

A hand holding a glass bottle of water over a river. The hand is wearing a black long-sleeved shirt and a brown leather watch. The bottle is clear glass with a faceted stopper and contains clear water with some sediment at the bottom. The background shows a wide river under a clear blue sky, with a line of trees on the far bank and some bare branches in the foreground on the left.

ISSUE 28 : WINTER/SPRING 2025

OPEN RIVERS : RETHINKING WATER, PLACE & COMMUNITY

MISSISSIPPI RIVER OPEN SCHOOL

<https://openrivers.umn.edu>

An interdisciplinary journal of public scholarship rethinking water, place & community
from multiple perspectives within and beyond the academy.

ISSN 2471-190X

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

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Open Rivers: Rethinking Water, Place & Community is produced by the University of Minnesota Libraries Publishing Services and the University of Minnesota Institute for Advanced Study.

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ISSN 2471-190X

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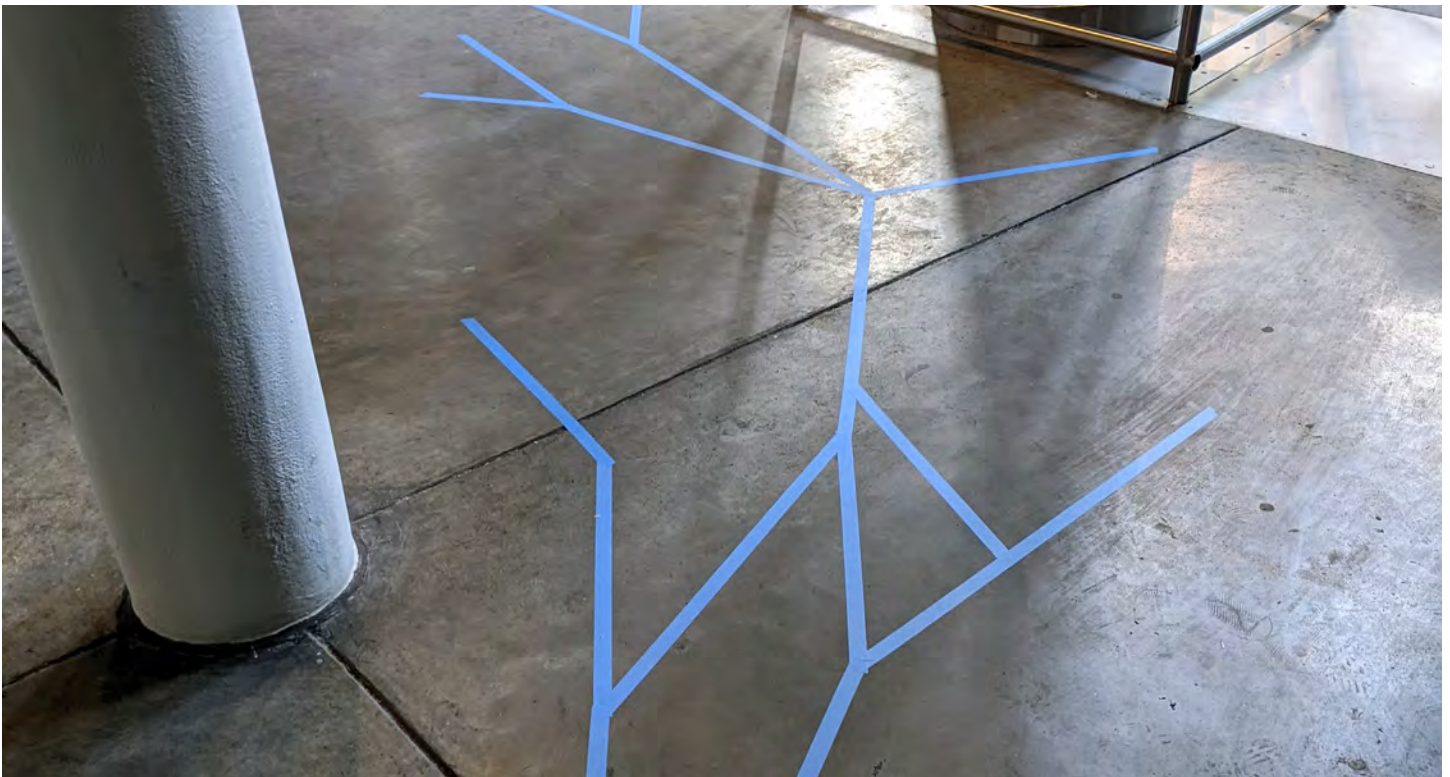
GEOGRAPHIES

BIG RIVER DRAWINGS: IN SUPPORT OF LEARNING, WELCOMING, AND COMMUNITY ENGAGEMENT

By Aron Chang

A common directive in community engagement is to “meet people where they are.” One way to do that is to locate activities where the community already gathers. This might mean organizing a workshop inside a church or hosting a planning meeting in a school gym. Such spaces may be large, available, and conveniently located, but they may not be ideal environments for

learning about the flow of the Mississippi River or imagining the future of drinking water systems. The challenge that arises, then, is: how might we create welcoming environments for diverse communities that support learning, dialogue, and creative activity? How might we change the scale and feel of a school gym?



Painters tape river drawing at the Contemporary Arts Center in New Orleans. Over the course of two days, participants added to the delta using painters tape as they learned about crevasses, distributaries, and avulsions. Image courtesy of Jo Farley and Water Map New Orleans / Bulbancha.

Since early 2023, Civic Studio and the Water Leaders Institute have been creating large, temporary drawings of the Mississippi River in different public spaces using painter's tape. A team of two or three people can create such a drawing in as little as two hours with materials costing less than \$20. These drawings function in a few different ways.

- **Learning through drawing:** The process of creating the river drawing is an opportunity to learn about and represent the flow of the Mississippi and to apply that knowledge to describe key features such as tributaries, distributaries, meanders, cutoffs, oxbows, and deltas.
- **A welcoming supergraphic:** The river drawing becomes a supergraphic—sometimes hundreds of feet long—that transforms the space and invites people in. We use the river drawing to spark curiosity as participants follow the pathway of the river and try to make sense of what they are seeing. We use the scale of the drawing to

ask participants to embrace the entirety of a space and to move and think expansively rather than asking people to engage at the scale of the eight-foot folding tables that we typically see at community events.

- **An armature for engagement:** The river drawing also serves as an armature for community engagement by helping to organize the flow of people and activities in relation to the flow of water represented by the drawing. The drawing, like line markings on a sports field, suggests possibilities for direction and flow, and defines both a sequence of activities for participants to follow and the areas where participants will engage in those activities.

We will explain each of the above points in more detail, using images from events organized by Civic Studio and the Water Leaders Institute in 2023, to help illustrate techniques, impacts, and possible variations of big river drawings. We also hope to show how easily these drawings can be adapted to different spaces.

Learning Through Drawing

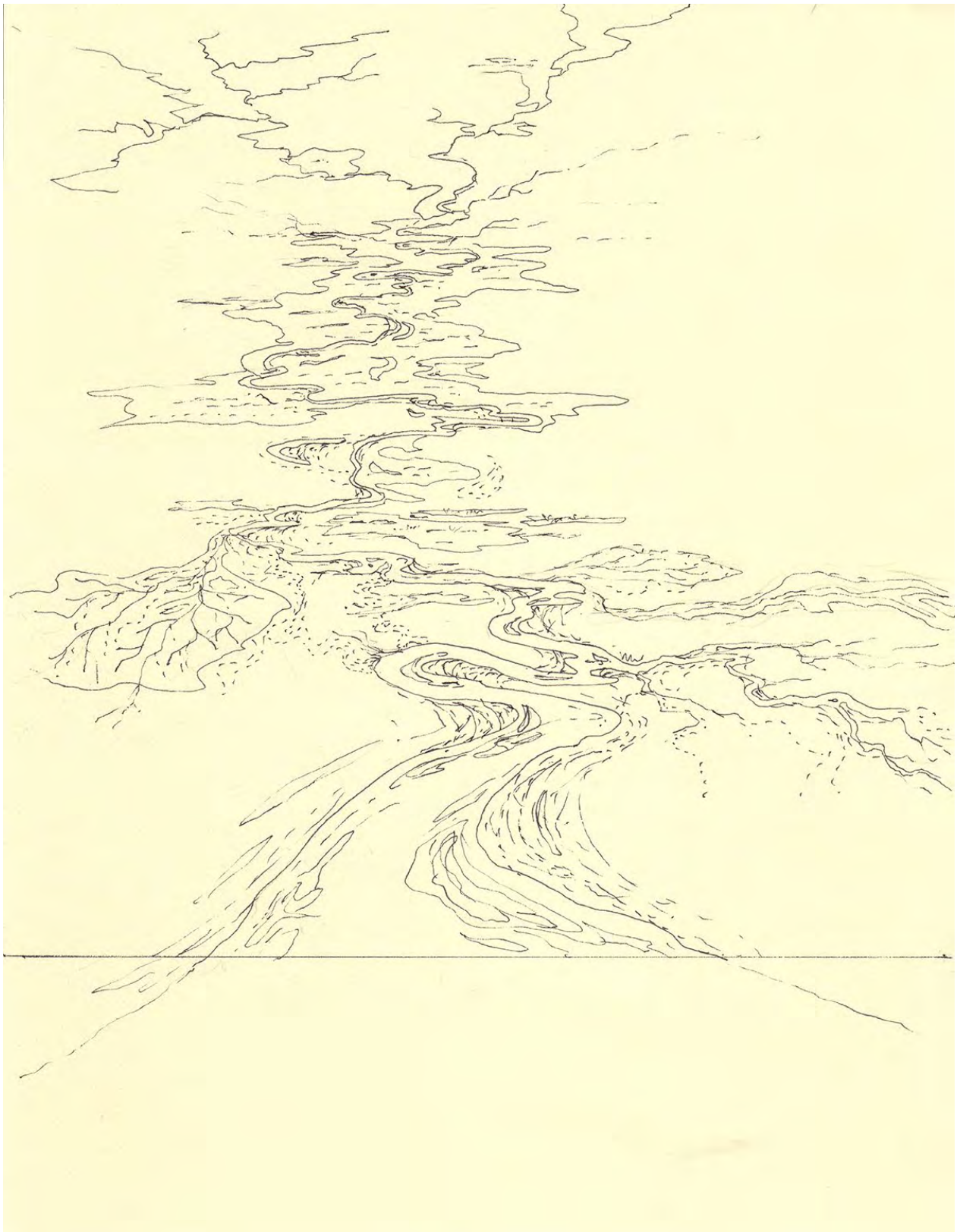
The first step for creating a big river drawing is determining the land across which the water will *flow*, as well as the aspects of the river that we hope to capture. We seek to incorporate visible topographical changes in the landscape into the drawing. That is, we try to draw the flow of water in relation to the slope of the ground upon which the tape is affixed.

Whether inspired by USGS maps, Fisk maps, satellite imagery, lived experience, or other representations and ways of knowing the river, the task of drawing it requires identifying which aspects and qualities of the river to try to represent.

What aspects of the channel and floodplain and major features like the Mississippi River delta might be shown? What proportions and spatial relationships are important to maintain, and where might distortions in scale and proportion be used to communicate something essential about the river? We are not simply attempting to represent the river as one might see it on a map—the relationship of the drawing to the space it exists in and the community it is engaging is more important. In this way, each river drawing is a completely different representation of the river, reflecting how the creators know the river and want to talk about it.



Bottom/delta end of a large river drawing at the Contemporary Arts Center in New Orleans. Over the course of two days, participants added to the delta using painter's tape as they learned about crevasses, distributaries, and avulsions. Image courtesy of Jo Farley and Water Map New Orleans / Bulbancha.



A large river drawing attempts to scale up key aspects of other representations of the river, such as this drawing which seeks to show the dynamic nature of a river course unbounded by artificial levees and flood control structures. Image courtesy of Aron Chang and Water Map New Orleans / Bulbancha.

A Welcoming Supergraphic

One of our goals in creating a large drawing that spans a few hundred feet is to reshape the look and feel of the space we are gathering in. We want to momentarily shift attention from the gym-ness of the school gym in order to provide a more exciting context for the activities at hand.

We seek to create a lively composition. By rendering how tributaries come together, how a river meanders, or how a river spreads out to form a delta, we end up creating engaging forms and patterns.

The river drawing sprawls out and invites the viewer to follow along, eyes on the ground, to see where the tape leads. There are opportunities to take different paths, to jump across lines, and to move upstream or downstream. The river drawing enlivens the space and helps to span across different surfaces and scales. It holds participants' interest both as a large drawing and concept and in the specificity of how individual elements are rendered.

While the tape installations are meant to be temporary, returning the school gym to its everyday uses without leaving a trace, these big river drawings can also remain as evidence of the work and connections they inspire. At one of our events, the hosts were so pleased with the drawing that they asked us to leave the tape in place for people to continue viewing the drawing as a work of art.

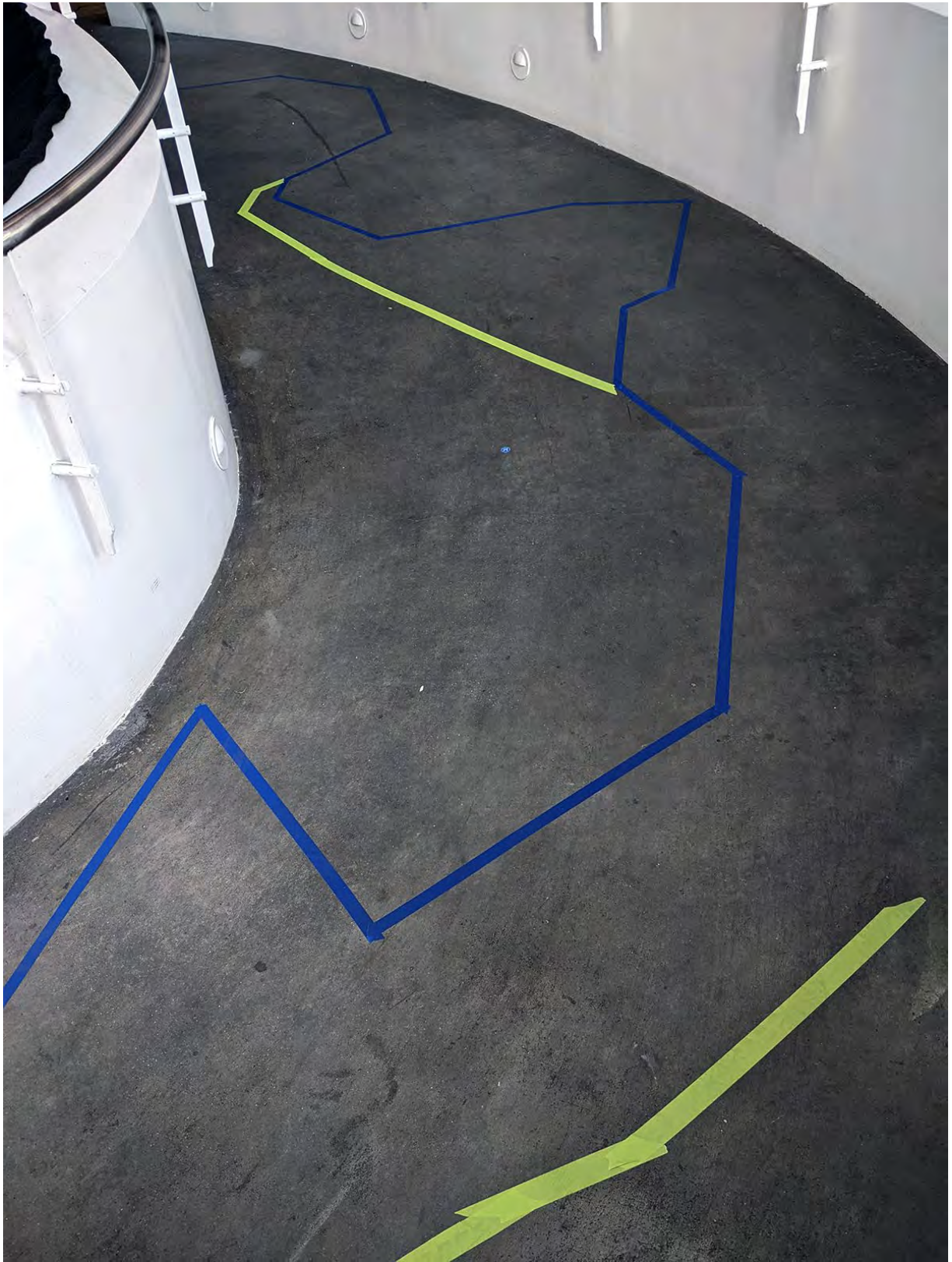


Image of river drawing descending a ramp with green painters tape added by a participant who applied what they learned upriver about meanders and cutoffs to show how the course of the river might change in the future.

Image courtesy of Jo Farley and Water Map New Orleans / Bulbancha.



River drawing starting to spread out onto flat ground as a river delta. Image courtesy of Jo Farley and Water Map New Orleans / Bulbancha.

An Armature for Engagement

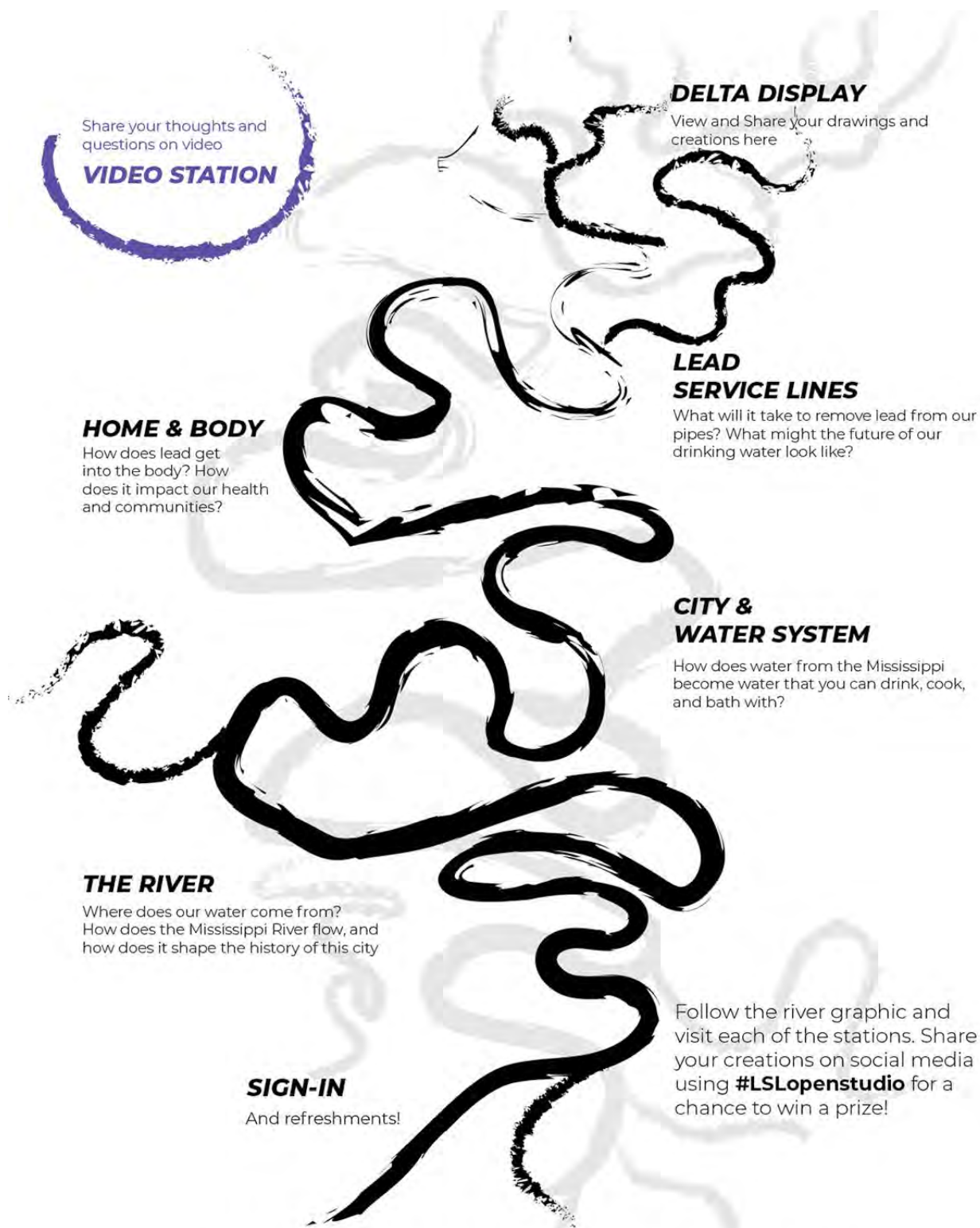
We use large river drawings to support different forms of learning, dialogue, and creative activities. By organizing individual stations along the river drawing, for example, we can encourage participants to follow a sequence as part of a larger narrative.

In one instance, we organized a series of Open Studios with the Water Collaborative and Total Community Action at three different locations (two gyms and a library). The series focused on the topic of lead service lines in New Orleans's drinking water system. In this context, the river drawing represented the Mississippi River, which is the source of drinking water for the city. On the upstream end, a station invited participants to learn about the water cycle and the Mississippi. As participants moved downstream, they engaged with stations exploring drinking water infrastructure and what happens when human bodies ingest lead. The participants followed the journey of water from the river to the point of ingestion, engaging with a wide range of key interrelated concepts and terms along the way. Once the participant had made their way to the delta, they were invited to respond to a series of creative prompts.

In another Open Studio, we created a large river drawing across two stories at the Contemporary Arts Center in New Orleans. This event was part

of the Water Map New Orleans / Water Map Bulbancha initiative, which seeks to build public knowledge of water and infrastructure and to support our delta city's residents in building a collective vision for what "living with water" will look like in the years ahead. Participants started at a station on the second-floor landing and followed the river around an oval ramp down to the first floor where the river spilled out into the lobby area as a widening delta. At the top, participants learned about how rivers change course. As participants made their way down the river, they were given painter's tape with which to apply what they had learned about meanders, erosion, oxbows, cutoffs, avulsions, and distributaries by making changes to the drawing and adding to the delta.

In another event, focused on building understanding of the water cycle, we invited participants to use the movement of their bodies as they followed the path of water to understand and embody the water's flow in terms of energy, velocity, or sediment carried. Using painter's tape and a variety of graphic notations, we expanded upon the river drawing to represent the full water cycle, from precipitation to river flow to evapotranspiration. Along the path followed by participants, we brought additional senses into the experience by playing music created by Sly Watts to represent each part of the water cycle.



Share your thoughts and questions on video

VIDEO STATION

DELTA DISPLAY

View and Share your drawings and creations here

HOME & BODY

How does lead get into the body? How does it impact our health and communities?

LEAD SERVICE LINES

What will it take to remove lead from our pipes? What might the future of our drinking water look like?

CITY & WATER SYSTEM

How does water from the Mississippi become water that you can drink, cook, and bath with?

THE RIVER

Where does our water come from? How does the Mississippi River flow, and how does it shape the history of this city

SIGN-IN

And refreshments!

Follow the river graphic and visit each of the stations. Share your creations on social media using **#LSLopenstudio** for a chance to win a prize!

LEAD SERVICE LINE OPEN STUDIO

Big Six Brass Band at 3 | River Acknowledgment by Monique Verdin at 3:30 | *Gaslight River* by AnnieLaurie Erickson

Wayfinding handout at a Lead Service Lines Open Studio where a river drawing brings participants to different stations to learn about drinking water infrastructure and public health. Image courtesy of Civic Studio.



An image of youth participants engaging at one of the stops along the river at a Lead Service Lines Open Studio. Image courtesy of Sabine Greeson and Civic Studio.

Thoughts on Adaptations and Further Exploration

We are using this approach to address other topics where describing flow is of pedagogical value. For instance, in another collaboration with Total Community Action, we are organizing Open Studios on the topic of incarceration, in which we ask participants to follow the path of someone moving through the criminal legal system (e.g., from apprehension to trial to prison to reentry) by following along a pathway rendered using painter's tape and stations arrayed along the

drawing. We believe that by mapping out the system in physical space and having participants navigate one or more pathways through the criminal legal system, we can make it easier to comprehend the shape of the system and its impact on someone who is being incarcerated, and to make sense of terms and metaphors such as "pipeline," "double jeopardy," "reentry," and "recidivism." Furthermore, building broader understanding of the criminal legal system



Abstract markings made with painter's tape indicate the gathering flow of raindrops in a watershed as part of an interactive installation focusing on the water cycle. Image courtesy of Katie Fronek and Water Leaders Institute.

supports a holistic approach to reforming it, even as we seek to combat the most glaring injustices associated with specific parts of the system.

We will continue to explore the use of these large drawings as tools for learning and engagement. We are interested in testing different techniques and materials that are as easy to use as our current ones but result in no waste (the painter's tape becomes a bundle of trash at the end of each event, unfortunately). We have successfully used these techniques with youth, in family settings,

and in other environments, and we believe that they can easily be adapted for use in classrooms, outdoor settings, and other places of learning and engagement.

We welcome collaboration and other experimentation with these techniques, and we are happy to share more details with anyone interested. You can learn more about our work and contact us via our websites: civicstudio.coop and waterleadersinstitute.com.



Music and movement guides bring participants along the entire water cycle, from the falling of rain to the flow of the river and the delta to evapotranspiration and condensation. Image courtesy of Katie Fronek and Water Leaders Institute.

Recommended Citation

Chang, Aron. 2025. "Big River Drawings: In Support of Learning, Welcoming, and Community Engagement." *Open Rivers: Rethinking Water, Place & Community*, no. 28. <https://doi.org/10.24926/2471190X.12142>.

DOI: <https://doi.org/10.24926/2471190X.12142>

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