

Summer 2026



A Watershed Moment

A NEWSLETTER OF WATERSHED MANAGEMENT GROUP

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Care and Connection



A Sacred Ceremony In the Tanque Verde Creek

Restoring & Nurturing Relationships with People and Rivers

At our 9th annual Tanque Verde Flow and Feast, we gathered to honor the Tanque Verde Creek and celebrate all the River Run Network has accomplished together to remove invasive Arundo and restore the river's forest. Every year during event planning for this annual celebration, I'm giddy thinking about what we'll do together as a community out in nature. It's a special moment to gather our energy—with our children, elders, and everyone in between—and show our love for our watershed.

Over the last five years, our volunteers have removed invasive Arundo from 75 acres of the creek. For a decade, we have engaged with local landowners on conservation and restoration projects, and for seven years, we have monitored the flows in Tanque Verde Creek. But at this year's Flow and Feast, we weren't out chopping and hauling invasive Arundo, planting trees, or surveying riparian health. So how did we honor and care for the creek?

On this special evening, caring for the Tanque Verde was as simple and profound as observing, listening, meditating, and visualizing a restorative future. Two-hundred and thirty of us sat down in the bed of the creek, put our toes and fingers in the sand, and embodied new riparian trees – cottonwoods, willow, and elderberries.



The following is the group meditation I led. I invite you to join our sacred ceremony, or create your own, in the creek or river close to your home. Together, we can show our rivers how much we love them.

Lisa Shipek
Co-Executive Director

Start sitting on the ground, touch the sand, take off your shoes. Feel the creekbed. Feel the water below you.

You are a seed... feel the energy and light within you. Feel the creek flow, pass over you, the winter rains, the snow melt, the summer monsoons.

You sprout! Thank you, water. Thank you, new space to grow now that the invasive Arundo is gone.

You start to grow, slowly rising. Cottonwood, willow, elderberry tree.

As the surface waters slow and dry, reach your roots into the groundwater.

Reach your branches to the sky. Breathe with your leaves. Breathe in the carbon dioxide and breathe out the oxygen. Inhale in the carbon dioxide and give life as you exhale oxygen.

We are a powerful riparian forest. As a forest, we give back to the creek. We shade its waters, help slow and sink the flow, distribute the water, and create life all around us.

Writing & editing: Lisa Shipek, Jennifer Glass, Val Gaddy, Nadira Mitchell, Joaquin Murrieta-Saldivar, Catlow Shipek, Rev. Amalia Vagts **Photos:** Julius Schlosburg **Graphic Design & Illustrations:** Dennis Caldwell
No Artificial Intelligence (AI) was used to write, edit, or design this publication

Cover: Santa Cruz Watershed Collaborative partners get special access to Chimenea Creek, a tributary to Rincon Creek that flows out of the Rincon Mountains. This mountain creek helps recharge Tucson's aquifer with clean water. Right: A joyous celebration connected people to the creek at Tanque Verde Flow and Feast.



Nibi

Nee · beh

Nibi refers to water. In the region and dialect of Anishinaabemowin spoken on the Saugeen (Bruce) Peninsula, this word specifically refers to a river.

In Leanne Betasamosake Simpson's *Theory of Water: Nishnaabe Maps to the Times Ahead*,* she shares:

“Rivers are connectors...Rivers are the veins of our mother, the earth; they are the visual mapping of a watery network. What, or where, is the centre of a network?...

Nibi decentres itself: it leaks, moves, flows and reconnects, not as real estate or enclosure or property, but as a living network, linking endless forms of life working with each other to bring about more life, more diversity of life, more abundance of life. Water is a matrix of bonds and attachments amongst living things of all kinds, a cascade of living beings across time and space, on a cosmic scale, extending into ancient times and into the future. Water is a set of practices that socially, intellectually, emotionally, spiritually and physically reproduce the planet. Practices that are deeply relational and reciprocal. Practices that embody ethics privileging kindness and gentleness, creating architectures of care across time, space and species.”

*Leanne Betasamosake Simpson is a Michi Saagiig Nishnaabeg scholar, writer, musician and artist who is widely recognized as one of the most compelling Indigenous voices of her generation. *Theory of Water*, 2025, pg 154-156.

Water reflects moonlight near Tanque Verde Falls, as it flows from the Rincon Mountains east of Tucson, on the night of a lunar eclipse.



Returning to Relationship with Our Rivers

By Valerisa Gaddy, Community Conservation Director

Valerisa Gaddy leads a discussion on river personhood at the Spring 2026 forum for the Santa Cruz Watershed Collaborative.

What if we thought about the Colorado River not as a resource—but as a neighbor, friend or relative?

For many Indigenous communities, this way of thinking is not new, it is a return. For me, raised with Diné (Navajo) teachings, I learned early on that water is life. It is not a commodity; it is a relative. In Diné culture, water is honored in our stories, prayers and daily practices, reminding us of our responsibility to care for it as a living relative. These teachings emphasize balance, reciprocity, and respect, Hózhó, reminding us that we are part of the natural world, not separate from it.

In the United States legal system, the idea of “personhood” already extends beyond humans. Corporations, for example, are considered legal

persons, with the ability to own property and be represented in court. This raises an important question: if human-made entities can have rights, why not the natural systems that sustain life?

Granting personhood to a river is not about anthropomorphizing the river, but about recognizing it as a living system with its own integrity and limits. It means recognizing the river’s right to exist, to flow, and to be protected from harm. It shifts our perspective from “How can we use this water?” to “How do we live in relationship with it?” Around the world, this shift is already happening. Rivers in places like New Zealand and Colombia have been granted legal personhood, acknowledging them as living systems rather than resources to extract from.

For Arizona, the Colorado River is at a critical

moment. It is over-allocated, strained by climate change, and no longer reaches the sea. For decades, policies have treated the river as something to divide, rather than a living system with limits.

What might change if we viewed the Colorado River through the lens of personhood? It could reshape how decisions are made and ensure the river’s health is considered alongside human needs. It could encourage long-term stewardship, asking us to think beyond immediate use and focus our energies and planning toward future generations. And it could transform our relationship with water, from control to connection. At Watershed Management Group, we work with communities to build resilience through rainwater harvesting, green infrastructure, and restoration. These hands-on solutions are grounded in a deeper question: what kind of relationship do we want with water?

Recognizing the personhood of a river is not a single solution. But it offers a powerful shift in perspective, one that brings together science, policy, and Indigenous knowledge. **If we begin to see the Colorado River as a relative that has needs, limits, and a voice, we can begin to care for it in new ways.** And in doing so, we take a step toward a more sustainable future for our region.

We all have a role to play in shifting how we relate to water. This can start with learning from different perspectives including Indigenous Knowledge, supporting policies and organizations that protect our waterways, and engaging in local efforts to steward water in your own community. Whether that means attending a community workshop, advocating for stronger protections, or simply paying closer attention to the water systems you rely on, each action matters.



Building Relationships Through Beaver-based Restoration

By Nadira Mitchell, Restoration Ecology Coordinator

Hidden among the cottonwoods along the lower Babocomari River was a beaver pond surrounded by lush wetland vegetation. We stood quietly taking in a scene that is hard to imagine in this arid landscape: a pool of water spreading across the floodplain, a stand of cattails, and unmistakable signs of active beavers. As people witnessed fresh chew marks on trees and dams that slowed and spread water across the channel, the group fell quiet, and their faces filled with awe.

As the lead coordinator, much of my attention leading up to this workshop had been focused on logistics planning and keeping the day on track. Those concerns quickly disappeared at the pond. I had almost forgotten how magical it was to see and to understand what a thriving beaver pond

looks like. Watching workshop participants experience that same sense of wonder reminded me that creating opportunities to share knowledge is just as important as doing the restoration work.

This special moment occurred during Watershed's Riparian Restoration Knowledge Exchange workshop along the lower Babocomari River, where Tribal environmental and natural resource professionals gathered for a day of shared learning, hands-on training, and relationship-building. The exchange highlighted Watershed's restoration work in partnership with private landowners and explored the important role beavers play in restoring healthy riparian ecosystems.

Every Watershed project is an opportunity for skill building, knowledge exchange, and community engagement. Watershed's River Run Network volunteers help build a beaver dam analog along the Babocomari River, one of dozens of structures we've built in the last two years.

Nine staff members from Tribal environmental and natural resource departments attended, including practitioners from the San Carlos Apache Tribe, Salt River Pima Maricopa Indian Community, Tohono O'odham Nation, and the San Xavier District of the Tohono O'odham Nation. Participants joined Watershed staff to visit restoration sites and explore low-tech process-based restoration (LTPBR) techniques. LTPBR is a method of restoring degraded ecosystems by building hand-built structures using locally available natural materials.

Participants had the chance to see LTPBR examples in action as they toured beaver dam analogs: structures that mimic beaver dams by slowing water, capturing sediment, and encouraging native vegetation. Watershed staff shared lessons from planning, installing, and monitoring these structures while participants exchanged experiences managing natural resources on Tribal lands.

As we walked along the water's edge near the thriving beaver pond, one participant paused to take in the pond's surprising width and depth. Seeing the pond firsthand helped them realize that wetlands they had encountered elsewhere were likely beaver habitat. Later, after we had gathered branches and woven them between hand-driven posts to build a beaver dam analog, another participant remarked that the experience gave them a newfound appreciation for how beavers accomplish the same work so naturally and make it look easy.

The idea for this knowledge exchange had emerged through conversations within the Arizona Beaver Working Group, a collaborative network that Watershed helped initiate. This group brings together practitioners and organizations working on habitat restoration, beaver coexistence, workforce development, education, and policy. As the group has grown, one insight has become increasingly clear: meaningful collaboration with Tribal Nations is essential to advancing beaver restoration and stewardship across Arizona.

Arizona is home to 22 federally recognized Tribal Nations, and Tribal lands comprise approximately one-quarter of the state's land area. Tribal Nations hold authority and responsibility for managing wildlife and natural resources on their lands. Tribal leadership,

stewardship practices, and ecological knowledge are critical to restoration efforts across the region.

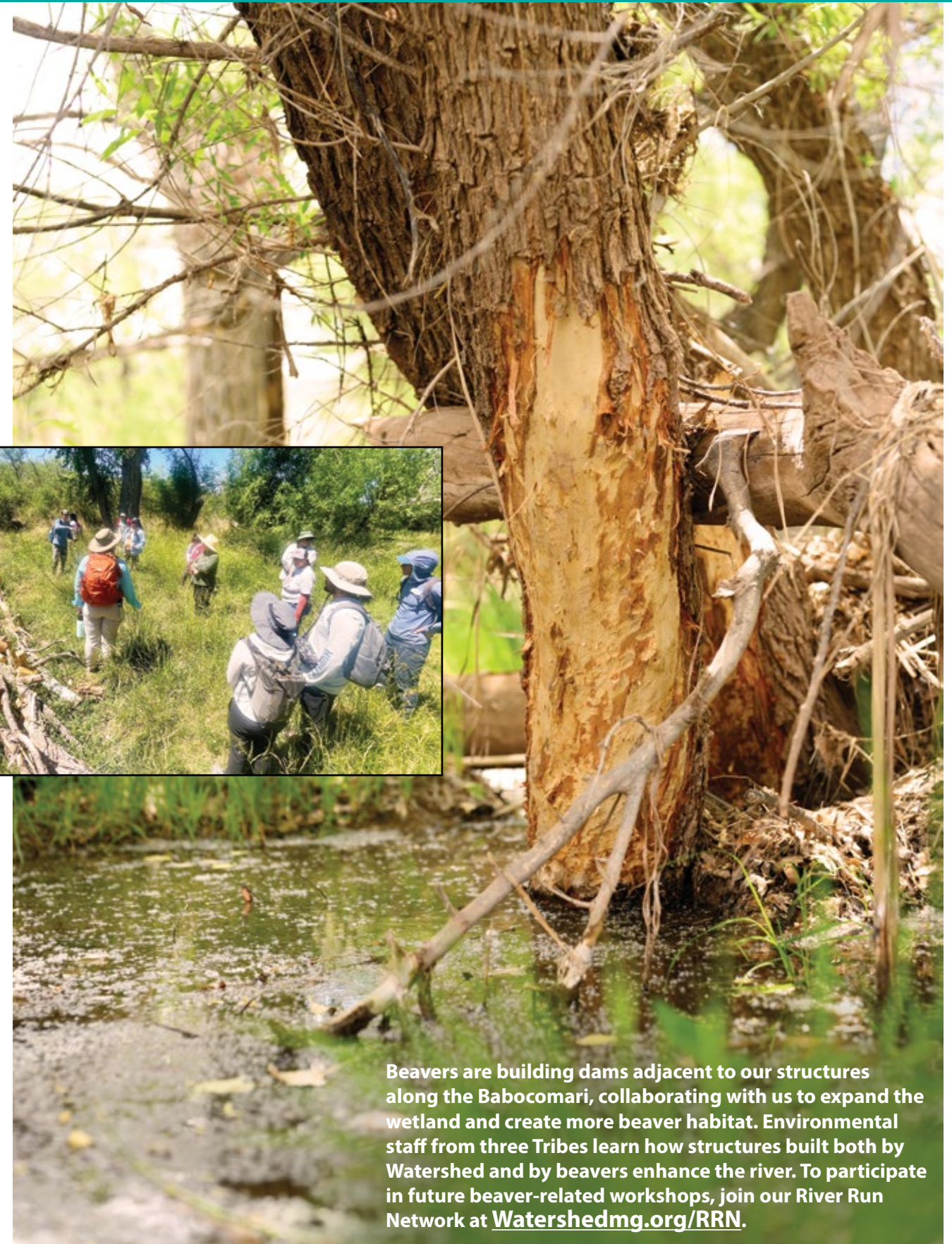
This importance is reflected in recent actions by the Tohono O'odham Nation and the San Carlos Apache Tribe, whose Tribal Councils passed resolutions declaring the San Pedro Watershed a historic property of traditional cultural significance and requesting formal consideration for inclusion in the U.S. National Register of Historic Places. These resolutions recognize the San Pedro Watershed as an interconnected cultural landscape shaped by Indigenous history and stewardship. The watershed contains thousands of documented cultural sites, springs, perennial river flows, travel routes, gathering areas, and significant landforms that continue to support and sustain Indigenous communities today.

The knowledge exchange demonstrated that restoration is about more than building structures in stream channels. It is about building relationships rooted in mutual respect. By learning together on the landscape, we strengthened connections that will support the long-term health of Arizona's rivers, wetlands, wildlife, and communities.

Reflecting on the workshop, I feel a deep sense of pride in helping create a space where Tribal environmental professionals and Watershed staff could learn from one another and build relationships that might not have formed otherwise. As a young Diné professional, one of the most meaningful parts of the day was seeing Indigenous and non-Indigenous practitioners come together around a shared commitment to caring for the land.

The relationships formed along the Babocomari River are only the beginning, and I hope they continue to grow into lasting partnerships that support restoration, stewardship, and shared learning across the region for years to come.

We are grateful for the support for this knowledge exchange, Statewide Beaver Working Group, and lower Babocomari restoration work including from Defenders of Wildlife, National Fish and Wildlife Foundation, U.S. Fish & Wildlife Service Partners for Fish and Wildlife Program, the Arizona Department of Environmental Quality, and The Nature Conservancy-Tucson Chapter.



Beavers are building dams adjacent to our structures along the Babocomari, collaborating with us to expand the wetland and create more beaver habitat. Environmental staff from three Tribes learn how structures built both by Watershed and by beavers enhance the river. To participate in future beaver-related workshops, join our River Run Network at [Watershedmg.org/RRN](https://watershedmg.org/RRN).



By Anissa McKenna & Jennifer Skinner
Urban River Restoration Apprentices



Left The Santa Cruz River in 1942, facing south toward the Santa Rita Mountains. Pictured is a vast mesquite bosque (forest), a highly productive riparian habitat found in the desert. Photo credit: U.S. Geological Survey.

Right The Santa Cruz River in 1989, facing south toward the Santa Rita Mountains. In place of the mesquite bosque from 1942, there is a dry river bed with little to no vegetation. Photo credit: U.S. Geological Survey.

Understanding the Southern Arizona Water Rights Settlement Act

Restoring Flow to the San Xavier District of the Tohono O'odham Nation

Since time immemorial, various groups of O'odham resided on and stewarded the land that we now know as Tucson. Within the last 400 years, the impacts of colonization and the extractive industries that followed resulted in the drying of the Santa Cruz River. The specific conditions that led to the drying of the Santa Cruz are unique to Tucson. However, the story of the impacts of colonization on natural resources is shared across the world by communities that have experienced and continue to experience the devastation of settler colonialism.

Prior to colonization and the development of Tucson as a city, Tohono O'odham living along the Santa Cruz practiced flood-irrigation farming, hunted local wildlife, and harvested native edible fruits and plants. The arrival of non-native settlers, the establishment of the mission system, and the proliferation of non-native agriculture, cattle ranching, and mining completely changed the O'odham way of life. By the 1800s, shifts in land ownership (land theft) and aggressive groundwater pumping by settlers had impacted local resources to the point that many O'odham were forced to abandon traditional agricultural practices. O'odham previously living in relationship with the land were made to transition from a traditional barter system to seeking wages by working in the city. By the 1940s, the river that had previously brought life to Tucson only flowed after intense rains during the monsoon seasons.

As time went on, industrial agriculture intensified, and multiple international mining corporations continued operating near the San Xavier District of the Tohono O'odham Nation, both industries pumping water from underneath land the O'odham had farmed for thousands of years. Seeing the need for legal intervention, the Tohono O'odham Nation sued the City of Tucson and numerous mining and agricultural water users to protect its water rights in 1975.

Although tribal nations hold senior water rights through the creation of the reservation system, these rights often go unquantified or undermined by corporate interests.^{1,2} An example is how tribal nations were completely left out of the original allocation agreements of the Colorado River Compact of 1922. After the initial legal filing, it took another 7 years for the Southern Arizona Water Rights Settlement Act (SAWRSA) to be signed into law in 1982.

SAWRSA enabled the Tohono O'odham Nation to hold the entities responsible for draining the Santa Cruz River accountable and to secure water rights for the San Xavier District. The act also required the federal government to build water infrastructure, fund irrigation systems, and create water management plans. In total, SAWRSA awarded the San Xavier and Schuk Toak Districts 66,000 acre feet of Central Arizona Project (CAP) water annually. However, it took over 30 years for the legislation to go into effect:

SAWRSA was not fully implemented until 2007. It took another 11 years after the act was put into effect to complete infrastructure to import Colorado River water and see meaningful aquifer recharge as a result of the nation's conservation practices. An important note is that the rest of the Tohono O'odham Nation still doesn't have settled water rights; the nation has been tied up in an over 50-year-long water adjudication process involving 30,000 other parties (including the Salt River Project and mining corporations like Freeport and Asarco).³

As the original stewards of the land, and as a reflection of their inherent sovereignty, Tribal nations should be at the forefront of local watershed management and restoration. What could it look like for Tucson to ensure equitable continued access to water for everyone—including the original stewards of the land? How can we support San Xavier District's long-standing stewardship of the river especially during periods of water shortages? Considering the uncertainty of the future of Central Arizona Project water that Tucson relies on, especially in light of potential changes to Colorado River water allocations, how could we strengthen our watershed by making an intentional effort to work together?

Jennifer Skinner is a Chicana environmental educator and cultural worker from Douglas, AZ. Anissa McKenna works on climate resilience and tribal

engagement and is a member of the Pascua Yaqui Tribe from Tucson, Arizona. Jennifer and Anissa are apprentices with Watershed engaging community members in education and restoration efforts to expand our riparian forests in hot neighborhoods.

Resources:

¹ For more information, see the following article: "Future Indian Water Settlements in Arizona: The Race to the Bottom of the Waterhole?" (Weldon & McKnight, 2006)

The Winters Doctrine was first applied to Native tribes by the United States Supreme Court in the case of *Winters v. United States*. It can be summarized by the phrase "first in time, first in right," meaning that the person who first appropriates and uses water in compliance with procedures prescribed by state law has the better right to use that water against all persons who subsequently appropriate water. When the federal government reserves and sets aside land for an Indian reservation, it also implicitly reserves enough water rights for use on the reservation to the extent necessary to accomplish its primary purpose.

² For more information, see the following article: "Wet Water and Paper Water in the Upper Gila River Watershed" (Kelly Mott Lacroix, et. al, 2016)

There's a difference between "paper water" and "wet water"; "paper water" may be possessed by those who have a legal water right, but what water is physically available to them is considered "wet water." When there's no physical water, "paper water" supplements water resources, often from outside of the watershed. One can have a legal water right, but whether the resource is actually available in the river or stream, or accessible from a groundwater well, may be a different story.

³ For more information see the following article: "How private interests benefit from tribal water settlements" (Anna V. Smith, 2023)

Achieving a Hydro-Local Water Balance

The Tucson basin can shift to a hydro-local approach for a positive water future. Living hydro-local means valuing and stewarding our local waters instead of depleting them and showing that same care and respect to neighboring watersheds.

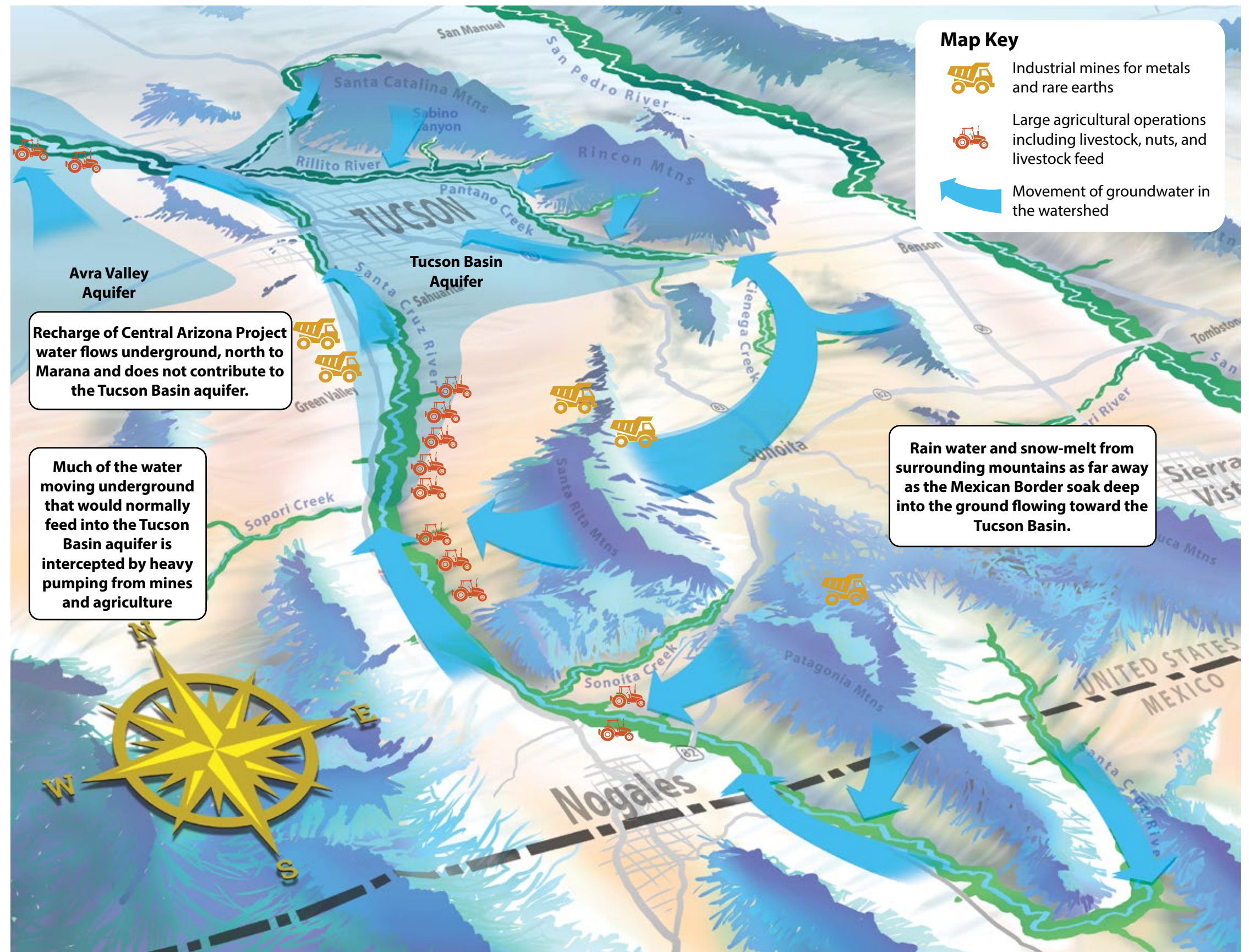
The Tucson basin can become a hydro-local community by shifting to a basin-wide water budget that aligns with our values. We can steward our groundwater supplies, value and wisely utilize our recycled water, and harvest stormwater, rainwater, and greywater as common practice. At the same time, we need to maximize conservation efforts and ensure desert-appropriate (low-water-use) industries and agriculture.

This map shows where groundwater recharge comes from, how groundwater moves through the Tucson basin, and who our major groundwater users are. In our colonial history, groundwater has been and continues to be Southern Arizona's main water supply. Groundwater will continue to be our most important local water supply, especially as imported water becomes more expensive, more energy-intensive, and less available due to climate change, drought, and competition with other users.

In a hydro-local future, we will need to be intentional about groundwater use from all sectors, particularly large water users like agriculture, mining, golf courses, and data centers. These large water users are located in and governed by the city of Tucson or Pima County, both of whom can influence local groundwater use.

The City of Tucson has recently instituted a Large Water Users Ordinance, but it is not strong enough to safeguard our creeks and groundwater from industries that use more water than they recharge. The Arizona Department of Water Resources regulates groundwater use through the Tucson Active Management Area (AMA) to be “safe-yield”, a balance between the amount of groundwater pumped from the AMA annually and the amount of water naturally or artificially recharged. However, recharge doesn’t often happen where groundwater is withdrawn, and our overall water balance is dependent on importing Colorado River water.

Groundwater aquifers continue to be depleted in areas like Vail, Green Valley, and Oro Valley, and many of our historically perennial rivers that dried up due to groundwater pumping are still not back to their historic flow patterns. **Not only should we safeguard against new large water users coming into our watershed, we must also work collaboratively with existing water users to shift to desert-appropriate practices that steward our groundwater and enhance the health of our rivers, creeks, and communities.**



I Spy Fireflies!

Watershed's River Run Network has a new mission: to discover and record where fireflies live, and then work to protect and expand their habitat. To achieve that goal, we are organizing our 1st annual I Spy Fireflies! event, a family-friendly, night-time event that gets people out to explore 11 wetland destinations in the Tucson basin.

I Spy Fireflies! is perfect for summertime in Tucson, not only because the summer monsoon is the only season fireflies are out, but also because it's a great time to get outside after the sun is down in our cooler river forests.

There are two threatened species of flashing fireflies found in the Tucson area: the Southwest spring firefly (*Bicellonycha wickershamorum*), which is under review for Endangered Species Act listing, and the Southwest synchronous firefly (*Photinus knulli*). Fireflies are becoming more and more rare, due to the drying up of our wetlands from groundwater pumping and development, use of pesticides and insecticides, as well as light pollution. We can help expand their habitat by caring for our creeks, rivers, and wetlands, including increasing surface flows and restoring riparian forests.

The data we collect during the August survey will be shared with the Xerces Society, as part of their larger Firefly Atlas project. Launched in 2022, the project aims to advance our collective understanding of firefly species' distributions, phenologies, habitat associations, and threats, with an emphasis on threatened and data deficient species in the US. To learn more visit Xerces.org/Fireflies.

A survey like this has never been done before and includes many of our favorite destinations– Sabino Creek, Rincon Creek, Cienega Creek, Tanque Verde Creek, and the Santa Cruz River. Fireflies need moist soil for their habitat, so we are visiting locations that have flow most or all of the year and a close connection to groundwater.

Get involved in future firefly efforts through the River Run Network, at:

Watershedmg.org/RRN

Fireflies light up the mesquite forest along the Santa Cruz River near Tumacácori National Historical Park. These Southwest synchronous fireflies (*Photinus knulli*) were captured by photographer and firefly enthusiast Julius Schlosburg. Staff and volunteers leading the first annual I Spy Fireflies! survey were trained by the Xerces Society at this location in July.

In our sacred ceremony, we embodied cottonwood, willow, and elderberry trees, sprouting and growing in the restored riverbed.



The Lifeforce Flowed Through Us at Flow & Feast

“Help us, Jim Washburne! You’re our only hope!” So spoke the River Fairy (AKA Co-Executive Director Lisa Shipek) in our recent production of *Arundo: The Musical*. This line is familiar to Star Wars fans, but this battle wasn’t against the Galactic Empire but rather, *Arundo donax*, an invasive plant that drinks more than three times as much water as our native species.

River Run Network Program Manager Lauren Knight explains that “*Arundo, the Musical* was a play put on by our staff and apprentices to celebrate Jim and all the work that he’s done in the Tanque Verde Creek, and to tell the story with a little bit of pizzazz.”

Jim may be the hero of our Arundo eradication story, but he doesn’t fight evil Arundo alone. Since 2021, over 200 volunteers have come out each year to

help restore about 75 acres of riparian forest. In the Tanque Verde, Arundo is now nearly gone!

Over 230 people came together at Flow & Feast to celebrate this achievement and to play, eat, walk, birdwatch, chat, and enjoy each other’s company in a beautiful riparian ecosystem.

What’s next for the Tanque Verde creek? We’ll keep removing Arundo resprouts and monitor the health of native plantings, part of a re-vegetation plan for the creek. With time, as these native trees establish themselves, groundwater levels will continue to rise and support shade-giving, beautiful plants.

To learn more about the River Run Network and to get involved in this important work, visit: Watershedmg.org/RRN



Staff, interns, and apprentices performed *Arundo, the Musical!*, a whimsical play written by apprentice Carmina Diamante and intern Henry Schon.



Children played in the creek flow, water that flows a good portion of the year thanks to groundwater connection.



Connecting with Creation

Our Saviour's Church Embraces Rain Gardens



The rain gardens also give us a place to slow down, to notice the beauty of desert plants. To pause and sit on a boulder. To make space in the day for reflection, for prayer, for noticing.

Reverend Amalia Vagts

Watershed Management Group is proud to partner with several faith communities both in Tucson and beyond. Rev. Amalia Vagts, pastor at Our Saviour's Lutheran Church in Midtown Tucson, earned a Master of Divinity at Wartburg Theological Seminary in Dubuque, Iowa. Prior to ordained ministry, she worked in the non-profit sector in support of reproductive health care and making LGBTQ+ welcome in the Lutheran church. Cultural Ecologist Director Joaquin Murrieta-Saldivar and Education & Outreach Manager Jen Glass recently asked Rev. Amalia to share her thoughts on the partnership between Our Saviour's and Watershed, including a recent rain garden installation project.

Is your place of worship or community group interested in welcoming the rain as a life-giving force and building storm resilience? Contact WMG's Cultural Ecologist Director, Dr. Joaquin Murrieta, at jmurrieta@watershedmg.org.

By Reverend Amalia Vagts



Our congregation has been here for over 80 years. I've been here as pastor for just under five years. The desert has been here for thousands of years. During that time, plants and animals (including humans) have come and gone. **In my few years, I have heard many conversations about water, monsoons, drought, conservation, hope and fear. The year that I interviewed at Our Saviour's was a year that the monsoons didn't come. One person told me that they started wondering if the rain would ever come again.**

Somewhat paradoxically, shortly after I arrived as pastor here, I heard about the issues the congregation had experienced with the office flooding. The staff dutifully put out sandbags during monsoon storms and braced themselves for water flowing into the building. I experienced my own first big flood in the summer of 2024. **Water poured in through the natural "waterfall" created by stairs and a lower-level entrance. Once we had cleaned up the water, I started asking why we weren't diverting the rainwater away from the office and towards some vegetation.** Others agreed! We had a member who had visited the Watershed Management Group Living Lab and suggested I reach out.

Our first meeting with Cultural Ecologist Director Joaquin Murrieta, back in September of 2024, convinced our whole team that this was the right project to pursue and that Watershed Management Group was the right partner. **We valued Joaquin's spiritual nature, his visionary approach, and the scientific and artistic way he talked about the project.** Once the project began the following spring, we identified the causes of flooding and started a process to guide the water for beneficial use. Our goal was to diminish flooding and increase infiltration by creating a rain garden that would also provide shade and habitat for pollinators.

Our whole congregation was invited to Joaquin's initial presentation and a follow-up one between the two workdays. It was really eye-opening for some longtime Tucsonans as well as transplants to the desert to learn about the history of water in Tucson. We also loved learning about the role of the color green in human happiness, and the way that we could address flooding and make our campus more beautiful.

Each of the two rain garden installation workdays at our church created a special bonding moment for our congregation. Our high schoolers got into the project, and members of all ages found ways that they could participate through working, planting, or helping to prepare the all-important snacks. Involving the members created a great investment and sense of connection with the plants. I still hear people who helped create the rain garden talk about which parts they helped with, which parts we struggled with, what they are impressed with. We also featured this project as part of our annual stewardship commitment campaign, which inspired some wonderful energy and special gifts from parishioners.

We want to continue to use the rain gardens as an opportunity to deepen our connection with Creation. In one way, the rain gardens increase our awareness of the value of water and the need to conserve in creative and new ways. The rain gardens also give us a place to slow down, to notice the beauty of desert plants. To pause and sit on a boulder. To make space in the day for reflection, for prayer, for noticing. We hope the visibility of the gardens helps make a public witness to our parishioners and the community that we value the role of water and that we are caring for the land we steward.



Annisa McKenna



Jennifer Skinner



Liam Donohue



Esther Wroth

Welcome to Watershed!

Introducing Annisa, Jennifer, Liam, and Esther

Watershed welcomed four new apprentices to our team in May, and they have hit the ground running! We asked Urban River Restoration Apprentices Annisa McKenna and Jennifer Skinner and Community Conservation Apprentices Liam Donohue and Esther Wroth to share a bit about their initial experiences with us and to reflect on some of our core values.

Here are some highlights from their responses.

What first brought you to Watershed Management Group?

Anissa: I first learned about the work of Watershed when I started getting involved in the No Desert Data Center last summer. Having knowledge and expertise on local water resources from Watershed helped the coalition with outreach and education to the Tucson community, which in turn, helped us rally people to say “No!” to the Project Blue data center.

Liam: The first thing I heard about Watershed was our goal to restore the flow of local rivers by the year 2070. I was shocked. This vision for what felt like the distant future really drew me in. Here was an organization that recognized that change is slow, deliberate, and involves people. Making future Tucson generations the focus struck a chord with me, and I knew I wanted to jump in however I could.

You haven’t been part of the staff for very long, but what’s your favorite part of working here so far?

Liam: I’ve loved it all, and I’m genuinely happy to show up each day. My favorite thing, though, has been my team! Even after just two weeks, we’ve gotten to know each other well, we communicate well, and we get things done. Everyone I’ve worked with really honors others’ time, shows a lot of thought and care, and has been kind enough to guide me through things that are new to me.

Jennifer: I have been enjoying how WMG demonstrates commitment to living hydro-locally by having a Living Lab where you can experience many examples of how we can use rainwater harvesting systems in our daily lives. Drinking rainwater and having access to composting toilets feels surprisingly luxurious.

What does the phrase “Care and Connection” mean to you in the context of your work?

Esther: Care and Connection reminds me of the love we

can have for our environments. I find that knowing the plants and animals around me is like knowing a friend, and building that relationship with a place makes me feel cared for and makes me care more about nurturing life.

Liam: I think one of the most harmful things we’ve done as a society is imposing pressure to do things quickly. We have our quotas and ambitious goals for growth, and I think these have, unfortunately, informed how we’ve built the communities we live in today. I’ve come to see that a lot of what WMG does is the opposite of that. Instead of saying, “Hey, let’s install ten rain gardens a week,” we start by meeting people. You ask, “What do the people living in this apartment complex care about? What is our role in making this space a more vibrant place to live in? How can we genuinely make this garden belong to everyone who lives next to it?”

What are some steps you recommend that we take, individually or on a community level, to live more hydro-locally?

Anissa: Living more hydro-locally can be as easy as building rain gardens, planting native plants, harvesting rainwater, or reducing your water usage. On a larger scale, Tucson should take steps to implement more green stormwater infrastructure throughout the city, and prioritize water use that supports the community and the local ecosystem, rather than water-guzzling industries.

Jennifer: If you’re like me, you might be a renter who doesn’t have many options on how you get your water or where your water goes once it hits the drain. That doesn’t mean we’re powerless, though. If we continue to develop a hydro-local consciousness, we can start seeing what immediate changes we can make (like using dishwater to water plants) and long term changes (like policies to protect water vulnerable communities)

can be made and show up to advocate for that change wherever possible. Even sharing a conversation with neighbors, friends or family about sustainability and the future of our water is super important.

What’s something you appreciate or enjoy about our desert rivers and creeks?

Jennifer: I appreciate that our desert rivers and creeks offer a place for refuge and care. I often seek time with the rivers and creeks when I need a place to reconnect to myself and the natural world. Whether it’s taking a long walk alongside the Rillito and Santa Cruz via the Loop or spending a day out by Tanque Verde Creek, it’s always a moment of respite from the chaos of life.

Anissa: The life the water brings! Seeing refuge that the rivers and creeks can provide animals, plants and the local community definitely motivates me to work to protect these areas.

What’s your dream future for our city and region?

Liam: “Turn around don’t drown” signs are everywhere around town. Imagine we are fifty years into the future. What if Tucson’s stormwater infrastructure was so effective that we didn’t need them anymore? Instead of water rushing through the streets, picking up trash and pollutants along the way, it could flow into basins, water our trees, and (if we’re lucky) maybe even make its way into the aquifer.

Esther: I dream of this region becoming united in protecting the land and empowering Indigenous people and local residents to steward the places they live.

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