, most her family pictures, her furnace, her hot water heater, a freezer newly stocked with pounds of fresh blueberries,

strawberries, and peaches, an older Mustang convertible, a late model SUV, a small tractor, her grandchildren's bicycles, and part of her home's foundation. When her sister arrived to help, Way remembered:

> I stood there with my sister and thought, "I don't," and I said, "I just have no clue where...where do we even start?" And she said, "Here's a shovel." Pulled it out of the mud. "Start. We dig." And I'm like, "Okay."

Two days later, Way put out a call on Facebook for help, and she recalled family, neighbors, and former coworkers assembling at her home:

> They set up a bucket brigade and hauled buckets of mud, scooped the mud—my basement is 30 x 40, it's big. And it had four to five inches of mud from one end to the other. So, bucket by bucket by bucket they hauled out all that mud.

As she continued:

They were awesome, unbelievable, amazing how the friends and the families and the people in this valley all pulled together in different places. So, they got all the junk out, but a lot of the mud was still there. The next day there was a group [...] an Amish Mennonite group that originates out of Ohio, and they had called their Wisconsin people [...] and they came and asked me, "Would you okay people to come in and help?" And I said, "Well, what are you charging?" "We're not charging. This is part of the service that we do for the country, people of our communities." So, um, I said, "Sure." [...] So, she said, "We'll be here at 8 o'clock tomorrow with a team."

And they were. By the time they left the next evening, Way reflected it was, "Amazing. They went through that basement, cleaned it top to bottom, every last speck of mud."



Community members watch the Kickapoo River flow over the bridge in Viola. Image courtesy of Tim Hundt.

Twenty-five miles southeast of Coon Valley in La Farge, Julie Fraser was getting messages through the night about damage, particularly to the United Methodist Church where she led the youth ministry. She headed back to the church "at the crack of dawn the next morning" to start the cleanup where she heard that a church member in Viola, eight river miles downstream, had a basement wall collapse. Fraser left the church for Viola to help salvage whatever they could from the house. As Fraser recalled:

> So at that point I was realizing how much damage this was hitting the whole community, not just La Farge but Viola, you know, and other communities. And—and I'm the type of person that just can't sit still very well anyways so I'm like, "Well what can we do?"

The next day, Fraser told her pastor about a self-described "crazy idea" and the pastor, to her credit, told Fraser to run with it:

So, I turned this into a donation center, um, because so many people were homeless. So many people had lost everything and we basically—I couldn't use the basement 'cause we were still tryin' to salvage what we could down there. Um, I...I took the whole sanctuary and out front and every room, space we had and for five weeks, seven days a week, um, I let people come in and take whatever they needed. And that included, you know, the food, cleaning supplies. I mean we had everything.

Fraser saw an urgent need and addressed it, using the resources at her disposal to create temporary infrastructure to respond to the floods, and coordinating others to support the effort.

Down in Gays Mills, Wisconsin, 45 river miles south but only 20 as the crow flies, the flood peaked later that Tuesday morning as waters converged from across the Kickapoo River watershed. This was the worst flood in the town's



Post-flood recovery efforts at the Gay Mills Community Center. Image courtesy of Tim Hundt.

150-year memory. Jill Riggs and Kathy Shepherd sprang into action using the shared kitchen space in the Gays Mills Community Center to feed folks across the community. Riggs kicked things off, issuing a message to the community that she would cook anything they brought over to the Community Center, then Shepherd joined in. They put out a call for donations; Organic Valley, Sam's Club, and local businesses dropped off food while relief organizations like the Red Cross used the space as a distribution point for water and cleaning supplies. For three weeks, Riggs and Shepherd and a rotating crew of volunteers worked day and night preparing and delivering meals to Gays Mills, Steuben, Soldiers Grove, and Readstown, feeding hundreds of people each day. Shepherd described the inspiration for their work:

> Yeah. I came in and thought, "I can't clean mud." You know? I was like, "I'm a restaurant person. Let's go see if anything's going down in the kitchen."

Things grew from there. As she continued:

It was so cool though. So many people came here to volunteer and so much food and this kitchen is amazing. Like, they got this kitchen after the first big flood [...] And it was so neat to see it, like, with so much life in it. People came in and it's so nice when their whole house is under water to have something better than just, like, a cold peanut butter—not that there's anything wrong with peanut butter and jelly but, like, meatloaf and mashed potatoes when—is, you know, we were able to feed people really good food.

Riggs and Shepherd, and the crew they inspired, shared food, comfort, and community for weeks along the river's banks.

Twenty miles northeast, in Liberty, along the West Fork of the Kickapoo, coauthor Tamara

Dean woke in the 5:00 a.m. dark of that first flood morning, hearing light plinks of rain on the window against the backdrop of a steady roar. As she recalled in her oral history:

> And I knew what the roar meant because I had heard the same sound after the 2008 flood—that was June of 2008. And it was the sound of water rushing through that floodplain across from our house. It had filled this whole quarter acre, or I should say maybe 1200-foot-wide floodplain. Whereas usually the river is only 45 foot wide. And the roar was, you know, like, an ocean because this waterway was just rushing. It was carrying trees and debris down with it.

Dean's home was high enough to be spared the flood, so she and her partner David Klann spent the next two days helping local neighbors with clean-up, until the surrounding roads slowly reopened. On Thursday, they headed into Viola to bring supplies to the food pantry and join volunteers cleaning up the Methodist Church and the public restrooms. As Dean explained:

> With Viola, we knew that it must have been bad this time. So yeah, we just went to see whatever we—see what we could do. And the interesting thing about that was, we ran into a lot of friends there who also weren't personally flooded at their house but who had come out to help—who lived quite far away and...and that was cool.

Not long after, Dean, a member of the board of the nonprofit <u>Driftless Writing Center</u> based in Viroqua, Wisconsin, was chatting with fellow board members Lisa Henner, Robin Hosemann, and Jennifer Morales, and they began scheming how they could connect their shared love—writing—with the shorter-term clean-up and longer-term recovery from the flood. That conversation became Stories from the Flood.

As Dean later reflected in a Wisconsin Public Radio <u>interview</u> about the project:

> Some of us on the Board were helping with clean-up in the days after that terrible flood, and we thought, you know, we're happy to mop and to haul away refuse, but we'd like to do something more for people. And what the Driftless Writing Center does the best, really, is help people tell stories. And we also knew about the research that shows when people tell their stories they begin to heal and move forward. So we thought, "Okay, we can collect people's stories and be listening ears for people who want to share their stories and help them move through it." (Davis, 2019)

As Julie Fraser, Kathy Shepherd, and Tamara Dean all explained, they felt compelled to respond to the floods in the ways they knew best: organizing through the local church to provide the clothing and other items that people had lost; cooking hot meals for community members without food or stability; making space for watershed residents to tell stories at the confluence of love and grief and place in community with others to support recovery. And they weren't alone in that. Marcy West, then Executive Director of the Kickapoo Valley Reserve in La Farge, realized she could open up their Visitor Center as a charging station for neighbors without power and use state vehicles to run bleach and hydrogen peroxide to folks who needed it. Randi Strangstalien in Westby responded to a friend's plea-"I wish I knew how to help people"-by managing a flood recovery Facebook group that surged to 3,500 members and thousands of volunteer hours, matching willing volunteers with folks who needed help. As she explained on the local news, "If you think something might work, step up and try it. Because all of sudden, it turns into something that 4,000 people come marching behind you, ready to help and willing." Gillian Pomplun, long-time area journalist, offered extensive coverage about the impacts of the

flood and continues to share critical information about ongoing recovery efforts. Pomplun filled an important need for communication about a long, slowly unfolding event that quickly faded from major media outlets. Coauthors Higgins and Gottschalk Druschke led many semesters of undergraduates at University of Wisconsin-La Crosse and University of Wisconsin-Madison in support of Stories from the Flood when the project needed additional help to gather flood stories, identify flood impacts and recovery ideas, and create materials to prepare the collection for Tiffany Trimmer with the Oral History Program at UW-La Crosse and Kristen Parrott with the Vernon County Historical Society. Hetti Brown, Executive Director of Couleecap, Inc., a nonprofit focused on supporting the needs of low-income residents in the area, created Project Recovery to support the emerging psychological and resource needs of community members impacted by floods.

What is clear from story after story gathered in the Stories from the Flood archive is that many individuals-and especially many women-came together in the absence of state infrastructures and in response to damage exacerbated by structural neglect to begin the work of recovery in mundane-but essential-ways, and to create channels for others to join the effort. As we consider how to make sense of these stories beyond the local case, we note that, taken together, these experiments in flood response built an informal and powerful infrastructure of mutual aid and community support that responded, collaboratively, to local needs as they emerged. These experiments echoed earlier work in these same valleys to experiment with creative responses to flooding. Building from these earlier radical changes in land management, we look forward to the power of story, and recognize that the many rich retellings of these mundane but heroic acts amplified their power, shaping and reshaping the community's experience of the 2018 floods while also shaping and reshaping the possibilities for future response.

Importantly, we want to return to the Houston Flood Museum's Lacy M. Johnson, heeding her caution as she reminds us that these oft-repeated "stories of everyday heroism," in her case about flood response after Hurricane Harvey in Houston, Texas, "have become the official stories of the storm: a story of sacrifice and resilience, of working together for the common good. We repeat these stories because we like what they say about us as a community, as people-but these stories aren't complete, and they are only partially true" (p. 3). Johnson points, too, to the ease with which more affluent, more white residents were able to receive mutual and federal aid compared to their less affluent, less white neighbors. "These stories," Johnson continues, "and the inequality they represent, also tell us who we are as a community, as people" (p. 4). Stories of heroism, sacrifice, and resilience in the Coon Creek and Kickapoo River watersheds are real, and they matter. But they are only partially true. They point attention to the structural inequities that make these everyday acts of heroism necessary in the first place. Community members needed to come together to share emergency clothing at the local church, or cook hot meals for stranded residents, or match Amish volunteers with struggling families, or spend years building and sustaining an oral history project focused on recovering from acute and sustained trauma because there were no institutional structures to fill those gaps. As Johnson reflects on flooding, "Though rain might fall without regard for social and economic disparities, flooding reinforces the inequalities that surround us every day" (p. 4). This is certainly true of flood response and recovery in the Driftless watersheds where we live and work.

As the floodwaters receded, community members checked on neighbors, friends, and strangers;

slopped out barns, basements, and first floors; tallied the damage in barns, cars, photo albums, canned goods, and cattle. Some made phone calls to insurance agents and federal agencies. Many didn't. They had lived through significant flooding before-2017, 2016, 2008, 2007, 1978, 1966, 1935—and had struggled to get coordinated support. Residents detailed not having the right receipts for FEMA reimbursement, not having the correct kind of insurance, not having the time or energy to manage the emotional and administrative labor of navigating flood bureaucracies. Many discovered their homes had migrated into the floodplain over time-purchased a seemingly reasonable distance and height from the banks of the Kickapoo River or Coon Creek only to find that what was once "safe" was now "100-year floodplain," as flood maps are redrawn in light of climate change-exacerbated increases in precipitation (Lea and Pralle, 2022). In the years since 2018, residents continue to navigate the slow pace of flood recovery and try to think as a community about future flood resilience-if such a thing is even possible-all the while holding their breaths waiting on the next flood, a recurrent nightmare they know will be exponentially worse in the midst of a global pandemic.

Our point here is that community members across the Kickapoo River and Coon Creek watersheds are already creating and sustaining creative responses to flooding, and have been for well over a century, inspiring us to argue for new flood management methodologies that attend to improvisation, narrative, and mutual support. We are heartened by projects around the region—and beyond—that think differently about the problem of flooding, following in the tradition of the Coon Creek watershed experiments of the 1930s and the improvised flood responses detailed above.

# **Creating New Stories about Flooding for More Livable Futures**

We close this essay by suggesting that attending to the messiness of these fine-scale stories is essential to the work of living through increasingly frequent and severe flooding in the region and of imagining justice-oriented flood futures. First, these individual narratives offer testimony to the devastating personal impacts of flooding, impacts that often amplify already existing forms of precarity. This testimony calls listeners and readers to bear witness to the immediate and ongoing damage of chronic flooding. Second, stories point to myriad systemic failures so often elided in structural, engineering-based approaches to flooding: an acute lack of mental health resources for flood-affected communities: a lack of physical health information and care related to floodborne illness; the absence of a widespread early warning system for flood events; the need for

more integration across these small communities to organize for federal aid. The list goes on. Third, we believe that these fine-scale stories—invited through creative mechanisms that make space for individual and community storytelling—offer the possibility to narrate new flood futures that work beyond structural solutions focused on control, document community strengths and needs, and cohere communities to imagine and create more livable futures.

As we write this, we are in the midst of finalizing the transfer of <u>85 audio files</u>, 14 written stories, and 1 video story from Stories from the Flood, collectively representing over 100 storytellers, to the Oral History Program at UW-La Crosse's Murphy Library and to the Vernon County Historical Society. Meanwhile, coauthors



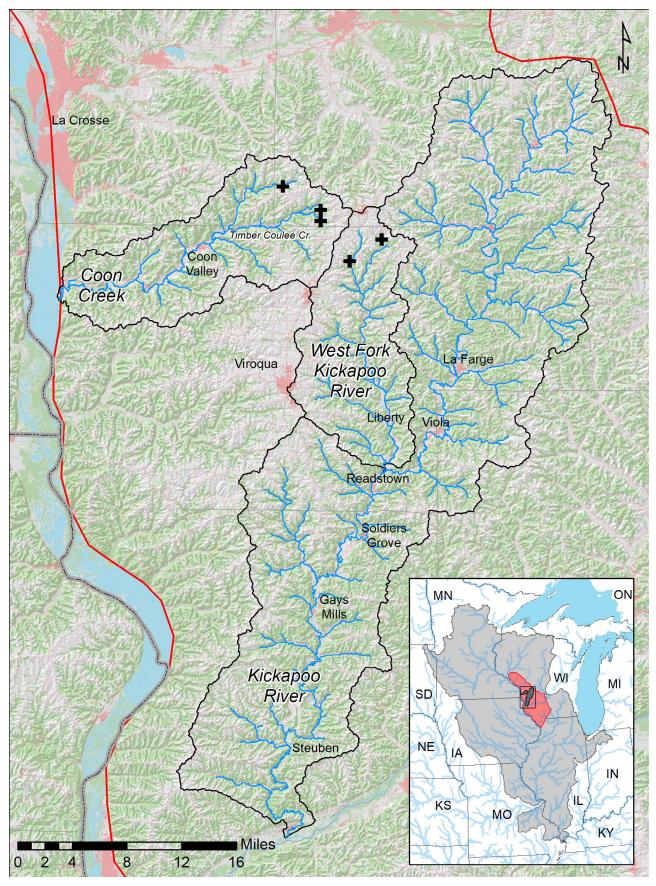
Watershed meeting in Coon Creek. Image courtesy of the authors.

Gottschalk Druschke, Booth, and Lave are continuing flood-focused research interviews with stream and watershed managers across the region and beginning the work of combining and refining recently developed hydrologic and hydraulic models of the Coon Creek and West Fork Kickapoo River watersheds into a publicly accessible interface to feature them in a series of community meetings to foster conversations about shared pathways into the flood-filled future we have detailed above (Pomplun, 2021).

In this ongoing work, we are trying to connect storytelling with flood modeling to engage community members to develop new flood futures on their own terms. We are working to link modeling approaches across scales, from the stream reach to the watershed, to highlight the sorts of connections that Coon Creek farmers in the 1930s knew so well: that what happens on a neighbor's farm upstream impacts all their neighbors downstream. And our past experience tells us that these upstream and downstream connections have crucial psychic, argumentative power to change material and symbolic landscapes (Gottschalk Druschke, 2013). Just as important, we are building these models from our wider experiences over five years of focused research interviews, surveys, informal conversations, public meetings, in-stream research, and fellowship. Like Cleo Wölfle Hazard (2022), we understand the river as "a presence that takes form from specific, yet constantly shifting physical, social, and psychic forces," and we are studying its flows, its infrastructures, its political and social forces (p. 7). We are trying to constantly work together, in community, to "hone an ability to sense fluvial and ecological histories by learning to see abandoned channels and old river terraces while walking across a floodplain," and also to "learn to sense political and social underflows by studying resistance to top-down management" (Wölfle Hazard, 2022, p. 7). As Wölfle Hazard argues, "When we are sensing in this physical and conceptual mode simultaneously, rivers come

into view as messy riparian braids of life, water, and sediment, shaped by and shaping human societies as they practice interfacing with other animals and altering flows using science and other systematic practices" (p. 8).

In our current work, the point of linking hydrologic and hydraulic models with engagement and story is to embrace this messiness, to consider the ways that river communities and human communities continue to shape each other, and to spark informed conversations with community members about their hopes, fears, and dreams for the future of their watersheds. Working in collaboration with local partners, we are planning watershed meetings that will allow community members to visualize the impacts of various flood responses on their landscape, and to talk over what changes they want to see and how they might get there together. Central to our work on the project is the idea that we are not using these models to "solve" the problem of flooding with a predetermined answer. Instead, we see our work in harmony with the experimental approaches of Lacy Johnson critically storying the Houston floods, Randi Strangstalien conjuring up a Facebook volunteer network, Coon Creek farmers in the 1930s trying new approaches in the face of a seemingly intractable erosion problem, and Driftless Writing Center board members and friends taking a chance to see whether an idea for a community-driven oral history project could blossom into an irreplaceable archive about flood impacts and potential solutions. Like them, we want to take a risk to create the conditions to think otherwise about flooding. Most of all, we are working to build, extend, nourish, and sustain relationships in community, even when that is hard, risky, unstable, and uncomfortable. At the heart of our engagement across these projects is the attempt to engage in a feminist mode to make space for community members across the Coon Creek and Kickapoo River watersheds to story their own solutions for the continued and worsening problem of flooding.



Map of the area covered in this article. Image courtesy of the authors.

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