SPRING 2013

A WATERSHED MOMENT

A Newsletter of Watershed Management Group



watershedmg.org



Students in a recent Water Harvesting Certification course learned skills to help them build green businesses.

10 Things That Might Surprise You About WMG

By Tory Syracuse, Associate Director

In celebration of our 10-year anniversary, here are 10 things we're doing that might surprise you. The depth and breadth of our work would not be possible without you: our basin-digging, compost-turning, donation-giving supporters!

- **1. Driving a Road-Design Revolution:** We're collaborating with engineers and policymakers to change the way roadways are designed so that our streets will always be built to capture stormwater. This means creating safer, more enjoyable streets for pedestrians and bicyclists, while growing shade, wildlife habitat, and real estate values in our community. **See page 5 for the full story.**
- **2. Saving You Money through Rebates**: Along with all the subsidies and grant funds WMG has brought into the communities we serve, we played an essential role in creating Tucson's rainwater harvesting rebate. This generous rebate covers 50% of project costs up to \$2,000. See page 3 to learn the secrets of our success.
- **3. Empowering Green Entrepreneurs to Succeed:** Looking for someone to install a cistern in your yard, put in a greywater system, or restore the stream behind

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Ten Years of Building Prosperity with You

It's hard to believe it's been ten years since the founders of Watershed Management Group got together. Our mission, to develop and implement community-based solutions to ensure the long-term prosperity of people and health of the environment, started as a shared passion with five founders. Ten years

later, we have reached hundreds of thousands of people across the globe.

Despite what traditional economics or the media may tell you, we believe environmental health and prosperous communities go hand in hand, and their intersection is the heart of our work. Whether we have helped you harvest rainwater, gain job skills, or green your neighborhood, we hope we've improved your life on a deeper level through new relationships, opportunities, and life-changing knowledge.

Why do we choose to organize around watersheds? A watershed is an area of land in which all water drains to a common outlet, such as a river, creating a natural unifier where water draws together all life – soil, plants, animals, and people. What better space to create solutions to today's complex problems?

A Watershed Moment is a critical point that marks a division or a change of course; a turning point; a pivotal moment. Over the last ten years, you have helped us create many watershed moments; making many small shifts to become part of a bigger change that leads to prosperity for us all.

Lisa Shipek

Executive Director



Get to Know...Kieran Sikdar, WMG Board Member

Role: Board Chair

Profession: Environmental Systems Engineer & Consultant, Self-Employed

Active Tucson Co-op Member: Yard makeover, Fall 2012

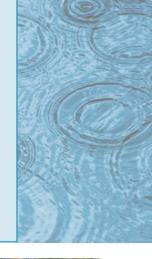
Why He's Involved: "I'm passionate about WMG because of the skills and community-based projects the organization provides to enhance the sustainability and resilience of the Tucson region. WMG is critical to creating a healthy desert community that can thrive in the face of pressures from climate change and growth."



CREATING CONSERVATION FUNDING FOR YOU:

Rebates, Subsidies, and Community Grants

Conserving water and energy and greening our yards and neighborhoods is something we can all get behind, right? But as you know, things often fall apart somewhere between our passions, ideas, and actually doing something. That's where Watershed Management Group steps in to create catalysts for conservation.



By Lisa Shipek, Executive Director

Doing the right thing should not be cost prohibitive.

Over the last six years, we have applied for many grants enabling us to offer subsidies to you and many others. We've provided \$250 to \$1,000 subsidies for rain gardens, greywater systems, cisterns, green infrastructure, chicken coops and composting toilets in Arizona and Southern California. Just in 2012, we subsidized 15 composting toilets, 20 green infrastructure systems along neighborhood streets, and 30 water harvesting systems.



Volunteers install a subsidized greywater system through a WMG workshop in Santa Barbara, CA.

Imagine if these subsidies could be offered consistently city-wide.

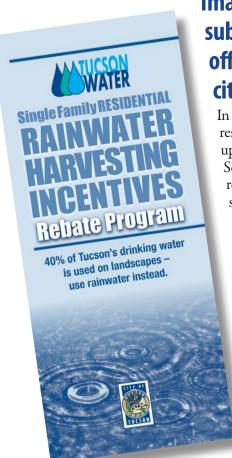
In 2012, Tucson unveiled a very comprehensive rainwater harvesting rebate. Tucson residents are reimbursed 50 percent of the cost of the rainwater harvesting system, up to \$2,000, if their design has the capacity to capture a one-inch rainfall. WMG Senior Program Manager Catlow Shipek was one of the principal authors of the rebate and part of a committee that included staff member Brad Lancaster and several people trained through our Water Harvesting Certification.

As government and foundation funding dwindles, we have been working with partners (Sonoran Institute and University of Arizona Water Resources Research Center) to create a new funding source for urban watershed restoration. This program, called Conserve to Enhance, helps individuals conserve water

and donate their savings back to a conservation fund. We worked with the Tucson water utility to designate a checkbox on the water bill for the Conserve to Enhance fund. All money donated is distributed back to the community as small grants to neighborhood groups for river and wash restoration and green infrastructure projects.

conserve to enhance

Tucson Water customers can receive up to \$2,000 to offset the cost of a rainwater harvesting system through the Rainwater Harvesting Rebate Program, which WMG staff helped to develop.





Lonnie and Jeff Woodman

Q: How did you get involved with WMG?

A: We discovered WMG about five years ago. We don't just like to fling money out there, so we always research organizations before we start giving. We started out with WMG by volunteering and had an incredibly positive experience. We live in Houston full time, but we come to

Tucson throughout the year and plan to live here someday. We love Tucson.

Q: Why do you give money to support WMG's mission?

We support WMG because of the impact they have in the community. We love the Co-op Program and the ripple effect that's created when people volunteer, participate, engage fully, and then share that work with others.

We also like the fact that WMG operates on many scales: individuals, neighborhoods, cities, and countries around the world. They start in one little neighborhood and then it ripples out.



Jeff and Connie Woodman with their granddaughter, Kali.

Q: Why is individual philanthropy important to an organization like WMG?

A: Individual philanthropy on any scale allows WMG to leverage those donations to do much more work. Individual giving provides unrestricted dollars that can be used where they are most needed. A lot of foundation and government grants don't cover overhead costs, staffing, and other administrative costs. The organization can't implement its programs without that freedom. WMG simply can't exist without individual giving.

Q: What's the bottom line for you as donors?

A: We really love Tucson and we believe we need to do everything we can to make sure Tucson is a viable place to continue living! WMG is doing that and we want to support it!

A SPECIAL THANK YOU

to our Most Loyal Donors-Giving Since 2007!

Kim and Jim Afinowich Barbara Buono Patricia DeWitt Tamara and Keith Evert Jill and Paul Grimes Karen Hyun Henry and Ruth Jacobson Terese and Peter Ireland Donna Lines Emily Creigh and Tom Poley Martha Retallick Richard Roati David Shipek and Melissa DeFoor Ed Thompson Jo Thompson Gay Townsend Susan Willis

DRIVING A ROAD-DESIGN REVOLUTION

WMG Policy, Design, and On-the-Ground Work Sets New Standards for Green Infrastructure

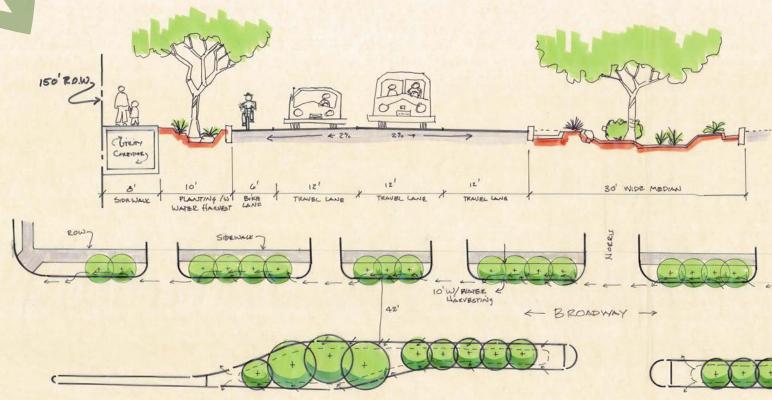
By Tory Syracuse, Associate Director

Did you know that in many urban areas, nearly half the land is covered by pavement? Much of that pavement is for roadways, and recently WMG has taken the lead in re-designing streets to do much more than transport cars. We want our roads to work for us by harvesting stormwater, treating pollutants, and creating greenways to cool our cities and provide comfortable places to walk and bike.

In 2012, supported by a grant from the Arizona State Forestry Department, WMG began working with the City of Tucson to develop a Green Streets policy for city roadways. We convened a working group of city staff, private-sector experts, and non-profit representatives. Our goal: to craft a policy that would require new roadway construction and re-construction to include green infrastructure design elements.

Under the policy, stormwater harvesting would be designed into projects from the very beginning, sparking the steady transformation of Tucson's streets from sun-baked flood zones to vegetated green corridors. After nearly a year of hard work and collaboration, the Green Streets policy is slated for review by Tucson's Mayor and City Council this spring.

Beyond Tucson, we've collaborated with cities across Arizona to develop standard designs and demonstration sites for green infrastructure retrofits. We are literally paving the way for these practices to be utilized at a city-wide scale. Our *Green Infrastructure for Southwestern Neighborhoods* manual is being used as a resource in cities across the West. We've received reports from partners in Arizona and California that they've been using our manual to work with their home cities to craft their own policies and designs. With your support, we'll continue to spur this revolution one block, and one community, at a time.



Thanks to You:



Fun-Filled Statistics from the Last 10 Years

48 CITIES

in the U.S. and abroad

are home to a Certified Water Harvesting Practitioner

2/3 OF VOLUNTEERS

who attend Green Streets workshops

subsequently implement green infrastructure features at their homes*

2 MILLION GALLONS

of water have been saved

by 60 participants in the first two years of Tucson's Conserve to Enhance program

22,500 HOURS

have been donated

by workshop volunteers

23 COMMUNITIES

in the U.S. and abroad

have at least one WMG demonstration site

4,000 CHILDREN

in India and Burkina Faso

have learned to build and wash their hands with tippy-taps

3,300 POUNDS OF POOP

diverted from the waste stream

and composted in the first year of the Soil Stewards program

600 DONORS

just like you have invested

nearly \$900,000 in WMG!

HEALTHY FARMERS MEANS FOOD FOR FAMILIES IN INDIA, AFRICA:

WMG's International Programs Tackle Illnesses that Threaten Farmers' Livelihoods

By Sowmya Somnath, Water, Sanitation, and Hygiene Program Director

Numero Un lives in northern Burkina Faso. He is a subsistence farmer and has 14 children. What does he need to grow his crops and provide for his family? Good soil, sun, water, seeds? Yes. But he also needs his health. When you or I get sick, we're likely able to take paid days off or fall back on disability insurance. But when Numero Un is too sick to plow a field or pull a harvest, his livelihood – his family's food – is reduced, and his ability to take care of his family is decreased.

Unsafe water and inadequate sanitation claim the lives of over 3 million people and cause sickness in tens of millions every year. This is one of the reasons WMG partners with rural communities in India and West Africa to safeguard drinking water, ensure proper sanitation, and promote healthy hygiene.

For example, we use tippy taps to promote hand washing with soap, which can cut diarrheal incidence in half. We also teach people to build and use low-cost and low-tech sand filters for drinking water, as well as latrine promotion and construction to stop the spread of pathogens.

In the last year, we started a program constructing simple, inexpensive improved cookstoves that decrease the health hazards of cooking over open fires. All of these programs are geared toward keeping farmers like Numero Un healthy so that they can provide for their families.



Numero Un, a subsistence farmer in Burkina Faso, learned to build sand filters and tippytaps through WMG workshops.



Lalitha shows off the improved cookstove she made at a WMG workshop.



Prescott College students in the Urban Stream Restoration course enjoy a locally-sourced meal cooked up by WMG Chef-in-Residence Rani Olson.

10 Things (continued from p. 1)

your house? WMG's green job training programs are teaching these skills, and many more, to entrepreneurs all over the country. Through our Water Harvesting Certification and Watershed Technical Trainings, we're focused on sharing our expertise so that others –and your local economy – can benefit. Ready to sign up for a training? Visit watershedmg.org/tech-trainings.

- **4. Promoting Farm to Table:** Up-and-coming chef Rani Olson has spent the last year whipping up amazing meals for our trainings and events through WMG's Chef-in-Residence program. The program is a tangible (and delicious!) way to put our money where our mouths are. By purchasing food directly from local farmers and producers, we are supporting responsible land stewardship, a reduction in energy to transport food, and boosting the local economy.
- **5. Transforming Poop into a Soil Resource Around the World:** Human waste has long been used as a soil resource. But with modern sanitation, we've lost our connection to the natural cycle that turns our "waste" into soil nutrients. So we're working from Arizona to Africa to restore that connection and transform poop into "humanure" that can amend soil to grow fruit and native trees. Composting toilets installed in Tucson allow our "Soil Stewards" to stop using clean drinking water to dispose of urine and excrement. And our international programs help people with limited (or no) access to sanitation to build and use culturally appropriate composting toilets to protect their health and environment. Learn to build your own composting toilet at watershedmg.org/soil-stewards.
- 6. Breaking the Language Barrier: Until recently, Spanish speakers had very few water harvesting resources to choose from. So few, that when we translated our Water Harvesting Certification manual into Spanish, we had to devise words like vasos de captación (basins) and bermas (berms), and create an English to Spanish water harvesting glossary. We held our first Spanishlanguage course in November 2011. Check out watershedmg.org/borderregion for more on our work in the Arizona-Sonora Border Region.
- 7. Banishing Gravel and Building Rain Gardens: Landscapes covered with gravel and some lonesome cacti have become common in the West in an attempt to conserve water. Unfortunately, these landscapes do



Members of WMG's Phoenix Green Living Co-op relax in a newly transformed front yard.

That Might Surprise You About WMG

nothing to promote healthy watersheds. But dig a shallow basin and add some organic mulch and mix of native plants, and what do you get? A lush landscape that captures the rain, saves water and returns nature to our cities. Through education and policy work we're changing the way people see and build their landscapes, shifting from water-starved gravel-scapes to densely planted, gorgeous rain-scapes. If you're ready to build your own rain garden, our Green Living Co-op can help: watershedmg.org/co-op.

8. Building Coalitions to Renew Our Rivers:

We've joined forces with more than a dozen organizations in Tucson to form the Community Water Coalition. The Coalition is working to build a groundswell of support for local water policy that can sustain healthy ecosystems. This includes everyday actions like writing letters and meeting with policy makers. We're also looking at the big picture by crafting campaigns to restore flowing water and habitat to our desert rivers. Want to learn how you can join the movement? Visit communitywatercoalition.org.

9. Increasing Health to Help Subsistence Farmers: If you're a subsistence farmer in rural India or Africa, every working hour counts. That's why much of WMG's work in these parts of the world is focused on ensuring the health of farmers and their families. Having basics like clean water and more efficient cookstoves along with promoting behavior change through hand washing goes a long way to ensure family members can be working or at school instead of sick at home. See page 7 for the full story.

10. Finding New Funds for Greening Neighborhoods: Green infrastructure is growing block-by-block in Tucson and in cities throughout the US. And now, thanks to WMG's Conserve to Enhance program, when you check the box on your Tucson Water bill to contribute to riparian restoration, your contribution will go back to the community to fund green infrastructure and urban river and wash restoration projects. See page 3 for the full story.



The Community Water Coalition is working to restore flows to desert rivers. You can help!



Children in Burkina Faso learn to use a sand filter for their drinking water at a WMG workshop.



Habitat for Humanity

Interview with JJ Swinney, Habitat Construction Manager

Habitat for Humanity Tucson builds more than twenty brand new houses in Tucson each year in cooperation with homeowners and volunteers. In the past few years, the organization decided to "go green" in both construction and landscaping. Thanks to a partnership with Watershed Management Group, all new Habitat houses have passive water harvesting and greywater features to enhance the landscape and reduce water and utility bills.





Volunteers learn by doing at a WMG workshop to construct a greywater system at a new Habitat for Humanity home. "Working with WMG has completely and forever changed the way we build houses in Tucson," says JJ Swinney, Habitat Tucson Construction Manager. He is walking down a street in a mixed development with some Habitat homes and some commercial homes.

"Look at both sides of the street," he says, "One side was built five years ago without WMG's help, while the other side was built two years ago using WMG's design, methods, and training.

The difference is astonishing."

Two years ago, Habitat and WMG partnered to build about ten homes in this neighborhood. Habitat homeowners, staff and volunteers received training and practical experience in passive water harvesting and greywater installation. JJ points out that the WMG-assisted homes have more productive tree growth, additional shade, and use less water, leading to a more sustainable and affordable home for Habitat homeowners. The homes also have fewer repair and maintenance issues.

These changes to Habitat properties improve homeowners' enjoyment and pride in their homes and help draw interest from non-Habitat homeowners in the neighborhood.

"Neighbors have definitely noticed these houses and shown interest in the water harvesting features. Now you see neighbors utilizing these methods and getting great results," says JJ.

Most importantly, WMG is playing an important role in helping Habitat families move from poverty to prosperity by using simple, affordable, easy-to-maintain systems that improve their quality of life.

Ten Years with Watershed Management Group



2002

Founders meet through the University of Arizona

2003

 WMG becomes 501c3 non-profit organization

2003 - 2005

 Create watershed restoration program for small land owners in Southern Arizona

2004

 WMG Founders Jared Buono and Sowmya Somnath lead Engineers Without Borders drinking water project in Ghana

2005

 WMG founders Lisa and Catlow Shipek work with watershed group in Costa Rica to create spring protection demonstration project

2006

- Lisa Shipek becomes volunteer Executive Director, WMG's first staff member
- WMG receives first grant to develop 6 water harvesting demonstration sites in Tucson

2007

- Run 16 public water harvesting workshops in Tucson including first Earth Day event with 50 volunteers
- Schoolyard Water Education program launched in Tucson
- Workshop series at Tucson's Ward 3
 Council Office: idea for Co-op sparked through conversations with volunteers





- Start Tucson Green Living Co-op; 1st year has 70 members and 12 workshops
- Green Streets program emerges through two-year stormwater harvesting project with Rincon Heights neighborhood and federal water quality funding
- First job training program 10-month Water Harvesting Apprenticeship, a bilingual program with southern Tucson partner Tierra y Libertad



2009

- Neighborhood-scale green infrastructure model created in Tucson, transforming 10 city blocks through 12 workshops with 200 volunteers. Project wins "Making Arizona Competitive in the 21st Century Award" from American Planning Association.
- India office established by founders Jared Buono and Sowmya Somnath after year-long needs assessment
- Water Harvesting Certification curriculum and exam created; first training run with 20 students
- Schoolyard program gets funding boost from U.S. Fish and Wildlife Service, funding two school projects, including Manzo Elementary in Tucson



2010

- Partner with Habitat for Humanity to incorporate greywater into new buildings
- Donors fund watershed training to assist villagers in Burkina Faso, Africa
- Run 75 hands-on workshops creating dozens of water harvesting, green infrastructure, and native habitat sites
- Publish Green Infrastructure for Southwestern Neighborhoods manual, available for free download
- EPA funds Green Streets program; WMG develops 6 green infrastructure standard designs with City of Tucson
- Run first program in **Phoenix** Water Harvesting Certification
- Conserve to Enhance pilot launched with 60 participants in partnership with Sonoran Institute and UA Water Resources Research Center



2012

- Inherit property from Marguerite Fisher to become WMG's Living Lab and Learning Center
- Work with **five Arizona cities** creating Green Infrastructure Demonstration sites
- Broaden environmental education through Soil Stewards program,
- WMG takes on toilets. Build and monitor 24 pilot composting toilets in Tucson and 25 latrines in India through community programs
- Selected as Top Nonprofit by Great Nonprofits (greatnonprofits.org)
- Record year for Green Living Co-op: 66 workshops in 3 cities, with 2,770 volunteer hours logged
- Conserve to Enhance pilot wraps up, with participants saving over 2 million gallons of water, installing 30 water harvesting systems, and donating \$2,000 to restoration projects
- Created Drinking Water program in India through spring box and watershed restoration with 3 villages

2011

- Merge with Phoenix non-profit Arizona Homegrown Solutions to open Phoenix branch, starting Green Living Co-op and Green Streets projects
- Start program in Santa Barbara offering water harvesting presentations, hands-on workshops, and professional trainings
- Start U.S.-Mexico border community program, including running 9-day Water Harvesting Certification in Spanish
- Green Streets Neighborhood Leaders program trains
 15 people from 6 neighborhoods and implements
 12 new Green Streets projects in Tucson
- Initiate the Community Water Coalition with partners and house Coalition Coordinator as staff at WMG
- Create School Handwashing and Watershed Restoration program in India
- 380 Co-op members, 32 workshops
- Win YouTube DoGooder Award with "It's In Your Hands" video on sanitation. Over 100,000 views.





Why Prosperity? AN INTERVIEW WITH WMG FOUNDERS

Q: WMG's mission is to develop 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. What motivated you to include "ensure the long-term prosperity of people" in the mission of WMG?



Catlow Shipek teaches professionals how to design and install rainwater catchment tanks.

Jared: We didn't want to be just an *environmental* organization, but a people organization. In the beginning, we became the water-harvesting people, but it was always our intention to be much more than that. One of our goals was the elimination of poverty through empowerment, to improve the quality of life and sustainability of the environment.

Catlow: This dual focus of people and the environment is essential. In order to develop sustainable and effective environmental stewardship, you have to engage people and make it relevant to them.

Lisa: Prosperity is about the connection between people's livelihoods and the vitality of the environment. Prosperity is the opposite of poverty. It's where we're headed.

Q: How do you see this focus on prosperity manifesting in your work?

Lisa: The basis of many of our programs is to create a healthier environment for people in urban areas. Most environmental work is focused on wild, pristine environments or rural areas, preserving open space and

biodiversity. But half of the world's population lives in urban areas where the quality of the environment is not great. When we improve urban environments, we improve the quality of life for people: access to clean water and air, fresh food, and green spaces. Along with healthier and happier people, our cities will have more opportunities to flourish as places to live and work.

Jared: Prosperity is also about creating and enhancing community, as we do in the Green Streets and Co-op Programs. People come out of their homes to workshops, and they have never even met their neighbors. Now they are working together to improve each other's homes, their streets, and their environment.



Lisa Shipek's dance lecture was a highlight of WMG's green infrastructure conference in 2012.

Lisa and Catlow Shipek, Jared Buono, and Sowmya Somnath



Sowmya Somnath teaches villagers in Burkina Faso a hand washing song.

Q: How does this focus on prosperity of people differentiate WMG from other environmental groups?

Lisa: We help people see that they can take meaningful action regardless of their economic circumstances. We offer resources that are accessible and affordable for everyone: courses and materials in multiple languages, scholarships. We partner with organizations like homeless shelters, job re-entry programs, and food banks. I think this makes us different.

Catlow: People all over the world are searching for ways to improve their lives and reduce environmental destruction. Many environmental movements focus on the doom and gloom of climate change, the destruction of the earth or species. This creates a feeling that the problem is too big to tackle.

We teach people that they can take meaningful action that will make a positive difference for the environment – and for their own lives.

Jared: The bottom line is there is no dichotomy between environmental conservation and people living well. We must have a healthy environment as human beings in order to prosper.

Q: What are the parallels between the prosperity work WMG does in the U.S. and internationally?

Sowmya: It's the community-led, participatory approach to sustainability and greater prosperity. We work *with people*, as opposed to *telling them what they should do*. That's what's needed to truly create a lasting impact.

Jared: In our international work, poverty is more of a rural phenomenon. We empower people to improve agriculture, establish greater public health and sanitation, and secure their livelihoods through increased income. We support people's ability to mitigate the vulnerability of poverty and increase their adaptability and resilience. It's still about prosperity; it just requires a different approach.



Jared Buono is honored by an Indian village after completing a spring restoration project.



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Enjoy our first print edition of A WATERSHED MOMENT!

