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#### **Urban Watersheds Reimagined**

We envision a world where the relationship between communities and the environment creates prosperity for all.

WMG's vision statement, both simple and profound, has been guiding the organization for the last decade. While this vision is more relevant than ever, it can be hard to imagine what this looks like in reality.

Do you relate to our vision statement? What relationship do you and your community have with the environment? Is it one that creates prosperity – for all? And who exactly is included in this "all"?

To shed some light, here is a localized interpretation of our vision statement:

We envision a world where the relationship between the Sonoran Desert and its people creates prosperity for all. This includes all people, plants, animals, land, and water of the United States, Mexico, and Native American nations found in the Sonoran Desert.

In the Sonoran Desert bioregion and Santa Cruz watershed which I call home, there are three nations and multitudinous other beings that make up our incredibly diverse community. While Western people are relative newcomers to the Sonoran Desert, Native Americans have a long-standing relationship with the desert and traditional practices from which we can all learn.

#### **Igniting an Ecology Ethic**

When I look back at our work over the last ten years, I see the seeds we planted together to ignite an ecology ethic. We reimagined our urban watersheds as places with abundant clean air and water, fresh food, and natural beauty, all achieved with local resources. In this impact report, we share some of the highlights of the last decade as well as insights into our future strategic direction, and I invite you to continue this journey with us.

If we are to work towards this vision and ignite a widespread ecology ethic, what is the story we need to create moving forward? Our Western story continues to be about extreme climate change, pollution, loss of biodiversity, the increasing gap between the rich and the poor, and people and the environment at odds. This popular narrative is constantly being repeated in the media and confirmed in scientific studies which can easily lead to apathy and anxiety.

We need to raise our voices and share an empowering story that is hopeful and inspires real change. This is the story that you and WMG have been a part of—helping create space to walk to a different drummer in harmony with the earth. This change is not difficult, it is just different, and it takes intention and practice.

The early Western conservationists of America helped shape a society that sees an ideal environment as pristine wilderness governed by a Leave No Trace philosophy where people are only visitors in nature. While this is a powerful legacy that has protected much of our public lands, it has also helped create an unnatural dichotomy between people and nature. It is time for our Western society to evolve and recognize that people have always been part of the natural environment and can manage their environment for greater biodiversity and abundance, as indigenous and other communities have shown.

Over the next decade, WMG will continue to foster education, restoration, and advocacy opportunities, working towards our 50-year goal to restore Tucson's heritage of flowing streams and rivers. Together we can develop an intimate partnership with nature, fully committed and interdependent with each other. With this relationship comes deep satisfaction and prosperity for all.

Sincerely,

Lisa Shipek Executive Director



# WMG's TOP TEN ACCOMPLISHMENTS OF THE 2010s

A decade of great impact made possible by you!

2010: Published our Green Infrastructure Manual for Desert Communities¹—a free resource to support design and installation of neighborhood green infrastructure. Over five thousand manuals have been distributed and downloaded providing a valuable resource to people in 13 different countries.

2011: Expanded our seven-day Water Harvesting Design Certification to new communities in Phoenix and Santa Barbara, and offered a course in Spanish for border residents. Last decade we trained 403 people through our Water Harvesting Design Certification from across the U.S. and abroad.

INFRAESTRUCTURA VERDE HERMOSILLO, SON

**2012:** Collaborated with Tucson Water to draft the rainwater harvesting rebate: the most comprehensive rainwater harvesting incentive program in the nation offering up to \$2,000 in rebates per home. Since then, WMG has taught more than 2,250 people through our rainwater harvesting class.

2013: Developed Tucson's Green Streets Policy that was approved by the mayor and city council. One of the only policies of its kind in the nation, it requires that the first ½ inch of street runoff be captured and utilized to irrigate streetover trees as well as provide 25% tree canopy cover and 25% grass and shrub cover along roadways. These guidelines must be met by all new and redeveloped roads in Tucson.

**2014:** Released the Spanish translation of WMG's Gl manual, *Infraestructura Verde para Comunidades del Desierto Sonorense*<sup>2</sup>, spurring new green infrastructure work across Mexico and the eventual adoption of a green infrastructure policy by the State of Sonora in 2017.

<sup>2</sup> Watershedmg.org/ManualVerde

<sup>1</sup> Watershedmg.org/GlManual



**2018:** Celebrated the 10-year anniversary of the Green Living Coop. Over ten years, WMG instructors led 366 transformative workshops at people's homes. These Co-op members are collectively harvesting over 5.1 million gallons of water annually!

2016: Started the River Run Network to mobilize the community in working towards our 50-year vision to restore Tucson's heritage of flowing rivers.

Now boasting over 1,600 members, the network attends creek walks and helps with river clean-ups and restoration projects.

2015: Built the Living Lab and

resource, launched our docent

program, and developed our

Living Lab annually.

Learning Center as a community

internship program in partnership with

the University of Arizona. Docents help

us teach thousands of people at the

**2017:** Established our We Are One Watershed resolutions and enhanced WMG's program inclusivity by starting WTF (women, trans, femme) Build Coop workshops, offering bilingual classes and tours, and expanding our limited income services.



**2019:** Co-led the development of the Santa Cruz Watershed Collaborative in partnership with dozens of government and non-governmental organizations and set a collective vision, "people working together to ensure a healthy urban watershed with flowing rivers and streams."



## CITY OF TUCSON RAIN GARDEN CARE GETS BOOST WITH WMG TRAINING

#### Thank You Monsoon Squad!

A big shout out to the hundreds of dedicated volunteers who have participated in WMG's Monsoon Squad over the last five years. Monsoon Squad volunteers were literally heroes for our rain gardens – they stepped in and saved four highly-visible water harvesting demonstration sites at Tucson city council offices. The rain gardens were not getting the care they needed, and the Squad helped nurse them back to health. Now the gardens are some of the most highly functioning and beautiful water harvesting demonstrations in the city. We are deeply grateful for the Squad's service and pleased to announce the next chapter in rain garden care at the Ward Offices.

In partnership with Tucson Parks and Recreation Department, we'll be training and mentoring city staff in water harvesting and native plant maintenance techniques at the Ward Office sites as well as other green infrastructure sites throughout the city. By providing this capacity-building training, we'll ensure the Ward offices and other Green Stormwater Infrastructure (GSI) sites are well-maintained and help expand our urban forests. Thanks to the new GSI fund passed by the mayor and city council in February, this work is more imperative than ever, as the city expands installation and maintenance of public GSI.

Several of our dedicated Monsoon Squad members were recognized at the event. From top to bottom: Amy Salvato, volunteering since 2016 at Ward 3; Patrick Stirling, volunteering since 2016 at Ward 1; Marty Johnston, volunteering since 2018 at Ward 6; Charles Duncan, volunteering since 2018 at Ward 6



## HYDRATE CONTINUES, NEW WATER HARVESTING DEMONSTRATION IN TEMPE Hydrate the Valley, our five workshop series or



Four Peaks Brewery employees volunteered on a Saturday morning in December to create a public rain garden. They helped shape the basins and berms, armor spillways that collect stormwater off the street, and plant native pollinator shrubs and wildflowers.

Hydrate the Valley, our five-workshop series on sustainable landscape practices, expanded to four cities last year - Phoenix, Mesa, Tempe, and Glendale. These classes served 486 people this year and gave them new watershedfriendly skills. In 2020, we're continuing the Hydrate series with Phoenix as well as expanding to Surprise and Fountain Hills. In December, we partnered with the City of Tempe, River Network, and Four Peaks Brewery to create a new water harvesting demonstration project. This neighborhood pocket park was transformed from irrigated turf into a pollinator park fed by stormwater and will serve as a demonstration site for other Valley cities seeking to install native habitat without the use of irrigation, through the capture of rain water. Overall, 3,200 square feet of native habitat was restored.

Arizona teachers have been partnering with WMG and Arizona Project WET to create water harvesting and climate resilience curriculum that engages middle school and high school students in experiential, STEAM-based learning. In the 3rd year of our "Recharge the Rain" program, we tested and formalized curriculum with 22 teachers and implemented mini living labs at 11 schools. The living labs are outdoor classrooms featuring rainwater harvesting and native and edible gardens. Through the program, we've been creating curriculum for WMG's Living Lab—called learning stations—which will be utilized with student and adult groups visiting the Lab. Unveiled at our highly successful Rainwater on Tap



### **NEW SCHOOLYARD LIVING LABS AND LEARNING STATIONS**

event this past Giving Tuesday, the river restoration learning station explores the heritage of Tucson's flowing rivers and engages students in our 50-year vision to restore the flow.

High school students learn practical science, technology, engineering, and mathematics skills helping design and install water harvesting systems at their schools. Students get their hands dirty working alongside their teachers and WMG and Arizona Project WET staff.

## **RIVER RUN NETWORK 50-YEAR STRATEGIC PLAN**

2020 - 2070

We have a dream, but we also have a plan! Our team has developed a strategic plan to achieve our 50-year vision to restore Tucson's heritage of flowing rivers. Now we're gathering feedback from our advisors and partners to strengthen the plan, and we also want your input. Here is an excerpt of our plan, including our goals and some of the measurable outcomes we've developed to help us determine success. You can read an abridged version of our Strategic Plan and submit your own feedback at **Watershedmg.org/RRN/Strategic**.

**Goals:** Our goals cover our four focuses of the River Run Network: community engagement, watershed planning, restoration, and policy.

- **1.** Renew community pride in our heritage of flowing rivers by growing a powerful and engaged River Run Network movement.
- **2.** Develop and implement river restoration priority actions, plans, and tracking metrics to guide WMG's efforts as well as partner efforts.
- **3.** Restore hydrological, geophysical, and ecological function to our rivers to enhance and connect riparian habitat and populations of native fish and wildlife.
- **4.** Support adoption of policies to protect and enhance river flow through public education and advocacy with decision-makers at the municipal, county, state, and federal levels.

**Outcomes:** These measureable outcomes will help us determine success along the way as we achieve our ambitious goals.

- **2025:** Santa Cruz Watershed Collaborative (SCWC) partners adopt and implement a shared Watershed Restoration Plan.
- **2030:** Environmental flows policy is adopted by City of Tucson, Pima County, and/or the State of Arizona to ensure our rivers have a right to flowing water.
- **2040:** Residential water use is 40 gallons per capita per day (GPCD), achieving a hydro-regional water portfolio and diminishing dependence on Colorado River water.
- **2050:** The River Run Network reaches 20,000 members, who engage in weekly restoration activities, with restoration efforts supported by a \$5 million endowment fund.

**2060:** Through restoration and conservation efforts, perennial flow is extended along our creeks and rivers by:

- 1.8 miles along Sabino Creek
- 6.4 miles along Cienega Creek
- 13.6 miles along Tanque Verde Creek
- 7.4 miles along the Santa Cruz River

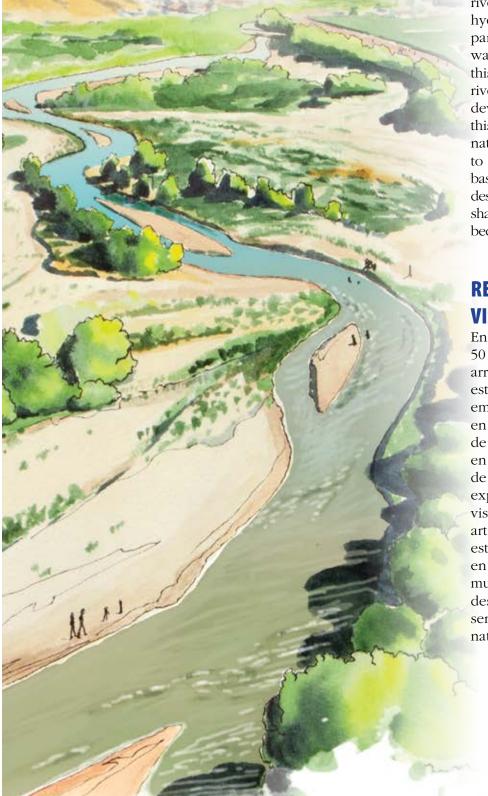
**2070:** 8 square miles of mesquite bosque are restored and preserved along the Santa Cruz and Tanque Verde Rivers with management practices to foster old growth forests.

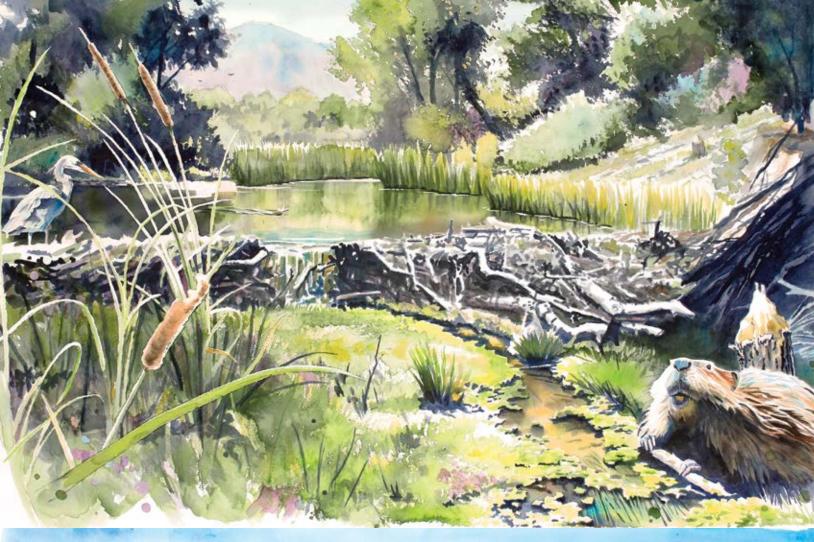


In 2013, WMG set a 50-year vision to restore Tucson's heritage of flowing creeks and rivers. We knew this vision was possible hydrologically and we saw the start of a paradigm shift in how we manage our water and develop our city. But what does this vision look like in reality? With flowing rivers long in the past and increasing urban development, it is hard for people to imagine this vision. We commissioned local artist and naturalist Dennis Caldwell to bring our vision to life at six iconic locations around the Tucson basin. The illustrations show what a restored desert river would look like-often with very shallow flow that meanders through the river bed—that serves both people and nature.

#### RENACIMIENTO DE NUESTROS RÍOS: VISIÓN A 50 AÑOS

En 2013, WMG estableció una visión a 50 años a restaurar la herencia de ríos y arroyos fluyendo en Tucson. Sabíamos que esta visión es hidrológicamente posible y empezamos a ver un cambio de paradigma en el manejo de nuestra agua y el desarrollo de nuestra ciudad. ¿Cómo se ve esta visión en la realidad? Con la desaparición histórica de nuestros ríos y el crecimiento urbano exponencial, es difícil poder imaginarnos esta visión. Comisionamos a Dennis Caldwell, un artista y naturista local, para ayudarnos a traer esta visión a la vida en seis lugares icónicos en la cuenca de Tucson. Estas imágenes nos muestran como se ve un río restaurado en el desierto—con un flujo poco profundo que serpentea por el lecho del río, sirviendo a la naturaleza y a la gente.







## **OUR RIVERS REBORN**

#### **Vision: Las Ciénegas National Conservation Area**

The American Beaver once again is a keystone species in the Santa Cruz Watershed with a robust population thriving in Las Ciénegas National Conservation Area. Ciénega Creek has regained its historic flow extent with over 13 miles of perennial flow in the conservation area, thanks to the return of the beavers and a collaborative community effort to protect the groundwater aquifer. The beaver's small, natural dams slow the flow and pond water across a broader floodplain. The more frequent, deeper pools of water supports a larger population of native fish and is a hotspot for Gila chub, Gila topminnow, and longfin dace, as well as yellow-billed cuckoo, Southwestern willow flycatcher, Chiricahua leopard frog, and the Mexican garter snake. The spreading of water across the landscape widens the floodplain to support one of the largest riparian forests in Southern Arizona, as well as allowing more water to seep into the aguifer. The aquifer is a big sponge, storing water for later to create water security for greater Tucson, and providing 20% of the groundwater inflow to Tucson.

#### Vision: Tanque Verde Creek at Isabella Lee Natural Preserve

Tanque Verde Creek at Isabella Lee has sections of year-round and seasonal meandering flow fed by groundwater and surface flow from the Rincon Mountains as well as the Santa Catalina Mountains through Agua Caliente Creek. Seasonal flow supports large populations of the lowland leopard frog and Mexican gartersnakes. The large cottonwood-willow riparian forests support rare birds such as the blackhawk, cactus-ferruginous pygmy owls and yellow-billed cuckoo. The creek has an extensive floodplain, a natural sponge to absorb large flood events and increase recharge, supporting a vast velvet mesquite-ash-hackberry bosque (forest). The area is treasured by the communities in the Tanque Verde Valley as a destination for bird watching, hiking, horseback riding and nature appreciation.

#### **RENACIMIENTO DE NUESTROS RÍOS**

#### **Visión: Las Cienegas National Conesrvation Area**

El Castor Americano, una vez más, es una especie clave en la Cuenca del Santa Cruz con una población robusta que prospera en el Las Cienegas National Conservation Area. Ciénega Creek ha recuperado su extensión de flujo histórico con más de 13 millas de flujo perenne en el área de conservación, esto fue posible gracias al regreso de los castores y un esfuerzo comunitario de colaboración para proteger el acuífero subterráneo. Las pequeñas represas naturales del castor retienen el flujo y el agua se esparce a través de una planicie de inundación más amplia. Las lagunas de agua más frecuentes y profundas sostienen una población más grande de peces nativos y son un punto de acceso para Gila chub, charalito Gila, longfin dace, así como cuco de pico amarillo, papamoscas del suroeste, rana leopardo Chiricahua y la serpiente chicotera mexicana. La extensión del agua a través del paisaje ensancha la planicie de inundación para darle vida a uno de los bosques ribereños más grandes del sur de Arizona, y permite que se filtre más agua en el acuífero. El acuífero es una gran esponja, almacena agua para más seguridad hídrica para Tucson, y proporciona el 20% del flujo de agua subterránea a Tucson.

#### Visión: Riachuelo Tanque Verde en el Preserva Natural Isabella Lee

El Riachuelo Tanque Verde en Isabella Lee tiene secciones de flujo serpenteante durante todo el año y estacional alimentado por aqua subterránea y flujo superficial de las montañas Rincón y las montañas de Santa Catalina a través del Riachuelo Agua Caliente. El flujo estacional alimenta a grandes poblaciones de la rana leopardo en las tierras bajas y la culebra nómada de agua Mexicana. Los grandes bosques ribereños de álamos y sauces sostienen aves raras como el halcón negro, los búhos pigmeos ferruginosos-cactus y el cuco de pico amarillo. El riachuelo tiene una extensa planicie de inundación, una esponja natural para absorber grandes inundaciones y aumentar la recarga, apoyando un vasto bosque de mezquite-almezo-cenizo. El área es atesorada por las comunidades en el Valle de Tanque Verde como un destino para la observación de aves, caminatas, cabalgatas y apreciación de la naturaleza.



## **OUR RIVERS REBORN**

## Vision: Confluence of Tanque Verde Creek and Pantano River

The lower Tanque Verde Creek has year-round and seasonal, meandering flow that feeds a ciénega (wetland) with tall stands of riparian grasses, alive with the sounds of native frog and toads. Regular flow invites native fish populations of the Gila topminnow and Gila chub to return as well as the illustrious American beaver. The reintroduced beavers enhance the creek through low mudpacked leaf dams that help slow the flow of water and provide for rich and diverse riparian habitat. Seasonal flows of the Pantano River help connect populations of native fish from Ciénega Creek to Tanque Verde Creek. The extensive floodplain is a natural sponge to absorb large flood events and increase recharge supporting an extensive mesquite bosque (forest). The mesquites, interspersed with cottonwoods and ash trees, create a shady oasis home to an abundance of wildlife and endless recreation opportunities for families.

#### **Vision: The Rillito**

The Rillito is Tucson's darling, capturing the community's heart and imagination by bringing its wet and wild wonder into the urban core. The river is alive with seasonal flows, supported by healthy groundwater levels, which are fed by stormwater infiltrated through green infrastructure throughout the surrounding neighborhoods. Parking lots and impervious areas are reduced and replaced with rain garden parks and native habitat. The Rillito's lush floodplain supports important riparian species with great wildlife viewing and recreation opportunities, tying into cultural amenities like the racetrack, restaurants, and the bike loop. People come to view the growing bat populations, hear breeding toads in the monsoons, along with enjoying fabulous bird watching all winter long.

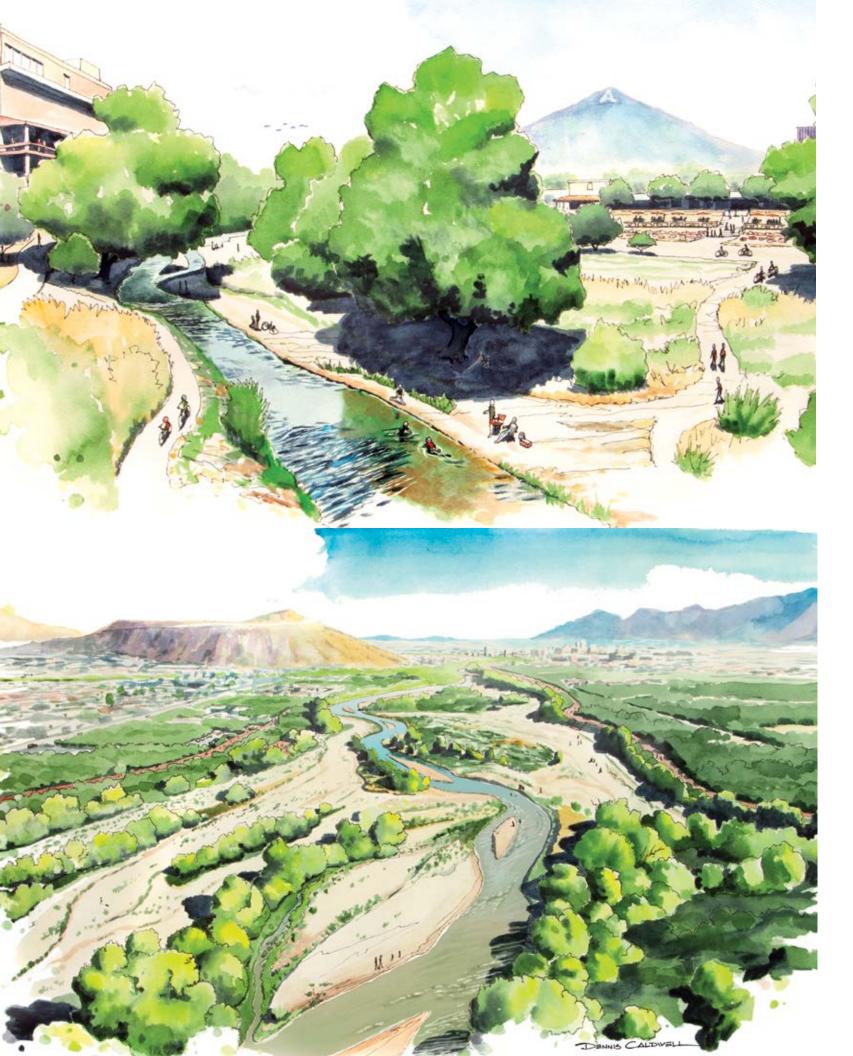
#### **RENACIMIENTO DE NUESTROS RÍOS**

## Visión: Confluencia del Riachuelo Tanque Verde y Río Pantano

La porción baja del Riachuelo Tanque Verde tiene un flujo serpenteante durante todo el año y estacional que alimenta a una ciénega (humedal) con alta presencia de pastos ribereños, y con ruidos sonoros de ranas y sapos nativos. Las corrientes regulares invitan a regresar a las poblaciones nativas de peces del charalito Gila y Gila chub, así como al ilustre castor Americano. Los castores reintroducidos mejoran el arroyo a través de presas de hojarascas llenas de lodo que ayudan a disminuir el flujo de agua y proporcionan un hábitat ribereño rico y diverso. Los flujos estacionales del Río Pantano ayudan a conectar las poblaciones de peces nativos del Riachuelo Ciénega al Riachuelo Tanque Verde. La extensa planicie de inundación es una esponja natural para absorber grandes inundaciones y aumentar la recarga que soporta un extenso bosque de mezquite. Los mezquites, intercalados con álamos y fresnos, crean un oasis sombreado que alberga una gran cantidad de vida silvestre y un sinfín de oportunidades de recreación para las familias.

#### **Visión: El Rillito**

El Rillito es el amor de Tucson, captura el corazón y la imaginación de la comunidad al llevar su maravillosa humedad salvaje al núcleo urbano. El río está vivo con flujos estacionales, alimentados por niveles saludables de agua subterránea, que son alimentados por aguas pluviales infiltradas a través de la infraestructura verde en los vecindarios circundantes. Los estacionamientos y las áreas impermeables se reducen y se reemplazan con parques de jardines de lluvia y hábitat de plantas nativas. La exuberante planicie de inundación del Rillito da vida a importantes especies ribereñas con excelentes oportunidades para la observación de la vida silvestre y la recreación, vinculando éstos con servicios culturales como el hipódromo, los restaurantes y el circuito para bicicletas (The Loop). La gente viene a ver las crecientes poblaciones de murciélagos, escuchan la cría de sapos en los monzones y disfrutan de la observación de aves durante todo el invierno.



## **OUR RIVERS REBORN**

#### **Vision: The Santa Cruz River - Downtown**

The Santa Cruz River flows year-round at the base of Sentinel Peak – supported by a healthy groundwater aquifer. The flowing river is a cultural and ecological gem of our desert community that is essential to our city's economy and livability. A river walk meanders near the Santa Cruz under a mesquite bosque for people to enjoy the riverside up close, where they can picnic and recreate. Restaurants and parks dot the outskirts of the floodplain and are popular places for fiestas and festivals –once again becoming the center of cultural affairs. The riparian forest is a haven for dozens of bird species, and native wildlife is abundant.

## Vision: The Santa Cruz River - from Martinez Hill to Downtown

The Santa Cruz River's shallow, meandering course has sections of year-round and seasonal flow from Martinez Hill (near San Xavier Road) to downtown Tucson. This flow is groundwater supported, running subsurface from the restored Great Mesquite Forest on the San Xavier District lands of the Tohono O'odham Nation. The forest, once the largest mesquite bosque in the United States, has recovered much of its historic territory and supports over 80 summer bird species, thanks to the rich habitat provided by mesquite trees reaching up to 60 feet tall. Native fish thrive in the year-round flows, with restored populations of Longfin dace, Gila chub, Sonora sucker, Desert sucker, and the Gila topminnow. Small, family farms, found throughout the floodplain, provide fresh food to local markets while preserving open space with practices that protect precious groundwater and topsoil. The river is a cherished natural area for Tucson-area residents to walk, bike, and enjoy family gatherings along the river bank.

#### **RENACIMIENTO DE NUESTROS RÍOS**

#### Visión: Río Santa Cruz – Centro

El Río Santa Cruz fluye durante todo el año en la base del Cerro del Centinela, avivado por un acuífero saludable. El río fluyendo es una joya cultural y ecológica de nuestra comunidad del desierto que es esencial para la economía y la habitabilidad de nuestra ciudad. Un sendero por el río serpentea cerca del Santa Cruz bajo la sombra de un bosque de mezquites donde la gente disfruta del ambiente ribereño, con áreas para los picnics y recreación. Restaurantes y parques esparcen las afueras de la planicie aluvial y son lugares populares para fiestas y festivales, una vez más convirtiéndose en el centro de actividades culturales. El bosque ribereño es un refugio de decenas de especies de aves, y la vida silvestre nativa es abundante.

#### Visión: de Martínez Hill al Centro

El trayecto serpenteante y poco profundo del Río Santa Cruz tiene secciones de flujo estacional y durante todo el año desde Martínez Hill (cerca de San Xavier Road) hasta el centro de Tucson. Este flujo está alimentado por el agua subterránea, y se extiende bajo la superficie del gran bosque restaurado de Mesquite en las tierras del distrito de San Xavier de la Nación Tohono O'odham. El bosque, una vez el bosque de mezquite más grande de los Estados Unidos, ha recuperado gran parte de su territorio histórico y da refugio a más de 80 especies de aves de verano, gracias al rico hábitat proporcionado por los árboles de mezquite que alcanzan hasta 60 pies de altura. Los peces nativos prosperan en las corrientes permanentes, con poblaciones restauradas de Longfin dace, Gila chub, Sonora sucker, Desert sucker y Gila topminnow. Pequeñas granjas familiares, que se encuentran en toda la planicie de inundación, proporcionan verduras frescas a los mercados locales y al mismo tiempo preservan el espacio abierto con prácticas que protegen las valiosas aguas subterráneas y el suelo superficial fértil. El río es una área natural respetada por los residentes del área de Tucson para caminar, andar en bicicleta y disfrutar de reuniones familiares a lo largo de los bancos del río.

As Tucson moves towards a **One Water** framework, WMG is continuing our local policy work to help shape the process.

The One Water approach views all water—groundwater, surface water, rainwater, stormwater, wastewater, and reclaimed water—as valuable resources that must be managed holistically and sustainably.

WMG helps shape policy by advocating for change with leaders, providing public education, and fostering collaboration with decisionmakers. In 2017, we set five policy priorities, and now we're thrilled to share with you the tremendous progress that has been made on these issues.



## WMG'S ONE WATER POLICIES

#### **Progress on WMG's 2017 One Water Policy Priorities**



1. Foster collaborative governance for Santa Cruz River watershed planning and management.

> The Santa Cruz Watershed Collaborative (SCWC) was formed in 2018 with the mission to collaboratively restore the hydrological and ecological function of the watershed. By fostering cooperation, SCWC enables watershed leaders to make well-informed management and policy decisions with over two dozen government agencies, non-profits, institutions involved. WMG has taken an active role in spearheading the development of the Collaborative as a co-convener and member of the coordinating team.



2. Shift the incentive to keep water (treated effluent) in the Santa Cruz River through watershed planning and a state legislative change for 100% credit for effluent recharged in the river.

During the 2019 Colorado River Drought Contingency Plan negotiation process, Tucson Water negotiated 100% credit for recycled water (effluent) discharged to the river as part of the Santa Cruz Heritage Project and other existing in-channel recharge management projects. Previously, the credit system incentivized diverting treated effluent to off-river recharge facilities. An Arizona state legislative change is required to allow for future effluent recharge river projects to qualify for 100% credit. WMG and other local organizations fostered public support in promoting this policy shift.



3. Develop a Green Stormwater Infrastructure Fund for the City of Tucson to finance and maintain green infrastructure projects throughout the City.

> In February 2020 Tucson's Mayor and Council approved the Green Stormwater Infrastructure Fund to begin in June 2020 through Tucson Water's rate structure adoption process. The initial fund will provide an estimated \$4 million to build and maintain green infrastructure throughout the city. For over a decade, WMG has been advocating for a green infrastructure fund and has provided educational and technical resources to demonstrate and promote its benefits.



4. Extend water harvesting incentives to schools, businesses, and residential well owners.

Starting in 2020 Tucson Water will fund schoolyard rainwater harvesting projects. This comes on the heels of a successful "Recharge the Rain" partnership funded by NOAA between WMG and Arizona Project WET to develop STEM-based rainwater harvesting curriculum with student-designed and implemented schoolyard rain gardens. Many businesses have also taken advantage of Tucson Water's existing rainwater harvesting incentive program.

5. Adopt an environmental flows policy to ensure sufficient water is allocated to our streams and rivers to sustain river ecosystems and the benefits they provide to people.

WMG and other organizations have begun to push for an environmental flows policy to support the restoration and sustained flow of our rivers. Ideally, this type of policy would be implemented at the state level but implementing a voluntary pilot program locally may offer short-term success and be a step towards state-level adoption.

#### WMG's 2020s One Water Policy Priorities

Moving forward, here are WMG's policy priorities, to ensure we achieve our 50-year vision to restore Tucson's heritage of flowing rivers. We'll keep you updated on our progress and inform you of advocacy opportunities through the River Run Network. You can get involved and join here: Watershedmg.org/RRN.

- 1. Adopt and implement a Watershed Restoration Action Plan through the Santa Cruz Watershed Collaborative to fulfill the Collaborative's vision of people working together to ensure a healthy urban watershed with flowing rivers and streams.
- 2. Extend conservation incentives to groundwater users in the Tucson basin to protect and restore critical shallow groundwater areas that support riparian ecosystems.
- 3. Extend 100% credit for all future projects recharging recycled water in rivers though an AZ legislative change to maximize water available for river restoration.
- 4. Adopt a local environmental flows policy to ensure water is allocated to our rivers to sustain river ecosystems and the plants, animals, and people they support.
- 5. Foster a hydro-regional water portfolio for greater Tucson and continue to create new incentives to reduce gallons per capita per day (GPCD) to 60 gallons by 2030 (to reach 40 GPCD by 2040). Hydro-regional water portfolio would support long-term water security and environmental flows in the Colorado River basin.
- 6. Increase Tucson's Green Stormwater Infrastructure Fund tenfold to 30 million dollars annually to create and maintain 20% urban forest cover irrigated by stormwater.



#### **2019 FUNDING, SPONSORS AND PARTNERS**

**Agnese Haury Foundation** American Rivers Arizona Department of **Environmental Quality** 

Arizona State Forestry Division

Bureau of Reclamation Central Arizona Project

Cienega Watershed Partnership

Coca Cola

Conserve2Enhance

**Gulf Coast Community Foundation** 

Intel Corporation

Jeff and Connie Woodman Foundation

National Oceanic and Atmospheric

Administration One Tree Planted

**River Network** 

Salt River Project

Sonoran Institute

The Kislak Family Foundation US Fish and Wildlife Service

#### **Business Sponsors**

AlphaGraphics

Baird

**Buffalo Exchange** 

Central Arizona Project

City of Tempe

City of Tucson - Tucson Water

Civano Nursery

Daniel J Rylander PC

**Ecoblue** 

**EcoSense Sustainable Landscapes** 

**Eighty-Eight Acres** 

Tank's Green Stuff

Freeport-McMoRan

GreaterGood.org

Imperial Excavating LLC

**KXCI Community Radio** 

Lil' John's Excavating

Mercado San Agustín

Net Zero Solar LLC

**Originate Natural Building Materials** 

Pioneer Water Tanks America

Pueblo Vida Brewing Company

Ren Coffeehouse

Rincon Country West RV Resort

Salt River Project

**Grant and Foundation Funding** Sierra Club - Grand Canyon Chapter Silicon Valley Community Foundation Smiling Dog Landscapes

> Southern Arizona Rain Gutters **Storyteller Public Relations**

Sun Tran

Susan Denis, Realtor (Tierra Antigua)

Razor USA

Technicians for Sustainability

The Saavedra Team

The Zoldan Law Group PLLC

**Treeland Nurseries** 

**Tucson Country Day School** 

**Tucson Electric Power** 

Tucson Hop Shop

Westgate Garden Design

Whiskey Del Bac

Zocalo Magazine

#### **Tucson Region Partners**

American Rivers

Arizona Master Naturalist Association

Arizona Project WET

**Basis Tucson North** 

Billy Lane Lauffer Middle School Booth-Fickett Math-Science K-8

**Magnet School** 

Canyon del Oro High School

Changemaker High School Cienega Watershed Partnership

City High

City of Tucson Mayor's Office

Desert Diamond Casinos & Entertainment City of Tucson Parks and Recreation City of Tucson, Ward 1 Council Office

City of Tucson, Ward 2 Council Office

City of Tucson, Ward 3 Council Office

City of Tucson, Ward 6 Council Office Central Arizona Project

Community Water Coalition of

Southern Arizona

Drachman Montessori

Esperero Canyon Middle School Flowing Wells Neighborhood Association

Local First Arizona Mission Garden

Hermosa Montessori School

National Park Service - Saguaro National Park

National Phenology Network

New Hope Church

Palo Verde Neighborhood Association

Paulo Freire Freedom School - University

Pima County

Pima County Community

Development

Pima County Regional Flood Control District

Santa Rita High School

Sierra 2-8 School

Sky Island Alliance

Sustainable Tucson The Sonoran Institute

Tucson Department of Transportation

**Tucson High Magnet School** 

**Tucson Water** 

U.S. Fish and Wildlife Service

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, Office of

Sustainablity

University of Arizona, School of

**Natural Resources** University of Arizona Water Resources Research Center

U.S. Forest Service, Coronado **National Forest Catalina District** 

#### **Phoenix Region Partners**

City of Avondale

City of Glendale

City of Mesa

City of Phoenix Water Services

Department City of Tempe

Desert Botanical Garden

Mesa Urban Garden Primera Iglesia Metodista Unida

Sustainable Cities Network Arizona State University Global Institute of

Sustainability The Nature Conservancy - Phoenix

Trees Matter Wilson School District No. 7

#### **Other Partners**

U.S. Forest Service International Programs

#### **2019 FINANCIAL REPORT**

#### **Revenue and Support**

Donations 304,620 Grants 373,117 595,797 Program income **Total Income** \$1,273,535

#### **Expenses**

#### **Program Services**

Living Lab & Learning Center 58.125 Phoenix Program 40,038 (Co-op, Demonstration Sites, Hydrate, Outreach)

River Run Network 298,823 Tucson Green Living Co-op 308,790 Tucson Design Build 396,861 Watershed Education 254,738

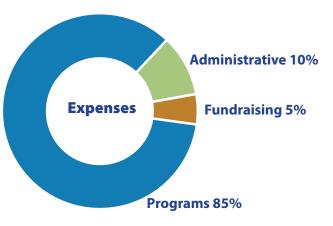
(Schoolyard, Monsoon Squad, Outreach) Watershed Policy, Planning, and Training 100,815 **Total Program Services** \$1,061,329

#### **Supporting services**

Administrative 129,135 Development 62,017 **Total Supporting Services** \$191,152 **Total Expenses** \$1,252,480

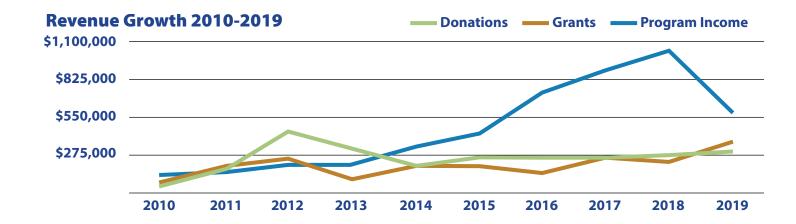
## Revenue **Grants 29%** Support **Program Income 47%**

**Donations 24%** 



#### **FINANCIAL SUMMARY**

Over the last ten years, WMG's annual revenue has grown from \$400,000 in 2010 to a peak of \$1.5 million in 2018. In 2019, our revenue dropped to \$1.3 million, with less revenue from program income but increased revenue from donations and grants. This change is a result of the strategic investment in our River Run Network, Living Lab, and Co-op programs, and the closing of our Design Build program at the end of 2018. In 2012 and 2013 donations peaked with the property gift that became our Living Lab & Learning Center and the associated capital campaign to fund our Center's development. In the 2020s, we will continue to keep a strong revenue portfolio with a mix of donations, grants, and program income. WMG will focus on developing long-term financial resources to support our 50-year strategic vision, which will include a new capital campaign, growing our monthly and legacy giving programs, as well as the launch of an endowment fund.



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