



Release the Beavers!

*Mejor Castores Que Tractores!*

2020 Impact Report



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1900

1950

2000

**1905: Zero beavers. Beavers exterminated by trappers along the San Pedro in Arizona and Sonora, Mexico.**

# The Facts about San Pedro Beavers

**1999: 16 beavers introduced to the San Pedro Riparian National Conservation Area (SPRNCA) in Arizona.**

**2010: 100+ beavers estimated in SPRNCA.**

**2019: SPRNCA population collapses with very few beavers and dams seen. Accounts of beavers downstream and in Mexico.**

**2020: 12-15 beavers estimated in SPRNCA by community-led population survey.**

**2021: 40-50 beavers estimated along the San Pedro River in Mexico by local biologists.**

## BETO AND CARMEN BORDERLANDS BEAVER TALES



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Wherever there are perennial flows and deeper pools, we want to see beavers.

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### **Campaign Expands to Promote Beaver in the Santa Cruz and San Pedro International Watersheds**

Beavers are so critical for our desert rivers that we're expanding our Release the Beavers campaign to include both the Santa Cruz and San Pedro international rivers, which flow through the U.S., Mexico, and tribal nations. We acknowledge the watersheds are part of the ancestral lands of the Hohokam, Sobaipuri, and Apache people, and those of the Pascua Yaqui and Tohono O'odham people whose relationship with this land continues to this day. Through this campaign, we strive to recognize traditional ecological knowledge and historical accounts of beavers in the Southwest.

#### **Release the Beavers Campaign Goals:**

**1 Advocating for beaver introduction and additional releases of beavers.**

We're still advocating for beavers in Ciénega Creek, but we also support additional beaver releases along the San Pedro River. Wherever there are perennial flows and deeper pools, we want to see beavers. The BLM estimates a capacity of three beaver per dam per mile of the SPRNCA, so there is the potential capacity to have up to 120 beaver in the 40 mile stretch of the San Pedro River, working for watershed health!

**2 Monitoring the health and distribution of beaver populations by coordinating an annual binational population survey.**

Through our December beaver survey, we estimate 12 to 15 beavers are living along the river in the San Pedro Riparian National Conservation Area (SPRNCA), but we need 50 beaver to maintain a stable population. We're also gathering accounts of beavers migrating to the Mexican side of the watershed

and neighboring watersheds. We'll be planning more annual surveys, and next year we'll coordinating a binational survey with our partners in Mexico.

**3 Restoring our creeks and rivers—slowing flows, spreading water across the floodplain, and recharging aquifers—and ensuring beavers can do the same!**

WMG staff are working on-the-ground with partners and landowners in the U.S. and Mexico to restore our creeks and rivers. Restoration Director Trevor Hare is leading restoration projects in Empire Gulch, a tributary to Ciénega Creek, with volunteers building rock structures to slow the flow, reduce erosion, and spread water across the floodplain. Cultural Ecologist Joaquin Murrieta is working on the Mexico side of the watershed with ranchers and partner Profauna to move cattle out of riparian areas and restore eroded lands and arroyos.

Visit [Watershedmg.org/Beavers](http://Watershedmg.org/Beavers) to join our campaign and pledge to support beavers in our desert rivers.

## **¡Liberen a los castores!**

### **La campaña se expande para fomentar la presencia de castores en las cuencas internacionales del Río Santa Cruz y Río San Pedro.**

Los castores son tan cruciales para nuestros ríos, que estamos expandiendo nuestra campaña para liberar a los castores en los ríos internacionales del Santa Cruz y San Pedro. Estos dos ríos fluyen a través de EE. UU., México, y naciones indígenas. Nosotros reconocemos que estas cuencas son parte de tierras ancestrales los Hohokam, Sobaipuri, y Apache, al igual que Pascua Yaqui y Tohono O'odham, quienes actualmente mantienen una relación activa con estos sitios. A través de esta campaña, hacemos el esfuerzo para reconocer conocimiento ecológico tradicional y reportes históricos de castores en el suroeste.

#### **Metas de la campaña:**

**1 Abogamos por la introducción de castores y liberaciones adicionales**

Seguimos abogando a favor de los castores en arroyo Las Ciénega, pero también apoyamos la introducción de mas castores a lo largo del Río San Pedro. Queremos ver castores donde sea que haya flujo perenne y represas de agua. Se estima una capacidad de tres castores por presa en cada milla del Área Nacional de Conservación Ribereña del Río San Pedro (SPRNCA, por sus siglas en inglés), así que existe el potencial de tener hasta 120 castores a lo largo de las 40 millas del Río San Pedro ¡Ayudándonos a sanar nuestra cuenca!

**2 Monitorear la salud y distribución de la población de castores a través de encuestas binacionales anuales.**

De nuestra encuesta en diciembre, se estima que existen 12 a 15 castores en el SPRNCA, pero se necesitan por lo menos 50 para mantener una población estable. También estamos recopilando reportes de castores que han migrado a México a varias cuencas. Planeamos tener más encuestas anuales, y el próximo año coordinaremos una encuesta binacional con nuestros colaboradores en México.

**3 Restaurar nuestros ríos y arroyos a través de la reducción de velocidad de las corrientes, distribuyendo el agua a través de las llanuras, y recargando acuíferos ¡Asegurándonos que los castores también lo puedan hacer!**

Compañeros de WMG trabajan en conjunto con colaboradores en México y EE. UU. para restaurar nuestros ríos y arroyos. Nuestro director de restauración, Trevor Hare, se encarga de proyectos de restauración en Empire Gulch, un afluente importante al arroyo Las Ciénega, con voluntarios creando estructuras de piedra para disminuir la velocidad de la corriente, erosión, y distribuir el agua a las llanuras. Joaquín Murrieta, nuestro ecologista cultural, trabaja con rancheros en colaboración con Profauna-AC en el lado mexicano con mejores practicas ganaderas y zonas de exclusión en áreas ribereñas y restaurar arroyos y tierras erosionadas.

Visita [Watershedmg.org/Beavers](http://Watershedmg.org/Beavers) para unirte a nuestra campaña y apoyar la presencia de castores en nuestros ríos.

## Anécdotas de castores transfronterizos

### Castores liberados en el sur de Arizona migran hacia Sonora y nuevas cuencas

Los castores son una especie clave e históricamente se distribuían ampliamente en corrientes y ríos del suroeste de los Estados Unidos y Noroeste de México. Trágicamente, los castores fueron exterminados por tramperos del Río Santa Cruz en los 1800 y del Río San Pedro en 1905.

Hace apenas veinte años fue que se logró re-introducir castores a estas áreas, cuando exitosamente se liberaron 16 castores en el Área Nacional de Conservación Ribereña del Río San Pedro (SPRNCA, por sus siglas en inglés). Su población creció, con un estimado de alrededor 100 a 160 castores para el año 2010, y desde entonces, su población a disminuido en el área de SPRNCA. Su disminución puede ser atribuida a la caza y depredación, pero claramente se le puede atribuir al hecho de que han emigrado hacia otros lugares, como el estado de Sonora en México, - cabecera del Río San Pedro.

WMG esta recopilando datos y reportes de colaboradores en ambos lados de la frontera para averiguar donde es que se han encontrado castores. El mapa demuestra cómo la población que ha crecido desde que fue introducida al SPRNCA ahora se encuentra a lo largo del río, en México, y hasta en la cuenca de Río Santa Cruz.

¡Los castores no conocen fronteras! A nosotros nos inspiran estas criaturas, encontrando nuevos atajos en el río en ambos lados de la frontera, y a la vez construyendo represas que reducen la corriente del río, recargan el acuífero, y crean hábitat ribereño que desesperadamente necesitamos.

## Borderlands Beaver Tales

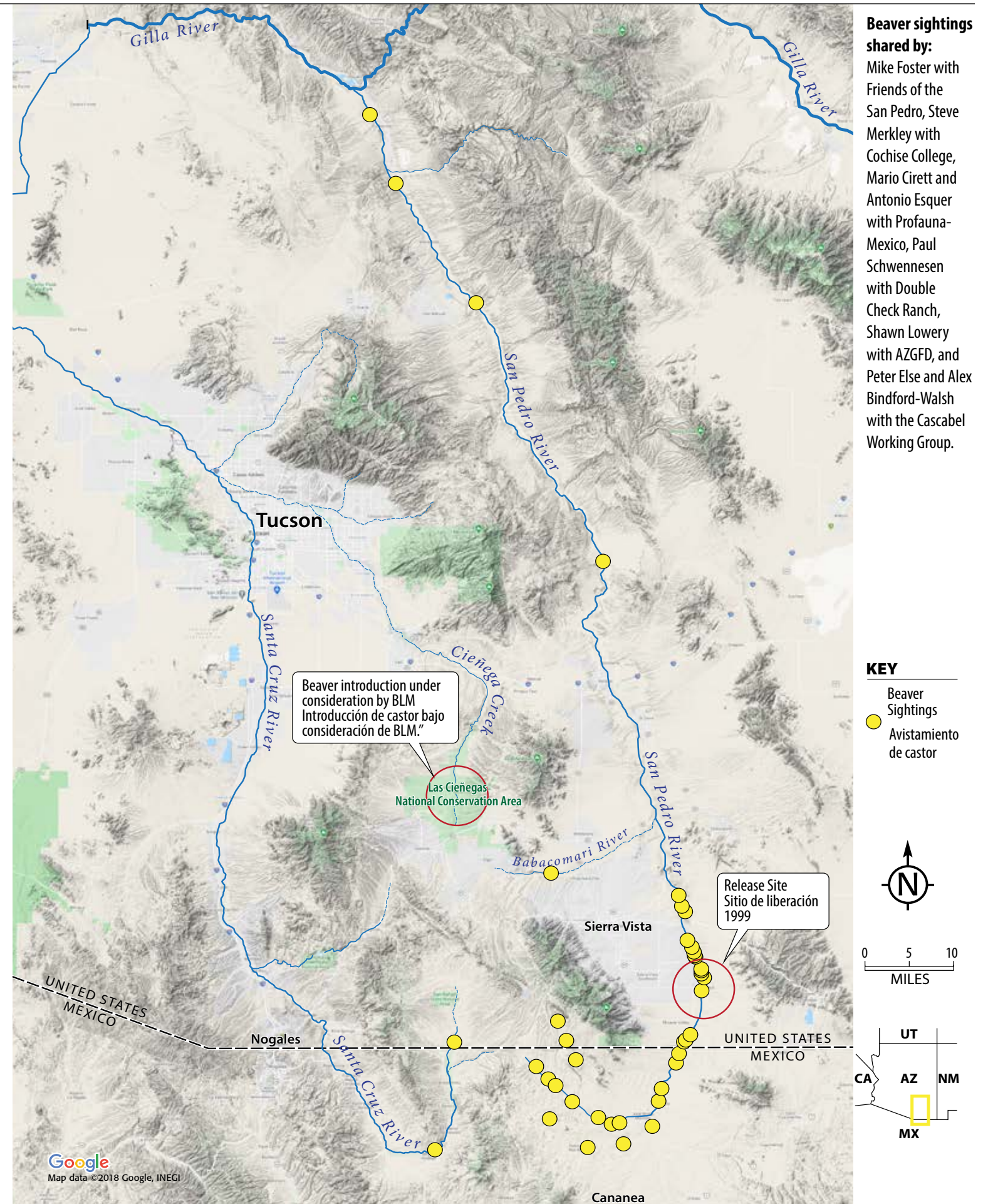
### Beavers Released in Southern Arizona Migrate Into Sonora Mexico and New Watersheds

Beavers are a keystone species and were historically widespread in Southwestern creeks and rivers. Tragically, beavers were exterminated by trappers from the Santa Cruz River in the 1800s and from the San Pedro River by 1905.

Not until twenty years ago, was there a successful effort to reintroduce beavers – when 16 beavers were released to the San Pedro Riparian National Conservation Area (SPRNCA). Their population grew, peaking with an estimated population of 100 to 160 beavers around 2010. The population has been declining in the SPRNCA over the last ten years. Some of the decline may be due to predation and hunting, but it's now clear that the beavers have dispersed to other locations, including Sonora, Mexico.

WMG is gathering accounts from partners on both sides of the border to pinpoint where beavers have been found. The map shows how the growing population that was introduced into the SPRNCA has found its way both upstream into Mexico, downstream along the river, and even into another watershed—the Santa Cruz.

Beavers are persistent creatures that know no borders! We're inspired by the beavers, finding their way to new river stretches on both sides of the border, doing what they do best—building dams that slow flows, recharge the aquifer, and create much-needed riparian habitat.



**Beaver sightings shared by:**  
Mike Foster with Friends of the San Pedro, Steve Merkle with Cochise College, Mario Cirett and Antonio Esquer with Profauna-Mexico, Paul Schwennessen with Double Check Ranch, Shawn Lowery with AZGFD, and Peter Else and Alex Bindford-Walsh with the Cascabel Working Group.



## Community Scientists Conduct Beaver Population Survey Along San Pedro

On December 5th, 2020, River Run Network (RRN) members and WMG staff explored sections of the San Pedro River for WMG's first-ever beaver survey. After learning about the drop in population of San Pedro beavers in early 2019, WMG had to find out more. The Bureau of Land Management has not been surveying the beaver population, so local beaver enthusiasts Mike Foster and Steve Merkley decided to spearhead this important effort.

Our RRN crew was split into three small groups for the survey, led by Mike Foster, with the Friends of the San Pedro River, Steve Merkley, a biology professor at Cochise College, and our very own beaver super fan Trevor Hare. Our mission was to find signs of beaver and estimate the current population in the San Pedro Riparian National Conservation Area (SPRNCA).

There was good flow along most of the fifteen-mile stretch of the river, and we walked both in the icy-cold water and along the banks, sometimes in head-high bunch grasses, to look for beaver evidence. Three dams were spotted, and two of the groups saw signs of active beaver with recently chewed branches, felled trees, and beaver slides! With our December 5th survey and additional surveys by Mike and Steve, we estimate 12 to 15 beavers are currently living along the 45-mile SPRNCA.

Barbara Drummond, a RRN member, says, "It was wonderful to slow down and live in the moment looking for beavers. After a year of homeschooling my sixth grader, it was an amazing day to go out and walk along a river lined with cottonwoods. My sixth grader was in beaver heaven and immediately came home to research the role beavers play in an ecosystem as a keystone species!"

Barbara was one of 10 RRN members that were invited to participate in the survey after winning the 2020 Triple Crown. The Triple Crown was a series of Steward In Place events planned for RRN members, including invasive species pulls, creek cleanups, and basin building. RRN members who participated in three of these events earned the Triple Crown.

**Congrats to our Triple Crown winners!**  
Sara Birtalan, Mike Campbell, The Drummond Family, The Radomsky Family, Gregory Mishaga, David Rabb, Paula Redinger, Jan Schwartz, Jen Thorn, Brandon Warren

## Científicos de la comunidad llevan a cabo encuesta de castores en el Río San Pedro

El 5 de diciembre del 2020, miembros de la River Run Network-La Red del Río (RRN) y WMG exploraron secciones del Río San Pedro para llevar a cabo la primera encuesta de castores. Al aprender sobre la disminución en la población de castores en el Río San Pedro a principios del 2019, WMG tuvo que investigar más a fondo. Estas poblaciones no habían sido estudiadas por cualquier institución gubernamental, así que entusiastas locales Mike Foster y Steve Merkley decidieron emprender este esfuerzo.

Nuestro equipo se dividió en tres grupos pequeños para esta encuesta, dirigida por Mike Foster, con Friends of the San Pedro River, Steve Merkley, profesor de biología en Cochise College, y nuestro aficionado Trevor Hare. Nuestra misión fue encontrar rastros de castores, y estimar la población actual en el Área Nacional de Conservación Ribereña del Río San Pedro (SPRNCA, por sus siglas en inglés).

Se encontró buen flujo de agua en la mayor parte de las 15 millas del río exploradas, se caminó en aguas muy frías, a lo largo de las orillas del río, y en veces arropados por los altos pastos, para encontrar rastros de castores ¡Se ubicaron tres presas, y dos de los grupos encontraron rastros de castores activos! Con esta encuesta, y encuestas adicionales dirigidas por Mike y Steve, pudimos estimar entre 12 y 15 castores actualmente viviendo en parte de las 45 millas del SPRNCA.

Bárbara Drummond, miembro de RRN, compartió << Fue maravilloso poder vivir en el momento buscando castores. Después de un año de estar perpetuamente en cuarentena, fue asombroso poder salir y caminar a lo largo del río lleno de árboles ribereños. Mi hijo de sexto año salió fascinado e inmediatamente comenzó a investigar sobre castores y su rol vital en nuestro ecosistema al llegar a casa.>>

Bárbara fue una de los 10 integrantes que fueron invitados a participar en esta encuesta después de ganar nuestra Triple Corona del 2020. La serie de eventos relacionados con la Triple Corona fue organizada para integrantes del RRN, incluyendo el manejo de especies invasivas, limpieza de arroyos, y creación de cuencas. Miembros del RRN que participaron en por lo menos tres eventos se ganaron la Triple Corona

**¡Felicidades a nuestros ganadores!**  
Sara Birtalan, Mike Campbell, The Drummond Family, The Radomsky Family, Gregory Mishaga, David Rabb, Paula Redinger, Jan Schwartz, Jen Thorn, Brandon Warren



Steve and Mike's wildlife camera captured two adult beaver along the San Pedro River, swimming and chewing on branches, early on the morning of December 2nd.

La cámara silvestres de Steve y Mike logro capturar imágenes de dos castores adultos en el Río San Pedro, nadando y masticando ramas, en la mañana del 2 de diciembre.

# CASTORES, BACANORA, Y CARNE ASADA

¿Te entro la curiosidad? ¿Se te hace agua la boca? Este podría ser el nombre del futuro tour geo-turístico de WMG por el Río San Pedro en Sonora, México, dirigido por nuestro Ecologista Cultural Joaquín Murrieta. Pero, ¿dónde entran en escena los castores?

Somos una sola cuenca. ¿En serio? Tenemos a los guardias fronterizos de Estados Unidos, el muro fronterizo entre USA-México, los usuarios del agua compitiendo, el estrés climático y la contaminación. ¡A pesar de todo, a los castores les importa un bledo! Los castores están demostrando nuestro mantra, Somos Una Sola Cuenca, más que todo lo demás. Se han encaminado río arriba, por tierra y agua, desde el Río San Pedro en el sur de Arizona hasta Sonora, México. Han encontrado aliados en Sonora —biólogos, conservacionistas, y rancheros de la región— que se aseguran que estén protegidos y son re-introducidos a nuevas cuencas hidrográficas.

La cuenca hidrográfica en Sonora es principalmente rural, dominada por ejidos, vaqueros y vacas: ranchos ejidales-comunales. Definitivamente encontrarán una excelente carne asada y deliciosas tortillas de harina y una sabrosa bacanora mágica (la prima del tequila).

Pero, ¿qué pasa con el Río San Pedro? El río y los pastizales son el alma de los ganaderos Sonorenses y sus familias. Joaquín y nuestros colaboradores en México lo saben y están trabajando con los rancheros para restaurar la tierra y proteger nuestros ríos. Hemos estado trabajando con más de 50 ganaderos en Sonora, que quieren vacas gordas. Podemos ayudar a lograr vacas gordas mientras sanamos la tierra y protegemos el río.

Con nuestro colaborador Profauna, estamos implementando proyectos demostrativos para establecer pastizales más saludables, protegiendo la capa superior del suelo, reduciendo la erosión y asegurando la cobertura vegetal con pastos nativos. Al mismo tiempo, como dice Joaquín, estamos “educando a las vacas” para mantenerlas fuera de las áreas ribereñas. En realidad, eso significa que estamos construyendo cercos estratégicos para evitar que el ganado camine por el río y su zona de inundación y crear rotación de pastizales. Sus pezuñas y “pasteles” de vaca pueden crear un problema de erosión y calidad del agua, si no se manejan adecuadamente.

Mientras tanto, los castores se están estableciendo en áreas ribereñas a lo largo de la cuenca, dondequiera que haya agua durante todo el año y ciénegas profundas. Ellos también están trabajando para restaurar la cuenca. Estamos aprendiendo de ellos y nos están mostrando el camino para tener cuencas hidrográficas binacionales más saludables, ¡por esto, estamos súper agradecidos! Como dice Antonio Esquer, ecologista Sonorense: “mejor castor que tractor”.

## Beavers, Bootleg Liquor, & Beef

Is your curiosity peaked or your mouth watering? This might be the name of WMG’s future geo-tourism tour of the Río San Pedro in Sonora Mexico, led by our Cultural Ecologist Joaquin Murrieta. But where do beavers come into the picture?

We are one watershed. Or are we? We’ve got the U.S.-Mexico border guards, the border wall, competing water users, climate stress, and pollution. Despite it all, beavers don’t give a dam! Beavers are literally proving WMG’s mantra, We Are One Watershed, more than all else. They’ve found their way from Southern Arizona upstream into the San Pedro River and its tributaries in Mexico. They’ve found some allies—local biologists, conservationists, and ranchers—who are ensuring they are protected and introducing them to new watersheds.

The watershed in Sonora is mostly rural, dominated by ejidos, vaqueros, and vacas – communal ranch land, cowboys and cows. You’ll definitely find some darn good carne asada y tortillas de harina (flour tortillas), and some tasty magical bacanora, a cousin to tequila.

But what of the San Pedro River? The river and the range are the lifeblood of the Sonoran rancher and their families. Joaquin and our partners in Mexico know this, and they’re working with ranchers to restore the land and protect our rivers. We’ve been working with more than 50 ranchers in Sonora who want fatter cows. We can help get fatter cows while healing the land and protecting the river.

With partner Pronatura, we’re leading demonstration projects to create healthier rangelands—protecting top soil, reducing erosion, and spreading ground cover such as native grasses. At the same time, as Joaquin says, we’re “educating the cows” to keep them out of riparian areas. In reality, that means we’re building strategic fences to keep cattle from walking through the river and surrounding floodplain and to establish rotational grazing. Their hooves and cow pies create a water quality and erosion problem if they are not managed properly.

In the meantime, the beavers are establishing themselves in riparian areas across the watershed, wherever there are year-round water and deeper pools. They’re working to restore the watershed as well. We are learning from them, and they are showing us the way for healthier binational watersheds, and we can’t thank them enough! As Antonio Esquer, a Sonoran ecologist says: “major castor que tractor” (better beavers than tractors).



Mr. Colores cooks up carne asada for the restoration crew (WMG & Profauna)!

¡El Sr. Colores prepara carne asada para el equipo de restauración (WMG-Profauna)!



Installing rock structures to restore the rangeland and river.

Instalación de estructuras de piedra que ayuden a restaurar los pastizales y el río.

Evidence of beavers along Arroyo Los Fresnos, a tributary to the San Pedro River in Sonora.

Evidencia de castores a lo largo del Arroyo Los Fresnos, un afluente del Río San Pedro en Sonora.

## Slowing Flows, Spreading Water, and Recharging the Aquifer Along Ciénega Creek

WMG's on-the-ground restoration work continues in crucial habitats such as Empire Gulch, a tributary to Ciénega Creek. Trevor Hare, our Restoration Director, led three weekend workshops this spring with volunteers to construct one-rock check dams, Zuni bowls, and other rock structures to slow the flow, reduce erosion, and spread water across the floodplain. The project has been in the planning and permitting phase for over a year, and it's thrilling to get the work done.

Ciénega Creek is one of the few creeks in Southern Arizona with perennial flows, and one stretch in the Las Ciénegas National Conservation area is being considered for beaver introduction. Groundwater pumping for nearby urban areas, changing climate, and cattle grazing all add stress to the creek, making restoration all the more critical.

The restoration work supports more riparian habitat, recharges the aquifer, and helps sustain greater flows.

**Jake and Crystal build one-rock dams at a WMG workshop to slow and soak in creek flow along Empire Gulch, a tributary to Ciénega Creek.**



## Steward In Place: What You Do Matters!

Kudos to the WMG community for making positive changes in your own backyards, caring and connecting more deeply to Mother Earth during the pandemic.

In 2020, over 2,000 people participated in 76 virtual and dispersed Steward in Place events—to build basins, install greywater systems, plant native and edible gardens, pull invasive species, care for rain gardens, and clean-up their local creeks and streets!



### Steward Your Streets and Creeks

Carly Morrison shared, “Venom (Tucson’s women’s club ultimate frisbee team) participated in WMG’s Steward in Place event. We had two squads: a morning squad at the Santa Cruz River downtown and an evening squad that worked at the Christmas Wash in the Rillito River. We all had a great time, and it felt great to volunteer a few hours to make Tucson’s waterways cleaner and healthier! With our season and practice schedule cancelled this year, who knew it’d be trash that could make Venom feel like an actual team again!”

Ben Lopez and Maura Mack spent four hours collecting trash in their neighborhood (Dodge-Flower), including in the basins along Glenn St. Maura shared, “The amount of trash in the basins was remarkable. We think the City of Tucson and/or the neighborhood associations should address this issue. For starters, we will raise this issue with our neighborhood association.”

### BYOB & Plant A Tree

WMG newcomer Justin Payne shared, “Well I didn’t want to waste any time so I got that tree in the ground. I dug an obnoxiously large hole so the roots can stretch out comfortably and I hope quickly. Then I mulched it and immediately watered it for an hour.” Justin participated in our Build Your Own Basin (BYOB) & Plant a Tree Virtual Workshop and our Take Action event—taking home a kit from the BYOB Community Swap.

“I have a lot of cottontail rabbits and found that if I use the bucket to protect the base of the tree they won’t eat it.” Justin shared, “Thanks again! I read both your handouts and would like to get involved with a volunteer effort or two as schedule permits.” Kudos to Justin for building his first ever basin!

Check out [Watershedmg.org/StewardInPlace](https://Watershedmg.org/StewardInPlace) to see all our how-to videos and virtual events. You can also subscribe to our Youtube channel at [Youtube.com/Watershedmg](https://Youtube.com/Watershedmg).

# It's Time to BYOB!



Veronica and Zia receive their BYOB kit!

We planned our first Build Your Own Basin (BYOB) virtual workshop back in May 2020. When 80 people tuned in that Friday night, we knew BYOB was going to be a good thing, and it has been a cornerstone of our Steward In Place effort ever since.

Third-grader Zia was the first student to receive an at-home schoolyard BYOB kit last December, and she and her family got right to work. She says, “I loved building the rain basin because I got to be outdoors a lot and play in the mud. I loved the way it looked and that I got to design something and see it happen.” The winter rains sent her running to the window to check on the flow of water in her basin!

Her mother, Veronica, notes, “We had a lot of fun working on the rain basin and spending time together as a family outdoors, working on a joint project. My mom came over the day we made the basin and even got in on the action for a little bit, so that is one more person who got to learn about rain basins and their importance through our participation in the project, and we made it a three-generation project and memory to recall as we watch it grow and evolve.”

The BYOB initiative with schools was launched in the fall of 2020 as a way to engage with students learning at home, an exciting collaboration between WMG and Arizona Project Wet. We’re working with 15 schools, including five teachers at the Paulo Freire Freedom School who are teaching an entire unit about BYOB. The curriculum includes classroom time for sketching basin designs and learning about native trees and pollinator plants. If parents approve, students can take home a BYOB kit, with a native shade tree, native shrubs and bunch grasses, wildflower seeds, organic wood chip mulch, and a rain gauge. Families then build basins together at home!

## BYOB Community Swap

WMG’s Living Lab and Learning Center is hosting the BYOB Community Swap this March and April and next September and October. Anyone who

attends one of our BYOB qualifying events can take home a free BYOB kit thanks to business sponsors and crowdsourcing materials from the WMG community. Folks have been dropping off donations of prickly pear pads, cactus pups, and other native trees, shrubs, and seeds. Tank’s Green Stuff is providing the wood chip mulch, and funds from Desert Diamond Casino and Entertainment cover the native trees. The Community Swap is open Monday to Friday from 12p.m to 6p.m. and Saturdays from 9a.m. to 3p.m.

## Bringing BYOB to Underserved Neighborhoods

To better serve limited-income households, we’re bringing BYOB directly to underserved neighborhoods. This year, we’re expanding on past water harvesting and green infrastructure projects in Flowing Wells and Elvira neighborhoods, working with churches, schools, and neighborhood associations to provide BYOB kits. Anyone who attends one of our in-person events at a partner location or a virtual event, can take home a BYOB kit. This spring, neighbors are invited to stop by events at the Flowing Wells Junior High and New Hope Church in Elvira.

## Phoenix Partners Interested in BYOB

With support from River Network, we joined forces with Four Peaks Brewing Company for a BYOB initiative last December. Staff members were provided with BYOB kits, and ten households built basins. The Phoenix area is the fifth warmest city in the United States, so their rain gardens will help create a patchwork of native habitat that cools homes and sidewalks and cleans and stores rainwater as it returns to the watershed—all while conserving water!

To check out our BYOB videos, how-to guide, and upcoming virtual events, visit [Watershedmg.org/BYOB](https://Watershedmg.org/BYOB)





Concept drawing of the entrance to our Learning Center, a multi-purpose classroom space which will support K-12, family, and adult educational programming.



## Learning Center Will Create More Opportunities for Youth and Community-Centered Education

We're completing the build-out of our Living Lab and Learning Center! The last big construction project on our development plan is underway. We are in the final stages of planning a multi-purpose classroom space, also known as the Learning Center, which will give us the space we need for our K-12, family, and adult educational programming. Thanks to the vision of several major donors including

Patricia DeWitt, we're over halfway to our goal! We've already raised \$182,500 towards our \$300,000 capital project. We'll be reaching out to our donors and supporters this summer to help reach our goal and launch construction in the fall. If you are interested in making a capital contribution to support the Learning Center, please contact Lisa Shipek at [lisa@watershedmg.org](mailto:lisa@watershedmg.org) or 520-396-3266 x 2.



## Patricia DeWitt Leaves an Inspiring Legacy of Community, Conservation, and Charitable Contribution

Patricia DeWitt was part of a small group that cofounded Milagro Cohousing in Tucson, constructed in the early 2000s. "We did it to serve as a demonstration community for what can be done in the desert to save water and energy," Patricia shared<sup>1</sup>. Milagro is not only a model for conservation, it's also an inspiring example of how to design a housing development that fosters community and preserves the Sonoran Desert ecology.

Patricia connected to WMG in 2007 as one of our earliest donors, just a few years after Milagro was built. At the time, WMG was creating water harvesting demonstration sites at city council offices and other neighborhood spaces through volunteer builds. She was happy to invest in a budding organization with passions similar to hers. By 2011, Patricia joined our Stewardship Circle, becoming a major donor to WMG with annual giving, and informed WMG we were a beneficiary in her estate.

"I believe in donating. I worked hard. I'm not from a wealthy family. But my needs are met and the universe has been wonderful to me. I believe in giving back," Patricia said in an interview for WMG's 2012 Annual Report. "I love WMG because they do a project, and then they use it as a demonstration for others, so they can see the possibilities. I also like the fact that they work with the City to implement policy change."

Patricia passed on last October, leaving a powerful legacy in the community she helped create at Milagro, as well as leaving a generous legacy gift to WMG. WMG was the beneficiary of one of her investment accounts, and her executor shared that the gift was a substantial, meaningful gift to Patricia, made in gratitude that WMG aligned with her values.

We are deeply honored and moved by Patricia's gift and legacy to the Tucson community and the Sonoran Desert. Her gift will help fund WMG's Learning Center – a multi-purpose space designed for our K-12 and adult education programs. Her gift builds upon another legacy donor, Marguerite Fisher, who donated her property and investment account as part of her estate, enabling WMG to launch our Living Lab back in 2011.

Patricia's legacy and generosity will live on through the expansion of WMG's Living Lab & Learning Center, allowing more people to visit our demonstration site and see all the possibilities Patricia envisioned. With more capacity for educational and community events, we can grow our network and achieve our 50-year vision to restore Tucson's flowing streams and rivers. Her efforts will allow us to make Tucson a more sustainable place where we can all live in harmony with the Sonoran Desert that she loved so much.

<sup>1</sup>Shelton, S. (2007, March 12). Goal: to save water, energy in the desert. *Arizona Daily Star*.



## Our Gratitude to the WMG Community!

Thank you to the many incredible people involved in WMG – as Flow365 monitors, docents, monthly donors, board members, Co-op members, as well as our talented staff. Get to know why folks do what they do, and meet our new staff members.



**Graciela Robinson**

Docent

"I love the environment and mother earth. I want to do something for it, and I think working in a project that has such goals is very important... Being myself an immigrant and speaking Spanish is [an] important [skill], and I can understand the culture, interests, and feelings of people, which is a big part of our community here. I've been a teacher for many years, teaching different languages, but now I can use the language experience to help reach more community members. The intergenerational community, I love, because it's not just a group of oldies trying to do something, but being able to work, exchange, and learn from young generations and trusting each other is very good."



**Mike Campbell**

Flow365 Monitor

"I've noticed the ways that water flows and doesn't flow within Tucson. I've noticed the way that the plants either grow or don't grow. I've noticed just how overwhelmingly different things are today than in historic accounts of Tucson from 100 to 200 years ago, or even just 50 years ago. I've noticed how little water we have in a place whose historical significance is due entirely to the presence of what used to be perennial flow. I've noticed how much fun it is to get out with my son and explore my area... I want to see plants, animals, water, and people in those rivers. If you bring the water, everything else follows."



**Margot Garcia**

Board Vice President

"I dedicate my time to board leadership because I like to see organizations function smoothly and efficiently. I believe in what WMG is doing and its mission, so I want it to be very successful, seen as the leader in the community. For over 50 years, I have worked for a rational approach to water use that recognizes we live in a desert, and that the desert is a marvelous ecosystem that includes people. Harvest the rain. It is a resource, not a problem!"

Thank you Margot for serving as our Board President for the last two years and continuing on as Vice President!

### Summer Franks

Monthly Donor since 2015

"I used to be very pessimistic and discouraged about the state of the world, but then I started doing concrete actions to make even a tiny difference. And along the way I met all these people with infectious enthusiasm sharing more examples! And slowly, and suddenly, my fear turned to hope, and my despair to joy! Friends & family get so excited when they see what I'm doing! Showing people different ways of living really generates momentum beyond our individual efforts. So grateful for the hope working with WMG has given me!"



# Our Gratitude to the WMG Community!



**Anthony Luketich**

Project Manager, Green Living Co-op

"As an environmental researcher, I think a lot about the principles of ecology and how natural systems interact with each other. WMG projects showcase how people can utilize these principles to benefit themselves and their surroundings, and I try to highlight these perspectives in my work. If you pay attention to news stories about our environment, it's pretty much all bad outside of a few gems. To me, WMG's vision and values is one of these gems and shows what people can do to make that news a little better step by step."

**Brian Ellis**

Co-op Member

"This work is so important and so crucial to the future of Tucson that the more I can help get the projects installed at people's houses, the better. Plus, it's fun and you meet a lot of cool people, and that's what keeps us coming back. It's a great grassroots opportunity to spread the gospel of water harvesting. You're learning best practices from people who've been doing this a long time and learning the right way to do it."



**James Lauder**

Project Manager, Green Living Co-op

"I really like working with WMG because of the endless potential for learning and interacting with new and interesting people. There is always someone I'm working with that is more knowledgeable about a topic I'm interested in. It's great to be able to develop a community of people who all want to help and learn from one another. Understanding how we impact our surroundings and how our surroundings impact us is an important concept to grasp. I also firmly believe that the solution to environmental issues is not only an environmental problem but also a social one."



**Cindy Hu**

Community and Youth Education Manager

"My background in education helps me design creative lessons by employing differentiated teaching strategies in order to meet the diverse learning needs of all students. As a bilingual educator, my goal is to connect underrepresented and limited income youth with STEM educational opportunities. The most exciting part of my job is serving as the chairperson for Diversity, Equity, and Inclusion committee. It allows me to lead initiatives that are responsive to the diverse needs of our communities. I'm very optimistic about the organizational changes blossoming at WMG!"



**Luis Salgado**

Green Infrastructure Coordinator

"My background in environmental hydrology, as well as my lifelong experience of living along the borderlands of the Sonoran Desert, helps me apply our organization's principles through practical approaches that address complex issues in our watershed. As I learn more about our watersheds and become more aware of the changes all around us, I deeply value being part of an organization whose values align with my personal ideals of resource conservation, living sustainably, and serving our communities – especially those that need it the most."

## 2020 FUNDING, SPONSORS, AND PARTNERS

### Grant and Foundation Funding

Arizona Department of Environmental Quality  
Arizona State Forestry Division  
Bureau of Reclamation  
Coca Cola  
Community Foundation of Southern Arizona  
Conserve2Enhance  
Desert Diamond Casino  
Freepport-McMoran  
Intel Corporation  
Jeff and Connie Woodman Foundation  
Kaimas Foundation  
National Oceanic and Atmospheric Administration  
Network for Landscape Conservation  
One Tree Planted  
Pima County Community Development  
River Network  
Tucson Water  
Women's Foundation of Southern AZ

### Business Sponsors

Allegiant Law Group  
Baird  
Begam Marks & Traulsen, P.A.  
Central Arizona Project  
City of Phoenix - Phx Water Smart  
City of Tucson - Tucson Water  
Crossman Law Offices, PC  
Dental on Central  
Desert Living, Inc.  
EcoBlue  
EcoSense Sustainable Landscapes  
Epcor  
How Sweet It Was  
Kate's Magik  
KXCI  
Madden Preprint Media LLC  
Net Zero Solar LLC  
Orange Grove Pediatrics  
Originate Natural Building Materials  
Pioneer Water Tanks America  
Rain Blocs  
Rio Nuevo  
Salt River Project  
Sierra Club - Grand Canyon Chapter  
Smiling Dog Landscapes  
Southern Arizona Rain Gutters  
Tank's Green Stuff  
Technicians for Sustainability  
The Zoldan Law Group PLLC

Thompson Law Firm  
Torgenson Law - Arizona Injury Lawyers  
Westgate Garden Design

### Tucson Region Partners

Amphitheater High School  
Arizona Department of Environmental Quality  
Arizona Game and Fish Department, Tucson Aquatic Wildlife Program  
Arizona Master Naturalist Association  
Arizona Project Wet  
Arizona-Sonora Desert Museum  
Basis Tucson North  
BKW Farms  
Butterfield Elementary School  
Canyon del Oro High School  
Centennial Elementary School  
Changemaker High School  
Cienega Watershed Partnership  
City High School  
City of Tucson Department of Transportation and Mobility  
City of Tucson Parks and Recreation  
City of Tucson, Ward 1 Council Office  
City of Tucson, Ward 3 Council Office  
City of Tucson, Ward 6 Council Office  
Cooper Center for Environmental Learning  
Coyote Trail Elementary School  
Drachman Montessori  
Esperero Canyon Middle School  
Flowing Wells Neighborhood Assoc.  
Freepport-McMoRan Sierrita Operations  
Living Streets Alliance  
Live Theater Workshop  
Local First Arizona  
Mission Garden  
Hermosa Montessori School  
National Park Service - Saguaro National Park  
National Phenology Network  
New Hope Church  
Sonoran Desert Mountain Bicyclist - 100 Acre Wood Bike Park  
Palo Verde Neighborhood Assoc.  
Paulo Freire Freedom School - University  
Pima Association of Governments  
Pima County Community Development  
Pima County Cooperative Extension, University of Arizona  
Pima County Office of Sustainability and Conservation

Pima County Regional Flood Control District  
Pima County Regional Wastewater Reclamation Department  
San Xavier District of the Tohono O'odham Nation  
Santa Cruz Catholic School  
Santa Rita High School  
Satori Charter School  
Sierra 2-8 School  
Sky Island Alliance  
Sustainable Tucson  
Sonoran Environmental Research Institute (SERI)  
Sonoran Institute  
Southside Community School  
St. Michael's School  
STAR Academic Highschool  
Tanque Verde Elementary School  
The Drawing Studio  
Tree of Life Church  
Tucson Country Day School  
Tucson High Magnet School  
Tucson International Academy  
Tucson Water  
United States Bureau of Reclamation  
University of Arizona Bureau of Applied Research in Anthropology  
University of Arizona Udall Center for Studies in Public Policy  
University of Arizona College of Architecture, Planning, and Landscape Architecture  
University of Arizona, School of Natural Resources and the Environment  
University of Arizona Water Resources Research Center  
U.S. Forest Service, Coronado National Forest Catalina District

### Phoenix Region Partners

City of Glendale  
City of Mesa  
City of Surprise  
City of Phoenix Water Services Dept.  
Desert Botanical Garden  
Four Peaks Brewery  
Mesa Urban Garden  
The Nature Conservancy - Phoenix  
Trees Matter

### Other Partners

U.S. Forest Service International Programs

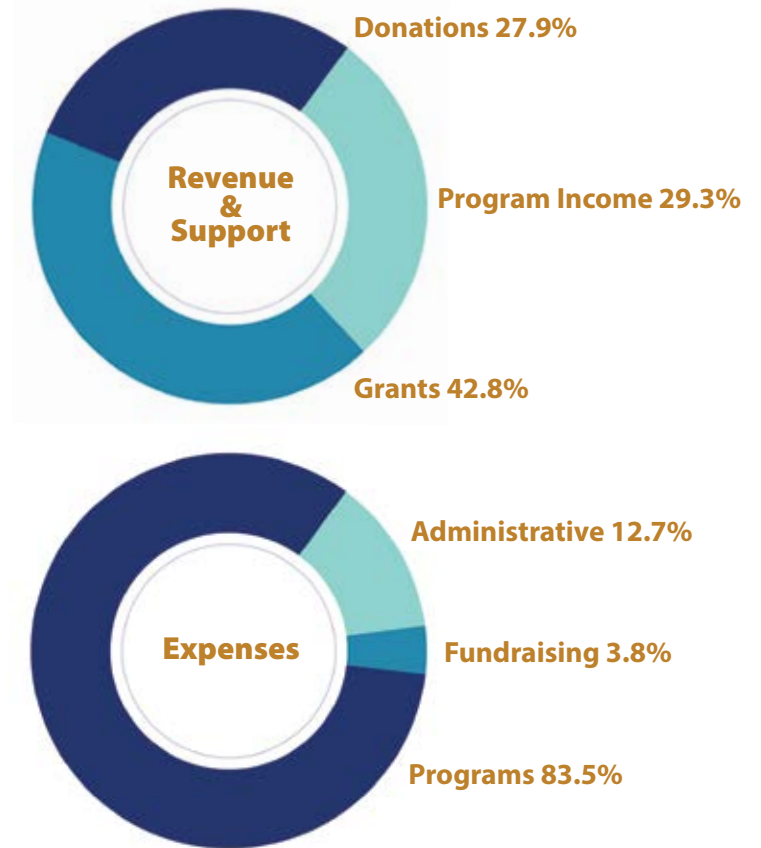
## 2020 FINANCIAL REPORT

### Revenue and Support

Donations	348,112
Program income	534,142
Grants	365,692
<b>Total Income</b>	<b>\$1,247,946</b>

### Expenses

<b>Program Services</b>	
Living Lab & Learning Center	84,127
Scaling Watershed Solutions (Neighborhood & Commercial Green Infrastructure)	136,784
River Run Network	215,834
Watershed Education (Schoolyard, Monsoon Squad, Phoenix, Outreach, Water Harvesting Certification)	250,198
Tucson Green Living Co-op	291,104
<b>Total Program Services</b>	<b>\$978,047</b>
<b>Supporting services</b>	
Administrative	149,129
Development	44,072
<b>Total Supporting Services</b>	<b>\$193,201</b>
<b>Total Expenses</b>	<b>\$1,171,248</b>



## FINANCIAL SUMMARY

Thanks to strong donor support from the WMG community, we were able to overcome financial challenges during the pandemic and end the year with net positive revenue. Donations support all of our programs and are the primary funding for the River Run Network, Living Lab and Learning Center, as well as new family programming. Grants support river restoration projects, green stormwater infrastructure in limited income neighborhoods, and work with K-12 schools. Program income is from fee-based services such as our consulting, Green Living Co-op, and technical trainings.



The riparian forest shows off fall colors along Ciénega Creek in Southern Arizona.



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## Support International River Restoration With Beavers!

Join WMG in restoring our desert creeks and rivers: slowing flows, spreading water across the floodplain, and recharging aquifers—and ensuring beavers can do the same! Learn more and donate at [Watershedmg.org/Beavers](https://www.Watershedmg.org/Beavers)