



We Are One Watershed



2016 ANNUAL REPORT

We Are One Watershed 2017 Resolutions



Getting grounded with yoga at WMG's We Are One Watershed Dance Rally, April 4th, AZ Gives Day.

Dear Readers,

WMG is poised to lead, innovate, and grow in 2017, standing tall on the foundation of all we achieved together last year. Our foundation is strong, thanks to your

investment as donors, volunteers, docents, clients, and students. The current political climate is sending out tremors of hate, fear, and division, but our organization stands undivided, based on the truth that We Are One Watershed.



We're not distracted by the turmoil and fear mongering; instead, we're amplifying our role as thought leaders and community builders with intense focus on our mission. This year, we've sharpened the focus with our 2017 Resolutions to be more inclusive with our programs and stay true to our values.

2016 marked my 10 year anniversary as Executive Director and the start of WMG's transition from an adolescent, growing organization to a mature, sustainable organization. We've set long-term goals, and we're putting the structure in place to achieve them, from launching the River Run Network (pg 3), to building a strong science program at the Living Lab (pg 11), and from digging into policy work (pg 8), to transitioning to a profit-based financial model (pg 14).

As we share the highlights of 2016 with you, we're also putting out a call to action to look past the turmoil and join us in building unified communities that are prosperous for both people and nature.

Sincerely,


Lisa Shipek
Executive Director

Board of Directors

Bill Wilkening, President
Jennifer Mills, Treasurer
Georgia Ehlers, Secretary
Andrea Finger
Mark Fleming
Margot Garcia
Jennifer Psillas
Gordon Yarrington

Staff

Lisa Shipek, Executive Director
Nate Clark, Water Harvesting Crew Member
Jen Glass, Communications Associate
Trevor Hare, River Restoration Biologist
Dusty Jacobs, Water Harvesting Crew Member
Sky Jacobs, Administrator & IT Manager
Russell Lowes, Finance Manager
Jamie Manser, Public Relations Associate
Joaquin Murrieta-Saldivar, Cultural Ecologist
Iylea Olson, Project Manager and Designer
Deborah Oslak, Living Lab Program Coordinator
Lincoln Perino, Water Harvesting Project Manager and Designer
Catlow Shipek, Policy & Technical Director
Kieran Sikdar, Water Resources Engineer
Emma Stahl-Wert, Sonoran Landscape Specialist
Anna Tyler, Water Harvesting Crew Member
Ryan Wood, Program Manager
Special thanks to former staff: Aaron Baumann, Sarah Brown, & Rudy Poe

Annual Report Credits

Writing & Editing: Lisa Shipek, Aaron Baumann, Sarah Brown, Jen Glass
Graphic Design: Cero Wood Graphic Design, Inc.
Photos: Julius Schlossberg & WMG Staff

Watershed Management Group develops and implements community-based solutions to ensure the long-term prosperity of people and health of the environment. We provide people with the knowledge, skills, and resources for sustainable livelihoods.

Cover: Feeling good after dancing at WMG's We Are One Watershed Dance Rally on Playground's rooftop.

Resolution #1: We will model strong female roles and fully value women's contributions.

We create opportunities for women to have a voice and build hands-on skills in an atmosphere of mutual respect alongside men, from our past work providing clean drinking water to villages in India to our barn-raising Co-op program. We will continue to provide safe and encouraging environments for women to learn and grow at our workshops, and plan new ways to advance women by having more female instructors, mentors, and "women-build" workshops.

Resolution #3: We will redouble our efforts to serve low-income communities.

WMG has run capacity-building programs with partners including Habitat for Humanity, Community Food Bank of Southern Arizona, Goodwill, and Primavera Foundation. We are building on these partnerships to offer more financial resources for low-income families to implement water harvesting. We also have received a grant from NOAA to develop environmental literacy curriculum with teachers from low-income schools to address issues, like chronic flooding and urban heat islands, that plague low-income areas.

Resolution #2: We will embrace diversity within and without our organization.

As much as WMG values diversity, it is not strongly reflected by our pool of volunteers, donors, and clients. We will increase our efforts to reach disadvantaged, minority, and politically diverse communities. We will accomplish this through targeted recruitment for volunteer programs including the Green Living Co-op, Docent program, and Monsoon Squad, and solicit a broad applicant pool for staff and board openings. At the Living Lab & Learning Center this year, we will be creating educational signage throughout the campus in English and Spanish.

Resolution #4: We will build political bridges and cross party lines to restore our rivers.

Through our work with municipalities and membership in the Community Water Coalition, we are gaining influence with decision makers across Arizona. We are inviting these leaders to tour the Living Lab, where we will share our water values with the hope of building collaborative solutions. And through our newest initiative, the River Run Network, we are reaching out to everyone across Tucson to help restore regular flow to Sabino and Tanque Verde Creeks.

50 Year Vision Flows Into River Run Network



Winter rains create flow in the Tanque Verde Creek at Isabella Lee Nature Preserve, January 2016.

Last year, WMG's river restoration work and 50-year vision came together under one framework, with an expanded focus on the entire Tucson basin: we're calling it the River Run Network. The idea behind the name is that—just like our rivers and streams—this Network will connect us.

The goal is to magnify our impact by working together: by pooling our conservation to leave more water in the ground, by collecting small pieces of data to paint a vivid picture, and by speaking as one to elected leaders.

When you join the Network, you'll receive a beautiful yard sign featuring artwork commissioned from Tucson artist Dennis Caldwell, to proudly display at your home and help turn "Restore the Flow" from a statement into a movement.

You'll receive priority invitations to join our Flow365 monitoring team, which is collecting data to paint a vivid picture of wet-dry cycles in our riverbeds.

And you'll be added to the names we show policy-makers when we propose sustainable solutions to problems like flooding, erosion control, and water security.

Since the Network launched in November 2016, we've welcomed 185 people who have joined as members. This is a great start, and we have big plans to expand membership to 500 people in 2017.

Flow365 monitoring volunteers learn how to determine groundwater levels in wells with simple gauge.

In April 2017, we hosted our first Flow365 monitoring training and started receiving data from more than 20 new river monitors.

And since the ultimate goal of this is partnership for mutual benefit, we've already joined with Pima County Flood Control to break ground on a huge restoration project at Isabella Lee Natural Preserve, where within the year you'll see benefits to the wildlife, habitat, and flow on Tanque Verde Creek.

Next time you're out for a hike enjoying one of our desert creeks or watering holes, remember that the River Run Network helped keep these desert waterways alive!



River Run Network Member Profile: Barbara and Brian Drummond

Barbara and Brian moved to Tucson in 2012 after falling in love with the high desert and the mountain views, settling by Tanque Verde Creek in WMG's Middle Tanque Verde Streamshed. They quickly did a green remodel on their home, where they installed a greywater system to irrigate citrus trees and a rainwater collection cistern to meet their other outdoor needs. They also got to work (with their kids' help!) constructing berms and basins around their yard to passively harvest rainwater.

The Drummonds are completely "off" Tucson city water for outdoor needs, and since joining the River Run Network, they have been busy sharing their enthusiasm for water conservation at their sons' schools and Boy Scout troops. Barbara has designed water conservation curriculum featuring WMG's videos and information shared through our events and website.

Barbara says, "Since we live in the Tanque Verde area and the kids play in the Tanque Verde Creek, we want them to learn what makes the creek flow. We take a cup of dirt and poke a hole in it, and they pipette water in it and count how much they put in. That's a really simple calculation of how much water we need to plant here to get the creek flowing again." Brian adds, "We thought: living in the desert we should be good citizens of the desert, and doing that means conserving the resources that are scarce in the environment we live in."



Barbara and Brian Drummond are helping restore the Tanque Verde Creek.



Join the River Run Network and proudly display a yard sign!

**Everyone in Tucson can join
the River Run Network!
Join the movement at
watershedmg.org/RRN.**

Thank You 2016 Donors!

Stewardship Circle

Robin & Bill Charles	Rosalind C Haselbeck	Emily Rockey & Christopher Byrne	Darryl & Mae Tang
Patricia DeWitt	James & Amy Kirchoff	Ruby J Sheffer	Ed Thompson & Julia Gove
Georgia Ehlers & Robert Marshall	Kyle D Komschlies	Lisa & Catlow Shipek	Carole Townsley & Bryan Smith
Nancy A Evans	Peter & Dawn Larmer	Dorene & Kalyan Sikdar	Janice K Ulrich
Ron & Bonnie Ewing	Merry S Lewis	Kieran Sikdar	Katherine Waser
Robert Fickes	Donna Lines & Gabe Sochor	Tina & Thomas Sleeper	Betsy & Bill Wilkening
Andrea Finger	Michael & Kathy Marron	John Spackman	John Wilkins
Lisa Ealy & Mark Fleming	Jennifer & Dan Mills	John D Stahl-Wert	Jeff & Connie Woodman
Julie Hall Allison	Stacey & Joe Plassmann	David J Stevenson	Alan Ziblat
	Mark & Leanne Ragel		Annemarie & Richard Zimmerman

Flow Donors (Monthly Giving)

Ceanne Alvine & Roy Schneider	Lindsay Ignatowski	John Murray & Judith Terlizzi	Jan Staedicke
Launi Andrews	Cidney Jones	Susan L Oates	Stephen Thomas
Cheryl & Theodore Bahn	Himat S Khalsa	Jeffrey Odefey	Danica Tuxbury
Edith Bailey	Tymon Khamsi	Jesse Coughlin & Justin Orkney	Katie & Forest Vornauf
Raul Espinoza	Marti & Ron Kuykendall	Bea & German Quiroga	Jennifer L Wadsworth
Steve Franks	Karen Lutrick & Carl Case	Jon Ralston	Laura Ward
Lisa Gardner	Vicki Lutrick	Benjamin Renner	Charlene Westgate & John Scoggin
Dustin & Heather Garrick	Andrea Martin	Martha Retallick	Emily Yetman & Ian Johnson
Joan Hall	Amy McCoy	Karilyn & Charlie Roach	Claire Zugmeyer & Sky Jacobs
Lynn & Greg Helseth	Mead Z Mier	Wil & Mai Ho Schaefer	
Deborah Hodges	Daniel Moss	Sally Sherman & Art MacDonald	
Holly Ann Hope	Regina Mullen	Julie St John	

Donors

Leif & Orion Abrell	Joel & Linda Biederman	Robert Carsten	Loren Dawn
Richard Adkins	Michael Bilharz	Alba Carter	Madeleine deBlois
Kim & Jim Afnowich	Bruce Billings	Jessica Castillo	Lucy Del Giorgio
Laura Alexander & Fabian Alfie	Karla Blackwell	Kelly Cederberg	Pat Delaney
Melissa Amarello	Kate Blair and Janee Walsh	Dara Chafik & Charmaine Lewis	James & Florencia DeRoussel
Regina & Michael Amerson	Deborah & Abraham Blattstein	Margaret Gay Chanler	Suzanne & Eric Dhruv
Todd Anchondo	Nancy Blomquist	June Chase	Donna DiFrancesco
Katayoun Anderson	Gita Bodner & David Hodges	Christopher Chelpka	Christopher Dimmick
Linette Antillon & Kyle Jefferson	Catherine Bradley	Dyan Chidester	Caroline G Dobler
Dante Archangeli	Curt Bradley & Jennifer Katcher	Marian A Chittenden	Claudia Doonan
Jennifer Arnold & Glenn Johnson	Roberta & Roger Braegelmann	Bradley Clark	Barbara & Brian Drummond
Clifford & Jeanette Arnquist	Robin Braegelmann & Dirk Beasley	Danielle & Todd Clark	Michael Duer
Steve Arnquist	Chris Brennan	Margaret J Clark	Charles Duncan
William Auther	Christopher & Coleen Brooks	Nathan Clark	Douglas Duncan
Wanda K Baker	Mary-Laura & Richard Brooks	Debra & Charles Cochran	Glenn & Barbara Dunn
Blue Baldwin & Ryan Anderson	Robert Brooks & Susan Evans	Jeff & Nancy Coker	Dari Duval
Chris Baldyga	Christie & Michael Brown	Lynn Colavito	Brenda Earle
Kathleen Bangs	Katherine Brown	Kaylee Colter	Clark F Edwards
William Banks	Philip Brown	Catherine Compagno	Gene D Einfrank
Ashley Marie Barkheimer	Sarah & Andrew Brown	Kristyn Conner	Debra D Einweck
Tamara Barnett	Stephen Brown	Chrystina Cook	Jonathan Elliott
Joan Baron	Ross Bryant	Jeanne & Doug Cook	Jane Evans & Gene Joseph
Ann Frances Barry	Aaron Bugaj	Barbara Coon	Keith & Tamarha Evert
Mary Bayless	Julie Burguiere	Catherine Crawford	Nancy Fahringer
Ginny & Tom Beal	Patricia & Richard Burns	Doug Crockett	Mima & Don Falk
Chloe Beauford & David Iwaniec	Shea Burns	Michelle Crow	Asha Farah
Cameron Becker	Budd & Judi Busche	Amy Crown	Michelle Ferman
Janice Bedford Hughes	Elizabeth Butler & Bill Gorrell	Andrew D'Arezzo	John & Dee Fife
Katie Belk-Arenas	Katharine & Nate Byerley	Nael Dagstani	Mary Finger
Kathleen & Ted Bell	Barbara Cain	Berniece Dahl	Heidi L Fisher
Kimberly & Anker Bell	Jeanne Calhoun & Ken Wiley	Kevin Dahl & Bam Miller	Linda & David Fisher
Mikaela Bell	Evan Canfield & Magdalena Moreno	John E Danloe	Samuel Flagler
AnnMarie Benz	Nancy Caroli	Christy Dargus	Lynn Fleischman
Claire Bernhard	James A Carpenter	Deborah Daun & Richard Fenwick	Jeri Fletcher

WMG Docent & Volunteer of the Year: Glenn Dunn

Glenn Dunn is not your average retiree. With an electrical engineering background and handyman certificate, Glenn was anxious to put his skills to work in retirement. In 2014, Glenn took his first rainwater harvesting class with WMG and was hooked. He became an active Co-op member in 2015 and eventually hosted his own workshop. Glenn took his involvement to the next level and became a WMG Docent in the inaugural 2015/2016 cohort. Glenn says what he loves most about being a WMG Docent and volunteer is being around the passionate staff. His incentive for volunteering at WMG is simply put, "To help people, that's it. WMG is going out into the community and educating people about water conservation, and I get to play a part in that." Glenn not only keeps the Living Lab in tip-top shape with regular handyman repair duties, but he also educates community members at outreach events. Plus, he recently designed and built WMG's state of the art chicken coop.



Glenn led the construction of WMG's chicken coop. Our hens are part of WMG's food forest and produce delicious eggs.

Karen Fogas	Penelope D Halpern	Lysistrata Hall & Erik Huntsinger	Laurel Lacher
Collin Forbes	Ruth Hammervold	Laura Hyneman	Anna Lands
Ann Forwood	Diane Hanover & Mark Andersson	Karen Hyun	Nancy Laney & Timothy Dennehy
Victoria & Mark Foster	Ethan Hansen	Terese & Peter Ireland	Jack Langley
Julie & Andy Frank	Trevor & Janet Hare	Jennifer Jacobs & Dean Crothers	Mark Larson
Nancy Freitas	Barbara Harrison	Will Jacobs	Kenneth Laux
Stephanie Furniss	Paula Hartgraves	Henry & Ruth Jacobson	Limell Lawson
Margot Garcia	Leo Hartke	Suzanne & George Jacoby	Cheryl Legan
Patricia Gehlen	Heather Haskell	Catherine Jacques	Jean Lewis
Maureen George	Kevin Haston	Herb Jalowsky	Victoria Ligon & Travis Smith
Kathy Gerst & Brian Hunter	Karin Have	Mara Jameson	Elaine Lim
Daniel R Gilbert	Tricia & Casey Hawkins	Derrick & Theresa Jepsen	Joan Lisi
Elise & Nathan Gladish	Elizabeth & Russel Healy	Mary Johns	Brian Lockhart
Jen Glass & Jay Meyers	Christina Heinle & John Carter	Bruce & Margaret Johnson	Jessica Bella Lynum
Niki Glen	Sharon Hendrickson	William Jones	Julie & Erik Lynum
Katrina Goering	Einav Henenson	Cynthia Jordan & John Corrin	Marsha Ma
Madeleine Golde & Norman Oslik	Anita Hess	Ken Kalin & Jane Erin	Deanna Mac Phail
Andrea Gomez	Heather Hiscox	Carl Kanun	Rachel Ann & James MacAdam
Anne Gondor	Gary Hix	Mary & James McCorry	Aleck MacKinnon
David Charles Goodrich	Larky Hodges	Carol I Keck	Melody Madden
Lynda Gordon	James Holley	Stephanie & Jim Keenan	Molly Kehr
Andrew Gorski	Scott C Honkonen	Molly Kehr	Dianne Maki-Sethi & Ravi Sethi
Stanley Gregory	Jean C Hood	Melissa Kerr	Hope Manross
Angela Greynolds	B. Joseph Howell	Camille Kershner	Rachel & Ernesto Manzo
Joshua Griffin	Susan Howers Walker	Kyria Kershner	Sarah Mar
Anna Groff & Brian Miller	Amy Hudson	Simrit Khalsa	Carol Margolis & Axel Golden
Sherry Groff	Stephen B Hughes Jr.	Yasmin Khan	Ann W Marsh-Marten
Amanda & Jason Grunden	Brenda Hughey	David Kiefer	Kris, Chuck & Mike Martin
Kristin Gunckel	Julie Hul	Madeline Kiser & Oscar Beita	Patrick & Loraine Martin
Lora May Hall	Anne Hunt	Shirley & Jim Kiser	Eva Martony
Barbara Hall & Dick Barber	Cheryl Hunter Houser	Christy & Joe Korinko	Marion M Matravrs
		Holli LaBrie	Tesa Mayorga

2016 Donors continued

Bill & Maria Maytorena	Linda Palumbo	Tina & Thomas Schlabach	Anna Tyler & Cara Slutter
Valerie McCaffrey	Shirley & Jeremy Papuga	Paula Schlusberg	Linda Tyler
Carolyn McCants	Gary Parcher	Jeff Schrader	Mark & Elizabeth Valentine-Day
Jodi McCloskey	Frances Peake & Louise Powell	Ivy Schwartz & Kathy Altman	Anne J Veague
Melissa & Samuel McClung	Lincoln Perino	Jan Schwartz & Judith McDaniel	Carolyn Vemulapalli
Jane McCreary	Liana Perrian	Patricia Shafer	Jorge Vergeli
Mark McCuen	Katya Peterson & Pierre Landau	Judith A Shappee	John E Villinski
Kathleen M McDaniel	Kayla Peterson	Juli Sheffer	Tekla Vines
Lisa & Michael McDaniel-Hutchings	Michael Phillips & Victoria Stahl	Robert Sheldon	Istvan Vizner
Patricia McDonald	Tamera Phillips	Marilyn Shenn	Nancy B Wall
Sharon McDonough-Means	Joy Phoenix	John Shepard & Carol Evans	Cynthia Wallace
Merrilee McFarland	Denise Piazza	Melissa Defoor & David Shipek	Kirsten & John Wallace
Kathleen McIntosh	Bruce Plenk & Patti Hartmann	Jeanne & Michael Shupe	Richard & Carole Walter
Sarah Tarver-Wahlquist & Robert McLane	Rodolfo Poe	Amit Sikdar	Charlie & Ronnika Ware
Richard P McNicholas	Steven Sherman Poe	Joseph Silins	Joan Warfield
Karen McWhirter	Wanda Poindexter	Marvin Silins	Karen Warren
Milo Meacham	Emily Creigh & Tom Poley	Marilyn K Simmons	Mary G Warren
Chris Meador	Lisa Polito	Nancy & Mark Siner	Nancy Warshawer & Bob Mellon
Kelly Meadows	Maureen Pollack & Sophie Pollack-Williams	Meredith & Perry Skeath	Shanna Weagle & John Jorgenson
Christian Meuli	Frank G Postillion	Gabriel Sleighter	Meg & Nick Webb
Christina N Micek	Alexander Prescott	Abel & Galen Smith	Matthew A Weber
Sandy & Bob Mier	Aaron Prohaska	Michele & Tim Smith	David Wegner
Wright Mier	Jennifer L Psillas	Eric Sophiea	Lori Wells
Joetta L Miller	Niccole Radhe	Mary Ann Sophy	Cletus Welsch
Julie Miller & Adam Schwartz	Gene & Jean Ramsay	Jennifer D Spademan	Chris & Wendy Wendel
Mary Miller-Crews	Michael Ray	Michele Spiller	Jessica West
Crystal R Mills	Kara L Raymond	Emma Stahl-Wert	Linda F West
Louise Misztal & Randy Serraglio	Shpherd Reed	Valerie Steen	Patricia & Richard West
Patrick Muldowney	Paul Reese	Donna Steinfeldt	Jesse Westad
Cathy Mullan	Ivy Pike & Geoff Reeves	James & Janice Stevenson	Allison Weyer
Shirley Muney	Kelly Rehm	Julie Stevenson	Gerry & Liz Whitaker
Dino & Elizabeth Murfee DeConcini	Alison Reichle	Catherine Stewart	Paul Whitby
Mark Murphy	Mary Reynolds	Arlene Stigen	Linda White & Mike Day
David Murray	Diana Rhoades & Michael Finkelstein	Susan Stokes	Cynthia K Whitehead
Stephen J Murray	Nancy Riccio	Dan & Jana Stormont	Lauren Whittaker
Joaquin Murrieta & Christian Aguilar	Barbara Richards	Maynhia & Eric Stott	Arnim Wiek
Brittany Myers	Laurie & Fraser Richards	Thomas M Sullivan	Margaret Wilch
Martin Nederpelt & Laura Smith-Nederpelt	Ralph Tom Richardson	Ileana & Charles Swanson	Jean Wilkening
Jenny Neeley & Sergio Avila	Brianne Rico	Janet Swanson	Aimee Williamson
Troy Neiman & Kylie Walzak	Jamie Roach	Tory & Jason Syracuse	Susan K Willis
Carrie Nelson	Ezra Roati	Michael Tamarack	Keren Winkelman
Maynard & Norie Nelson	Richard Roati & Susan Silverman	Justin Tang	Natasha Winnik
Karl Newell & Wieke de Boer	Stephanie Robertson	Ryan Tang	Matthew Winston
John F Newman	Kerry Rodgers	Jason A Tankersley	Seth Wisniewski Smith
Christine Nimitz	Ryan Charles Rogers	Walter Tannert	Charles & Nancy Wohlenberg
Maureen & Raymond Noeth	Elizabeth & William Ronstadt	Rebecca Tarantino	Harry Paul Wolfe
Carol B Nystuen	Richard Ross	Nancy Thias	Ryan Wood & Ericka Cero Wood
Carolyn O'Connor	Jonathan Rothschild & Karen Spiegel	Jo Thompson	Stephen Woodall
Rosaleen O'Gara	Jane Ruggill	Wayne Thompson	Beth & Bill Woodin
Beverly Olson	Brandon Ruiz	Jennifer & Shannon Thorn	Louis Woofenden
lylea Olson	Madeline J Ryder	Teri Thorpe	Michele Worthington
Ruth Omick	Michael Salkowski	Elizabeth Tobey & David Hostetler	Terry Wuterich
Brad Ong	Shay Salomon-Leonard & Nigel Valdez	Patty Todd	Gordon Yarrington
Nancy Orr	Amy Salvato & Eric Rudd	Cindy & Dan Tolleson	Jennifer Younger
Deborah Oslik	Sue Sanders	Julie Tomkins	Sara Zadorozny
Jennifer Oswald	Sherry Sass & Carlton Baker	Joanne Toms	Loraine Zagula
Anne B Padias	Kenneth Allen Schachter	Amanda Toohey	Robin E Zenger
Louis F Paff	David Schaub & Laura Laughran	Gaillbraith Toomey	Ross Zimmerman & Pamela Golden
	Susan & Mark Schildt	Carol Townsend & Charles Cole	Anne & Ron Zimmermann
		Gay W Townsend	Jesse Zoernig & Cecile McKee
		Clare & Jeffrey Turner	Linda Zveitel



Can Phoenix Become the Water Conservation Capital of the West?

WMG volunteer Einav Henenson instructs Wilson School students on identifying plants and proper pruning.

The effects of decisions made in Phoenix ripple outward through the state and the region. Arizona has a reputation for responsible water management dating to our landmark 1980 Groundwater Management Act, but now we are facing new challenges that call for “watershed” thinking.

Although we relish working one yard, one street, and one class at a time, our goal is to ultimately change the narrative of urban life from consumption to conservation and scarcity to surplus. That’s why Phoenix has the potential to become the water conservation capital of the West. Because nowhere else is it so hot, so dry, and home to so many people... and yet there is such potential for groundbreaking change in our relationship to our environment and resources.

At the Wilson School District in central Phoenix we maintain a rain garden that turned a parched heat island into an outdoor classroom and teaches students they can cool off in nature instead of cranking up the A/C.

More recently we worked alongside staff at Avondale City Hall to create a rain garden that will serve as a

community resource for anyone interested in discovering water harvesting and native landscaping for themselves.

We’re pressing state policy makers to stop asking “Where can we get more water?” and to start asking how we can conscientiously use the *renewable* water we have. WMG is one of the standard-bearers at the state level of this movement to modernize Arizona’s water laws to promote conservation, restoration, and fully evaluating the costs of “augmentation” (expensive projects that move water from one place to another).

Whatever the challenge—changing climate, establishment thinking, or urban heat islands—Watershed Management Group continues to promote innovative, sustainable solutions in this massive desert city. We’ve been in Phoenix for five years, and it may take decades more to change our water mindset. But we’re committed to the fight, and we’re committed to making metro Phoenix the water conservation capital of the West.

Trailblazing Water and Sanitation from Pueblitos Mexicanos to the Old Pueblo



When WMG's Cultural Ecologist, Joaquin Murrieta, stops by to help you install a rain garden or redesign your potable water system, you might find yourself energized to take on a much bigger project than you bargained for. In 2015, Joaquin was invited to San Miguel de Allende in central Mexico to give a talk about water harvesting to state officials. In the meeting, a municipal engineer got so interested in using harvested rainwater as a potable water supply that he decided to use it to supply an entire village.

Joaquin teaches water-conserving planting techniques at training in San Miguel de Allende.

WMG Training Inspires Potable Rainwater System in Guanajuato, Mexico

That engineer, Fernando Rosa, assisted the village of Derramadero, whose water supply for its 3,000 residents was in jeopardy. They were over-pumping their groundwater—which was also polluted with arsenic—and they were desperate for a new water supply.

Fernando kept in touch with Joaquin and showed him his plans to retrofit two city blocks with gutters to feed into their centralized water tank (500,000 liters). Using the filtration and distribution system already set up for their groundwater supply, and by adding simple guttering and first flush filtration systems, a few dozen homes on two city blocks could provide the water supply for the whole village! There was even enough to serve two adjacent villages, ultimately providing 7,000 people with a clean, sustainable water supply.

In September 2016, Joaquin was brought back to San Miguel de Allende by local non-profit, Salvemos El Río Laja. He conducted a training including a tour of the village of Derramadero, where Fernando gave a tour of their new potable rainwater system.

Agustin Madrigal, the director of Salvemos El Río Laja, first met Joaquin at a WMG training in La Paz, Mexico. He was inspired by the collaboration, and shared, "Joaquin's four-day training in San Miguel de Allende brought the participants' additional hope, strength and confidence as well as appropriate techniques to work hand in hand with the community. After this training, Río Laja installed 56 (5,000 liters/each) tanks to harvest the rain and put it to beneficial use in the community of Peña Rodada. Thanks WMG and Joaquin for this great collaboration!"



Innovating Composting Toilets in Tucson as a Model for the World

Joaquin often hosts international visitors at our Living Lab, and they are frequently captivated by our composting toilets and tippy taps. These simple technologies are often used in the developing world where there is no running water, but composting toilets can help any home or property to save water, reduce waste, and create a resource for our landscapes. WMG is pioneering solutions such as these: common sense, do-it-yourself "technologies" that we hope can rise above cultural stigmas, and help restore environments and improve livelihoods around the world.

Four years ago, WMG launched a pilot program to design and test site-built composting toilets. In December 2016, our two models were officially approved as "reference designs" by the Arizona Department of Environmental Quality, so anyone in Arizona can permit and build them! This is the first site-built composting toilet reference design approved anywhere in the U.S.

By summer 2017, both composting toilet systems will be available to view and use at WMG's Living Lab. Consider putting in an order—WMG is now offering composting toilets kits pre-built by our crew, ready to be installed at your home. Check out the designs and learn more through WMG's online resource library. Go to watershedmg.org/learn/resource-library, and click on the "composting toilet" filter.

Testing out the tippy tap at water harvesting training in San Miguel de Allende.





Docent Amy Salvato and intern Kat Henricks monitor plant growth at the Living Lab.

Science at WMG's Living Lab

WMG's Living Lab and Learning Center is quickly becoming a science hub for people, plants, and the community. In 2016, we launched a monitoring program with WMG docents tracking water use, plant growth, wildlife, and food and compost production on our campus. Docents enter their data weekly into our online database and contribute to national databases with citizen science tools like E-bird and the National Phenology Network.

Last year, WMG was one of five grantees nationwide out of 170 applicants to receive NOAA's Environmental Literacy Grant. WMG is partnering with Arizona Project WET to address threats from extreme heat, drought, and flooding by building environmental literacy among 6th-12th grade teachers, students, and the public. The Living Lab is one of the primary teaching tools for this program, and our monitoring data is now available through an online platform for students to use in their own research projects.

Our University of Arizona (UA) interns also assist with monitoring during their year-long WaterWRLD (water as a platform for Workforce Readiness and Leadership Development) program. One of our interns, Jessica Lynum,

helped write a grant funded by Arizona State Forestry to expand our food forest and monitor its growth, water use, and production. We're keeping a log of everything we harvest and using a weigh station to quantify the amount of food we've produced on campus with local, renewable water. We can't wait to track how our production changes over time as our food forest matures!

One of our more sophisticated monitoring programs is run by a UA grad student, Anthony Luketick, who has set up cameras and sap flow sensors to monitor the greenness and moisture fluxes of our native Velvet Mesquite trees. This two-year study will provide valuable information on how rainwater harvesting impacts tree growth and will contribute to emerging research on urban water harvesting.

We've just scratched the surface of what the Living Lab can offer as a resource to study how humans and nature interact. Our campus will continue to grow as a model of how humans can manage natural resources to enhance our environment – increasing diversity, food production, and aquifer recharge.



Co-op Member Spotlight: Connie Carder

Connie Carder is a new Co-op member turned enthusiastic advocate. She has been involved with the WMG Co-op for just a year but hit the ground running by hosting four workshops at her home. Connie shared what WMG's Green Living Co-op means to her:

Why did you decide to work with WMG's Co-op program? My main motivation was flooding on my back porch every time it rained. My son was doing an internship with WMG at the time and encouraged me to get involved with the Co-op. In June 2016 my son and I participated in one workshop together, and I was able to use a lot of his volunteer hours. I hosted four workshops at my home to completely transform my front and back yards.

What would you tell interested Co-op members? Don't hesitate to get involved. You will learn so much, you will meet wonderful people, and you will feel more connected to your community. Plus, there's an amazing feeling of accomplishment once the job is completed!

Why are you passionate about the Co-op? The Co-op has expanded my interest in gardening immensely. While I always have enjoyed gardening, the Co-op has really ignited my appreciation for our native plants and what I can do to conserve water and raise the aquifer. The Co-op has really opened up my eyes to how much more everyone could, and should, be doing to help our community.



Grant & Foundation Funding

- | | | |
|---|--|---|
| Alcoa Foundation | Desert Diamond Casino & Entertainment | Norcross Wildlife Foundation |
| Amaterra | Fondo Mexicano para la Conservación de la Naturaleza, A.C. | Pasqua Yaqui Tribe |
| American Rivers | Gulf Coast Community Foundation | Salt River Project |
| Arizona Community Foundation | Jeff & Connie Woodman Foundation | Tucson Water |
| Arizona State Parks | Kaimas Foundation | University of Arizona - School of Natural Resources and the Environment |
| Arizona State Forestry | Kimley-Horn Foundation | U.S. Fish and Wildlife Service |
| Border Environment Cooperation Commission | Long Realty Cares Foundation | Walton Family Foundation |
| Central Arizona Project | National Fish and Wildlife Foundation | |

Business Sponsors

- | | | |
|---------------------------------|---------------------------------|---|
| 5 Points Market and Restaurant | Habitation Realty | Stantec |
| Ace Hardware - 6959 E 22nd St | Hayden Flour Mills | Storyteller Public Relations |
| CB Richard Ellis | KXCI Community Radio | Summit Hut |
| Cheri's Desert Harvest | Lil' John's Excavating | Technicians for Sustainability/Sunpower |
| Civano Nursery | Native Seeds/SEARCH | TerraSophia LLC |
| Creative Pools and Spas | Natural Grocers | The Hatch Team |
| Conserve to Enhance | PayPal Gives | Time Market |
| EcoSense Sustainable Landscapes | Peddler on the Path | Tobi |
| Edible Baja Arizona | Pima Association of Governments | Trader Joe's |
| Epic Cafe | Premier Printing | Tucson Electric Power |
| Exo Roast Co | Pueblo Vida Brewing Company | Tucson Hop Shop |
| Fairfax Companies | Queen Creek Olive Mill | Tucson Water |
| Food Conspiracy Co-op | Sprinkler World | VIP Mortgage Inc |
| Golden Rule Dairy | Sprouts Farmers Market | |

Partners

Tucson Region Partners

- | | | |
|---|--------------------------------------|---|
| ACE Charter High School | Conserve to Enhance | Pima County Dept of Environmental Quality |
| American Rivers | Crow Communications Inc | Pima County Regional Flood Control District |
| Arizona Department of Environmental Quality | Earth Economics | Sierra Club - Rincon Group |
| Arizona Project WET | Ecosystem Economics | Sky Island Alliance |
| Arizona State Forestry | Edible Baja Arizona | Skyline Country Club |
| Arizona-Sonora Desert Museum | The Fairfax Companies | The Sonoran Institute |
| Borderlands Brewing Co | Green Communities Canada | Stantec |
| Center for Biological Diversity | Hidden Valley HOA | Technicians for Sustainability |
| Changemaker High School | hydroGEOPHYSICS | Town of Oro Valley |
| Cienega Watershed Partnership | Lil' John Excavating | Tucson Association of Realtors |
| City of Tucson Department of Transportation | Living Streets Alliance | Tucson Audubon Society |
| City of Tucson Mayor's Office | Manzo Elementary School | Tucson Clean and Beautiful |
| City of Tucson Parks and Recreation | Meow Media | Tucson Mountains Association |
| City of Tucson, Ward 1 Council Office | Metro Water | Tucson Water |
| City of Tucson, Ward 2 Council Office | National Park Service | UA WaterWRLD |
| City of Tucson, Ward 3 Council Office | Native Seeds/SEARCH | University of Arizona Bureau of Applied Research in Anthropology (Dr. Diane Austin) |
| City of Tucson, Ward 6 Council Office | Palo Verde Neighborhood | University of Arizona Water Resources Research Center |
| Coalition for Sonoran Desert Protection | Peter Howell Elementary | US-Fish and Wildlife Service |
| Community Food Bank of Southern Arizona | Physicians for Social Responsibility | |
| Community Water Coalition | Pima Association of Governments | |
| | Pima County | |

Phoenix Region Partners

- | | | |
|---|--|--|
| Arizona State University School of Sustainability - Decision Center for a Desert City | City of Phoenix Parks and Recreation | Mother Bunch Brewing |
| City of Avondale | City of Phoenix Water Services Department | National Park Service - Tonto National Monument |
| City of Glendale | City of Tempe | Primera Iglesia Metodista Unida |
| City of Mesa | Desert Botanical Garden | Sustainable Cities Network Arizona State University Global Institute of Sustainability |
| City of Phoenix Neighborhood Services Department | Flood Control District of Maricopa County | The Nature Conservancy - Phoenix |
| | Human Services Campus | Trees Matter |
| | International Rescue Committee Phoenix | Wilson School District |
| | Julie Ann Wrigley Global Institute of Sustainability | |
| | Mesa Urban Garden | |

Financial Report

Revenue and Support

Program income	\$ 730,604
Grants	\$ 149,310
Donations	\$ 259,111
Total support & revenue	\$ 1,139,025

Expenses

Program services	
Community Water Coalition	\$ 6,091
Fee for service	\$ 69,529
Green Living Co-op	\$ 457,007
Greening Urban Watersheds (Demonstration Sites, Green Streets, Schoolyard, Soil Stewards)	\$ 270,268
Living Lab & Learning Center	\$ 41,780
River Run Network (50 year program)	\$ 57,432
Watershed Harvesting Certification	\$ 18,967
Total Program services	\$ 921,074

Admin and Fundraising

Administrative	\$ 77,057
Fundraising	\$ 34,572
Total supporting services	\$ 111,629

Total Expenses	\$ 1,032,703
-----------------------	---------------------

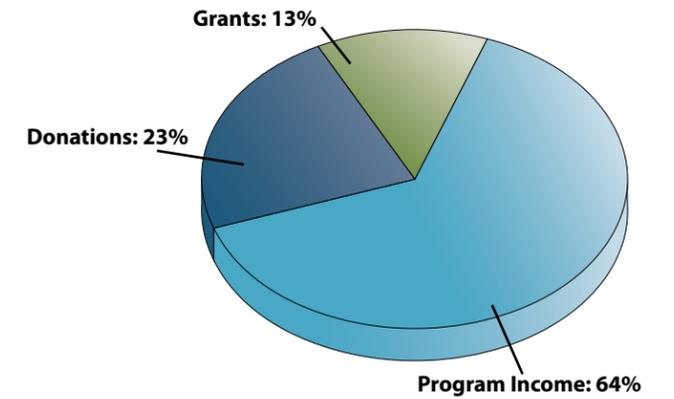
*Report for Fiscal Year of Jan 1 - Dec 31, 2016

Financial Summary

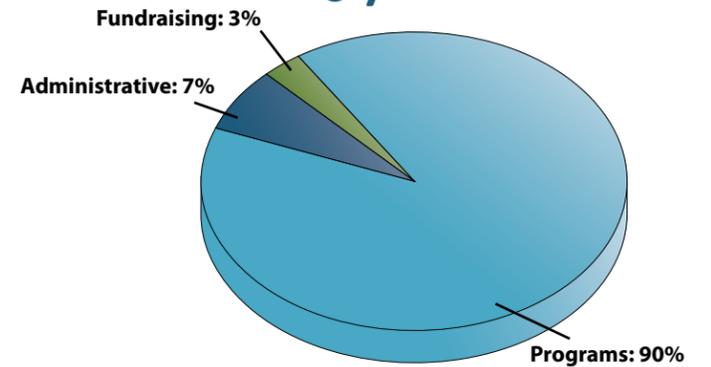
WMG donors funded WMG's core programs as well as helped launch the River Run Network, expand educational programs at the Living Lab, and fund work with low-income communities and schools. In 2016 we successfully transitioned from a break even financial model to a profit model, ending the year on solid footing to start building a cash reserve. The board of directors helped create Friends of WMG, LLC, working with seven major donors to provide a low-cost loan to WMG to finish building out the Living Lab and Learning Center.

Docent Dan Stormont and volunteer Emily Rockey help out at WMG's Edible Shade Mesquite Pancake Breakfast.

Revenue & Support



Expenses



Other Western Partners

- City of Las Cruces
- City of Flagstaff
- City of Sierra Vista, Arizona
- Cochise Water Project
- Stream Dynamics, Inc

International Partners

- US-Forest Service International
- University of Arizona - College of Education Niparaja
- Border Environmental Cooperation Commission - BECC
- Fondo Mexicano para la Conservacion de la Naturaleza - FMCN
- Instituto de Ecologia del Estado de Guanajuato

- Salvemos al Río Laja, A.C.
- Fundacion Manantlan para la Biodiversidad de Occidente - MABIO
- Comisión de Cuenca del Río Ayuquila-Armería
- Center for Latin American Studies - University of Arizona
- IMIP-Nogales, Sonora. Mexico
- IMPLAN-Hermosillo, Sonora. Mexico
- CEDES-Hermosillo, Sonora. Mexico



1137 N Dodge Blvd
Tucson, AZ 85716

We Are One Watershed

