Summer 2021 A NEWSLETTER OF WATERSHED MANAGEMENT GROUP A NEWSLETTER OF WATERSHED MANAGEMENT GROUP

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Let's Live Hydro-Local! Vivamos Con Nuestra Agua!

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What Is Your Part in Creating Our Hydro- Local Future? ¿Cómo Ayudarás a Realizar Nuestro Futuro Hidro-Local?

In order to live Hydro-Locally, we must re-hydrate our

watersheds by reclaiming our floodplains, replenishing rivers and wetlands, restoring soil cover, increasing tree canopy and native forests, and letting nature do its work—like allowing beavers to thrive again in our wetlands. This is fundamentally an act of gratitude—fostering a reciprocal relationship with nature.

Para vivir de nuestras aguas locales, debemos re-hidratar nuestras cuencas, recuperar nuestras llanuras aluviales, reponer nuestros ríos y humedales, restaurar la cubertura del suelo, aumentar la sombra y habitat creado por los bosques nativos, y dejar que la naturaleza haga el trabajo, por ejemplo permitiendo que los castores prosperen nuevamente en nuestros rios. Esta es la mejor manera de fomentar una relación recíproca con la naturaleza y mostrar lo agradecidos que estamos por poder contar con ella.

A first-ever Colorado River water shortage is likely to be declared this year, leading to major cutbacks for Arizona as well as Nevada. This crisis has been developing since the Colorado River's original 1922 Compact, which allocated more river water to cities than is available in average rainfall years. Drought, climate change, and the drying up of the Colorado River and other rivers across the West paint a grim picture for the future of Western cities, but also create an imperative for a new path forward.

We at WMG believe the most effective solutions to our water crisis are at hand, and that nature can be our greatest teacher. What can we learn from the water cycle, which is never wasteful and always replenishing? What wisdom do our rivers hold? And what can we learn from Native American communities that stewarded our waters since prehistory? In other words, how can we return more than we use?

Status quo thinking would plan for bigger, more expensive water infrastructure solutions— looking outward for the next drop of water and a massive technology fix. But in just a hundred years of mismanagement, we have lost most of our wetlands, floodplains, soil cover, and forests, squandering the local waters that people and ecosystems rely on.

Instead of continuing to look outward for more water and depleting our environment, let's turn inward. Let's steward and cherish our local, renewable waters. Let's create a Hydro-Local future!

Living Hydro-Local means using and stewarding local, renewable water supplies, including rainwater, greywater, and stormwater, and ensuring that when surface water and groundwater are used, that they are always replenished locally.

If you're already on the Hydro-Local path, it's time to become a teacher and inspire others! If this is all new to you, we're eager to help get you started. In this newsletter, you'll find simple but impactful actions that you can take while connecting to your community and the sacredness of water—a precious resource that is essential to all life on Earth.

Seasonal flows are resurfacing along Tanque Verde Creek in Tucson thanks to reduced groundwater pumping.

Record-Breaking Monsoons and River Flow All Caught By Our Flow365 Volunteers!

July was a wet, wild, and euphoric month in Tucson! We had the most monthly rainfall ever, which rehydrated our rivers and recharged groundwater after 2020's extremely dry monsoon season.

During the rains, WMG's Flow365 community scientists were out monitoring 50 sites along Tucson's creeks and rivers like they do all year—catching data at sites no one else is monitoring, and painting a fuller picture of the ebb and flow of Tucson's rivers.

Agencies like Pima County Regional Flood Control and the US Geological Survey (USGS) do have flow gauges at some strategic points across Tucson, but mainly to alert the public about flooding. This is a vital role, but only one part of our watershed's story. Beyond flooding, Flow365 volunteers record gentler flows, capture how flow starts and stops at different times of year, and help us understand where groundwater is recharging. This monitoring data provides critical information to our River Run Network program, which works toward our long-term goal of restoring Tucson's heritage of flowing creeks and rivers.

This July our Flow365 volunteers captured data showing by far the most flows we've ever recorded since starting the effort in 2016. The Rillito River flowed for most of July, thanks to strong contributing flows from both the Tanque Verde Creek and the Pantano River! Monitors recorded a total of 22 days of flow for the Rillito River near Craycroft Road. That's a lot more flow than we've ever recorded and a stark comparison to July 2020, when we recorded just one day of flow!

While some of this flow was definitely flood flow, there have also been many days of shallow, slow flows in our creeks, which is great for recharging our aquifer.

Thank you to all our Flow365 volunteers for your diligent efforts in providing this critical data about our rivers. To learn more and get involved, visit: Watershedmg.org/RRN.



Sabino Creek Bear Canyon Trailhead flowing strongly with evidence of flooding 15+ feet above bank. Wendy Beal, 7/29/21



Pantano River at Tanque Verde Road. Flowing like a real river this morning. Susan Syracuse, 7/23/21.



Agua Caliente Wash at Fort Lowell Rd. Wash running for the first time in over a year. Yeah! Adele Youmans, 7/23/21.



The Tanque Verde is still flowing under the loop Bridge 24 hours after the rains yesterday that accumulated 2.1". John Loughrey, 7/26/21.



Rillito and Pantano flow converging today! Confluence has moved upstream 150 yards. Jon Ben Asher, 7/23/21.



Cañada del Oro Bridge at 1st Ave, rained in the mountains 7/3/21. Maria Iannone, 7/4/21.

Tucson's Hydro-Local Home Hero, David Stevenson, Inspires Us All!



For over a decade, David Stevenson has demonstrated the endless possibilities for desert dwellers to live more sustainably at his amazing northwest Tucson property. David is a WMG friend, Stewardship Circle supporter, and former board member, and we asked him a few questions about his inspiration and insights.

How and why did you become involved with Watershed Management Group?

I got involved through the Green Living Co-op and Water Harvesting Certification Course. I think WMG provides the best information on water harvesting to our local community, and what's more, they are leading by example.

Could you give us a quick and dirty rundown of your Hydro-Local home? What are you most proud of?

I collect rainwater in two 5,000-gallon cisterns, and have a pumping and filtration system that allows me, when possible, to live only on rainwater—including use in the home and garden. I have a greywater-to-landscape system for my laundry room and kitchen, outdoor shower, compost toilet, and earthworks (berms and basins) that helps slow, spread, and sink water into my landscape. I'm proud of my rainwater harvesting, recycled greywater use, and of producing more energy than I use (via various home energy improvements).

David captures rainwater in every way he can, both in large earthen basins (rain gardens) and cisterns (rain tanks). By capturing water both in the soil and in tanks, David is living Hydro-Locally, meeting most of his outdoor and indoor water demand with rainwater.



What's your relationship to your garden?

My garden has LOTS of native plants and trees that provide shade, shelter, and food for diverse desert life including birds, lizards, and insects, plus for me and my family! I love to see pollinators like bats and butterflies feasting here, and animals raising their young. My role is to keep nurturing the soil with compost, and to direct rain and greywater to where plants can use it. It's rewarding to see neighbors and passers-by stop to enjoy our little oasis, and I think about how they might foster similar living spaces and habitats in their own homes and/or neighborhoods.

What is your average daily water use? How much comes from the city municipal water and how much from rainwater and greywater?

In summer, average daily water use in our home and garden is about 44 gallons per personper-day. Our winter use is roughly half of that (~21 gallons). Prior to June of 2020, 50-100% of our water came from harvested rainwater. During this year's dry spell, we had to revert almost 100% to city water, though I used a few additional gallons from the cisterns to water my succulents and younger plants. With the recent rains, however, we got well over the two inches needed to switch back to using only rainwater!

What projects have given you the most bang, or gallons, for your buck, and what would you suggest to someone working with a very *limited budget?*

Aside from the big rainwater tanks, these projects are very affordable, and accessible even to low-income families. I'd recommend this cost-to-benefit order when taking on projects: 1) hand-dug earthworks, 2) laundry greywater, 3) outdoor shower, 4) composting toilet. If we are talking "bang for the gallon" – or what gives me the most recycled water at the lowest cost laundry greywater is #1, and the outdoor shower is #2 (plus it's fun to use!) In terms of water conservation, the composting toilet can't be beat, with every missed flush saving a full gallon from the (costly) sewage treatment process. Plus, we produce nutrient-rich compost for our fruit trees! Because dirt and rain are free, earthworks are our most affordable project, and require only simple tools and a little elbow grease.

Why is living hydro-locally important to you?

I want the Sonoran Desert and its wildlife to thrive, and I want to be able to live here myself. Without water, this won't be possible. Recycled greywater effectively doubles or triples the value of our water, and rainwater harvesting greatly reduces the need for city water-most of which is sourced from the diminishing Colorado River reservoir at Lake Mead.

My ultimate goal in making our home Hydro-Local is to inspire others to take action, and I encourage all community members to take on visible front-yard projects, however small. Let's be like WMG and lead by example!

2021 Monsoon Update from David:

"We received 8.71 inches of monsoon rain in July, the most ever since I've been recording and almost double the amount for all of 2020. The cisterns have been overflowing and we've resumed living on rainwater via the pump/filtration system."

Visit David's home and many other inspiring Hydro-Local homes at WMG's Desert Living Home Tour

Saturday, October 23, 10am – 3pm (In-person and virtual options!) Register today: Watershedmg.org/HomeTour



greywater to nearby desert plants.



fertilizer for fruit trees.

Living Hydro-Local Cherishing and Stewarding Our Local Water At Home

Making the most of our local water will create greater water security as we face increasing drought, pollution, overuse, and misuse that is affecting major water sources like the Colorado River. You can help your community make the needed change from relying on water from afar to using, and caring for, our local and renewable water resources.

Here are five simple things you can do to live Hydro-Local:

1. Value Groundwater

Groundwater is a main water supply for many cities. You can help ensure that groundwater remains available and drinkable for everyone by reducing your water use, and by preventing toxic pollutants from going down your sinks and street drains.

2. Reuse Greywater

Greywater is water that you've already used – for example, to wash your dishes or shower – and then recycled for a second or third purpose, like watering plants or flushing toilets.

3. Harvest Rainwater

Rainwater is a free source of water for plant irrigation, and the easiest way to capture and store it is through earthen landscape features, such as basins and berms.

These "rain gardens," as we call them, can support native plants and replenish our city's groundwater supply. If your budget allows, add a rain tank to store water for outdoor and indoor uses.

4. Steward Rivers

Surface water is found in your local rivers, creeks, lakes, and ponds. You can be a surface water steward by visiting and caring for these areas, and by advocating for "environmental flow" policies that make sure water is being allocated for the wider ecosystem, and not just for human use.

5. Sink Stormwater

Rainwater becomes stormwater when it flows across a landscape. Help stormwater sink into the ground, and keep it from getting polluted, by redirecting it away from concrete and sewage drains and towards green spaces. Here, it can recharge our groundwater supply, while also watering plants that provide shade and habitat.

The Future of Western Cities Dry, Hot, and Dusty? Or Green, Shaded, and Resilient?

Most western cities depend entirely on the heavy pumping of groundwater and/or the piping of faraway water sources like the Colorado River. These practices have led to a shrinking and unreliable water supply, while drying up our aquifers, creeks, and wetlands. The good news is that we can call on our cities to become Hydro-Local—making the best use of our local and renewable water resources!

Here's our roadmap to water security and a Hydro-Local city:

1. Value Groundwater

Instead of overspending to secure water from faraway sources, cities can invest in conservation programs that help balance our local water budget. By pumping out only the surplus water that our region's seasonal rainfall recharges each year, we can maintain a sustainable groundwater supply. Groundwater must also be protected from pollutants to ensure that everyone has safe drinking water.

2. Reuse Greywater

In a Hydro-Local system, greywater is repurposed to help replenish the local watershed. Recycled or reclaimed water from wastewater treatment facilities should be used for community and environmental benefit—to support river flows and irrigate public green spaces.

3. Harvest Rainwater

Cities can design public green spaces to be supported by local rainfall alone, with rain gardens and native plants that create a sense of place. City codes and incentives can help homes, businesses, and schools shift to rainwater for landscape irrigation.

4. Steward Rivers

It's time for cities to make flowing and functional rivers a priority of urban planning! This means protecting and reclaiming natural floodplains from development, and supporting "environmental flows" policies that ensure sufficient water is allocated to the river to sustain river ecosystems and the benefits they provide to people, plants, and animals.

5. Sink Stormwater

Cities can systematically plan and invest in green infrastructure, capturing and sinking stormwater in parks, streets, and parking lots. This prevents flooding, cools and beautifies our neighborhoods, and recharges our groundwater supply.

Release the Beavers Campaign Saving Beavers, Launching Binational Beaver Survey, & Protecting Riparian Areas

Get involved in our Release the Beavers campaign and river restoration efforts by joining our River Run Network: **Watershedmg.org/RRN**

WMG helped save this beaver from being euthanized through a relocation along the San Pedro River!

On April 23rd, the beaver population along Arizona's Upper San Pedro River grew by one! Critter Control, a private company, had been called to remove a

beaver in the Verde River watershed by a landowner who didn't like the beaver chomping on their cottonwoods. They needed to find a new home for the beaver in short order or the animal would be euthanized. Fortunately, they called WMG for help!

WMG's Executive Director Lisa Shipek, finding no immediate opportunities to release the beaver through the Arizona Game and Fish Department (AZGFD), made a flurry of phone calls and eventually connected Critter Control to a landowner along the San Pedro River who was happy to have the beaver released on her private property. After a harrowing week in captivity, our furry friend happily hopped into a deep pool with year-round flow, plenty of cottonwoods, and best of all, more beavers like him—approximately 12-15 others living in the Upper San Pedro!

Beavers build dams that slow river flows, recharge our aquifer, and create critical wetland habitats in our arid Sonoran Desert ecosystem. As part of our *Release the Beavers* campaign, we have been advocating for additional beaver introductions in Southern Arizona, leading public education initiatives, and implementing habitat restoration projects in both the San Pedro and Santa Cruz Rivers. All of this helps ensure our desert beaver populations and riparian habitats can thrive.

This saga of a single beaver opened our eyes to the fact that perfectly healthy, "nuisance beavers" are often euthanized in Arizona without recourse. So, we'll be building networks with people and businesses who trap beavers and connect them with those who manage suitable, private and public release sites. In addition, we'll be learning from other beaver relocation efforts across the West to foster best practices, aiming for the highest success rate when introducing beavers to new river habitats.

Binational River Restoration and Beaver Efforts

By the late 1800's, beavers were exterminated from the binational San Pedro River. Twenty years ago, they were reintroduced into Southern Arizona, and today, WMG is preparing to launch the firstever **Binational Beaver Survey!** The idea gained traction at our Beavers and Brews Binational Bash in April, and is planned to commence this fall. The goals of the survey are to understand the health, distribution, and size of beaver populations all along the San Pedro River, from Arizona to Sonora, Mexico. The success of our beavers can set an amazing precedent, and we hope that our study will inform efforts to bolster beaver populations in the San Pedro, Santa Cruz River, and beyond.

This collaborative survey is part of WMG's broader river restoration and community building efforts in Mexico, where we are working with binational partners to restore our connected watersheds. In Sonora, WMG is partnering to educate ranchers about beavers and rivers, as well as offering minigrants to build watershed restoration structures like "one-rock" dams and install fences to keep cattle out of riparian areas.

Make Way For Beavers: RRN Members Help Keep Cows out of Ciénega Creek!

In early May 2021, WMG staff and River Run Network (RRN) members visited the Las Ciénegas National Conservation Area, where we were saddened to see cows trampling our precious creek! The lush riparian area, located just southeast of Tucson, is being considered as a prime area for beaver reintroduction. Though the conservation area includes a working cattle ranch, cows are not allowed in the creek's core habitat, since their poo, stomping, and grazing quickly degrade both the creek's water quality and surrounding vegetation.

We encouraged our River Run Network members to tell the Bureau of Land Management (BLM) to please help fix the broken fences and keep the cows out of the creek! After hearing from many of our RRN community members, we are happy to announce that BLM has been providing regular updates on their efforts to protect the creek. They have already repaired one mile of fence and are working on a careful survey of the entire boundary area to make sure Ciénega Creek is totally protected from cattle. Thank you RRN members for speaking up on behalf of Ciénega Creek and its precious riparian habitat!

Connecting to Place, from an Indigenous Perspective

Anthony Francisco Jr. of the Tohono O'odham Nation, and Dr. Lydia Jennings, who is both Huichol (Wixáritari) on her mother's side and Pascua Yaqui (Yoeme) on her father's, are both accomplished trail runners and Indigenous community organizers. Just as there is groundwater underneath a permanent surface flow, active stewardship involves having a deep personal connection to the land and water. While each individual has their own way to connect to the natural world, we can all learn from the Indigenous stewards of our region, and from their communities, who have maintained reciprocal relationships with nature in the Sonoran Desert for millenia. In early June, WMG hosted an online discussion through our River Run Network with two Indigenous stewards of our region and active members of Tucson's running community—Anthony Francisco Jr., of the Tohono O'odham Nation, and Dr. Lydia Jennings, who is both Huichol (Wixáritari) on her mother's side and Pascua Yaqui (Yoeme) on her father's side and who grew up in New Mexico. In addition to being accomplished runners, Anthony is a community organizer, former Tribal Council Representative, and Communications Institute Fellow, and Lydia is a Postdoctoral Fellow in Community, Environment, and Policy at the University of Arizona. She is also an expert in soil health, environmental remediation, and mining policy.

Anthony and Lydia's running, research, and social work inspire gratitude for the natural world, and it is natural stewards like them who are helping our community heal, connect, and move forward towards a more hopeful and sustainable future. In the spirit of sharing knowledge, resources, and spaces with our region's deeplyrooted Indigenous communities, we asked Anthony and Lydia a few follow-up questions.

Lydia, you mentioned building on new programs like "Native Land Digital" – an online, Indigenous-led map of traditional lands – in order to help more people connect to land and Indigenous culture, past and present. How might this be done?

Knowing where Indigenous lands are located is an important first step, but it's also critical that we learn from traditional Indigenous stewards about how to respect and treat the land too. Ideas central to the field of conservation have been largely rooted in colonial practices, and have disconnected Indigenous communities from their homelands and traditional ecological knowledge (check out the podcast "Parks," or the book *Dispossessing the Wilderness*).

In addition, many parks and public land policies/regulations have not acknowledged the many ways in which Indigenous Peoples have long co-existed with their natural spaces. Ecosystems that are, to the average person, a natural playground, to many Indigenous Peoples are also our churches, food pantries, classrooms, medicine cabinets, and kin.

I feel that Indigenous-led codes of conduct that go along with platforms like Native Land Digital could help guide people visiting traditional lands, for example by requesting that people wear a face mask during a pandemic, avoid harvesting certain sacred plants, avoid certain areas out of respect for sacred sites and ceremonies, and take the opportunity to learn histories and traditional knowledge they might ordinarily miss. Essentially, when visitors would enter an Indigenous homeland they would be able to learn about how those peoples relate to their land, and how to respect this relationship. Autonomy of knowledgesharing by Indigenous communities would also be an important protocol of data management, such that private/ sacred information is only shared with consent from knowledge-keepers.

People have long co-existed with their natural spaces. Ecosystems that are, to the average person, a natural playground, to many Indigenous Peoples are also our churches, food pantries, classrooms, medicine cabinets, and kin.

— Dr. Lydia Jennings

Dr. Lydia Jennings peers into an abandoned mine shaft in the Santa Rita Mountains within the Coronado National Forest.

Lydia, as an academic, you emphasized the importance of building relationships that co-inform, directly involve, and seek opportunities to benefit the Indigenous communities where science is taking place. Could you explain this in the context of your research?

Indigenous communities, past and present, have largely been left out of the conversation when it comes to research. What is more, we have often been the topic of research without proper representation or decision-making power. It is critical that Indigenous peoples today lead the important conversations that pertain to, and directly impact, our land, soil, and water, including topics concerning resource extraction and regulatory policies. As scientists and

environmental professionals, we must also recognize the long-held expertise of Indigenous land stewards that exists outside of, and extends beyond, academic and colonial knowledge.

My project's reclaimed mine-site is an example for how Traditional Ecological Knowledge (TEK), in this case of the Tohono O'odham Nation, can inform science and restoration practices moving forward. The tribal nation chose which plants would be used, and determined the depth of soil cap that would be applied - decisions based on cultural values and ecological expertise. As researchers, we studied the patterns of soil health that these decisions resulted in. Our work demonstrated specific soil health indicators that can potentially be applied when working with other reclaimed mine sites in the future.

Anthony, you spoke of how when you run, you do so for your family and community, and of how running in the O'odham tradition is connected to carrying messages, natural resources (like salt and seashells), the celebration of life, and the carrying forward of purpose-giving creation stories. How does running connect you to these values?

Our [Tohono O'odham] culture and traditional practices have faced many obstacles throughout history. Indeed, much of the culture, language, and identity of all Indigenous communities has been lost or forgotten due to colonization. Today, running-such as participating in a five or 10 km race allows Indigenous people to reconnect with the land in a meaningful way. This connection, although it has changed through time, allows for a reignition of the cultural fire. Running creates a bond that spans across generations and brings about a common purpose: connecting to the past through movement. My role is to continue the work: creating opportunities for our Nation's members, and other communities, to connect to and move across the lands that we have all been blessed to be stewards of.

Anthony & Lydia, how can we better protect of our biological, cultural, and historical treasures, while also being more inclusive of diverse peoples?

Thank you for asking. We both feel that it is of utmost importance to:

- Make sure everyone feels safe and welcome in outdoor spaces, no matter their body type, skin color, experience, or how they choose to engage with outdoor spaces (provided it is respectful).
- Ensure that more Indigenous and historically marginalized voices are on Parks and Public Lands boards. Policies too need to be reviewed and

revised to ensure they are written in a manner that is inclusive of, and acknowledges the presence, rights, and values of the Indigenous communities that have long lived within protected natural areas.

- made invisible?

In solidarity, Anthony Francisco Jr. runs alongside other members of the Tohono O'odham Nation, and with visiting runners from southern Mexico, along the US-Mexico border.

• Have culturally-informed park signs and resources, including Indigenous names and other forms of acknowledgment, showing that communities other than white settlers have long existed in places like the Sonoran Desert, despite having been erased from many historical records. After all, how can people come to see themselves existing in, and wanting to protect, outdoor spaces if they are

Hold meaningful conversations around these topics, for example with organizations like WMG. This is a wonderful start to opening up larger conversations, such as the possibility of returning lands and rights to their traditional owners and stewards.

Dr. Lydia Jennings' research at the University of Arizona involves the remediation of mining areas on lands held sacred to our region's Indigenous stewards.

WMG Board Member Dr. Jesús Treviño Helps Foster Inclusive Excellence Model and Center Diversity, Equity and Inclusion Across WMG's Social and Environmental Programs

Diversity, Equity, and Inclusion (DEI) The Leadership in Diversity Group (LinD) Inclusive Excellence (IE) By investing in Diversity, Equity, and Inclusion (DEI), WMG is building our capacity to involve and engage every corner of our culturally-rich community in Tucson and beyond. Dr. Jesús Treviño is the Senior Executive Officer for the Leadership in Diversity (LinD) Group, and we're honored to learn from Dr. Treviño's experience and perspective through our Board of Directors and DEI Committee.

Why did you become involved with Watershed Management Group?

In 2019, The LinD Group, which primarily worked with colleges and universities, began delivering DEI services to non-profit environmental organizations. I have always been interested in environmental issues, and joining the WMG board and DEI Committee in 2021 provided me with a unique opportunity to re-focus on urgent challenges facing people and the planet.

What Is "Inclusive Excellence (IE)," and how can it help advance WMG's work?

Inclusive Excellence (IE) is a model for enabling greater equity among people by embedding DEI considerations into every aspect of an institution's systems. Non-profits have systems too, and IE is very compatible with WMG's efforts to be more inclusive—both internally and externally. Inclusive Excellence strives to build trust-based relationships through meaningful actions and places our community's inherent diversity at the center of environmental justice issues like water access and watershed management.

How can the WMG community be more inclusive of diverse communities?

Community-based solutions require consistent engagement with, and integration of, diverse people, and will only be successful if organizations like WMG—including staff, leadership, and the wider supporting community—adopt a "perspective-taking" approach. This involves actively listening, suspending judgment, and living with the uncomfortable knowledge that people live in disparate realities and see the world through different lenses.

WMG should strive for its services and programs to be offered from the various worldviews of diverse others. For example, we cannot assume that Native Americans, Latinos, Black/ African Americans, Asian Americans, and other historically excluded peoples do not already possess their own knowhow concerning watershed management. These groups have, over hundreds if not thousands of years, accumulated deep reserves of unique knowledge, much of which also has a spiritual dimension.

Acknowledging that "Diversity" comes with its own knowledge, expertise, values, and beliefs will not only help others recognize the validity of diverse groups. It will also improve our collective capacity to understand, appreciate, and better manage our watersheds and wider environment. Inclusive Excellence (IE) is a model for enabling greater equity among people by embedding DEI considerations into every aspect of an institution's systems.

— Dr. Jesús Treviño

It's Time to Build Your Own Basin (BYOB)...On the Cheap!

Es hora de construir tu propia cuenca...;Bara bara! ¡Sin gastar lana!

Building a rain garden, complete with basins, berms, and native plants, is a great way to live Hydro-Local. Now, it's more affordable and easier than ever, and we'll help get you started!

Just visit Watershedmg.org/BYOB and you'll find how-to videos, guides, and virtual classes.

BYOB Community Swap

At our Spring Build Your Own Basin (BYOB) Community Swap, held at the Living Lab & Learning Center, we invited folks to drop by and donate materials for our (freely distributed) BYOB kits. This collective effort was a huge hit, with enough native plants and other materials donated to distribute **288 BYOB kits** to households here in Tucson and Southern Arizona! Everyone who received a kit attended one of our virtual BYOB workshops or neighborhood workshops, ensuring they had the basic skills to build their own basins.

We want to thank the 24 WMG friends who pitched in, donating prickly pear cuttings, agave plants, pollinator shrubs, wildflower seeds, gardening tools and more, along with Tank's Green Stuff for the organic mulch, and Desert Diamond Casino for covering the cost of many native shade trees.

To Participate in our Upcoming Fall BYOB Community Swap (Sep-Oct, 2021),

Please Register @ Watershedmg.org/BYOB For Our:

- Virtual classes: Tuesdays (5:30pm-7pm);
- Community Swap at the Living Lab: Thursdays (12pm-6pm); and
- Swap, Kits for Kids, & In-Person Classes at the Living Lab: Saturdays (8am-12pm)

We're continuing to crowdsource plants, tools, and other BYOB supplies!

Your donation helps your community create more native rain gardens.

Just drop off any of these plants and/or materials at the Living Lab:

(Donation Hours: Mon-Fri, 9:30am-5:00pm, August–October 2021)

- Native Trees & Shrubs: Velvet mesquite, desert ironwood, blue palo verde, canyon hackberry
- Native Cactus Pups: Prickly pear, agave, and other native cacti
- Native Seeds: Wildflowers, bunch grasses
- Landscaping Tools: Rakes, shovels, pick axes, hand trowels, tampers, digging bars
- Large, Empty Pet Food Bags: Large bags from dog, cat, or chicken feed. We'll use these for our mulch!

BYOB Is Helping Restore Tucson's Overlooked Neighborhoods

The Elvira and Flowing Wells neighborhoods have some of the lowest tree canopy coverages (shade levels) in Tucson, and can benefit the most from low-cost solutions for capturing stormwater and growing native trees. Last spring, thanks to budding relationships in these neighborhoods, we involved over 100 people in distributing BYOB kits and planting basins! Schoolkids at Flowing Wells Junior High led the charge, inviting their friends, siblings, parents, tías, tíos, and grandparents to transform the street in front of their school with basins and native trees. At Nueva Esperanza Church, neighbors came out to maintain the existing rain garden and took home BYOB kits for their own homes too. We can't wait to partner once again with churches, schools, and neighborhood associations this fall for another round of BYOB!

Shovel & Rake: Free (Don't have tools? Make friends with your neighbors!)

Pala y rastrillo: Gratis (¿No tienes herramientas? iHazte amigo de tus vecinos!)

Your Labor: Free Friend's Labor: \$5 - \$10 (Cost of a 6-pack)

Tu mano de obra: Gratis Mano de obra de un amigo: §5- §10 (costo de un seis)

Native Shade Tree: \$0 - \$25 (Check out discounted tree programs)

Árbol de sombra nativo: \$0 - \$25 (Consulte los programas de árboles con descuento)

> Native Shrubs: \$5 - \$10 (1 gallon size)

Arbustos nativos: \$5 - \$10 (Tamaño de 1 galón)

Native Wildflowers or Bunch Grass Seeds: \$0-\$5 (Collect, save, & share with friends!)

Flores silvestres nativas o semillas de pastos. (iColecciona, guarda, y comparte con amigos!)

Prickly Pear and Cactus: Free (Get cuttings from friends/neighbors)

Nopal y cactus: Gratis (Obtenga esquejes de amigos / vecinos)

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