8th Annual Homescape Harvest Tour

Saturday, October 19, 2019 10am-3pm





Proceeds support WMG's Green-Living Co-op program. Watershedmg.org



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8th Annual Homescape Harvest Tour

Watershed Management Group and the Grand Canvon Chapter of the Sierra Club are pleased to welcome you to the 8th Annual Homescape Harvest Tour. To spark your sustainable-living inspiration, we're showcasing 11 homes and three schools – along with the not-to-bemissed WMG Living Lab & Learning Center! This year, 80 percent of the tour sites harvest solar energy and 100 percent of the sites harvest water. Using renewable resources, such as solar and rainwater, is critical to ensuring that we quell rising temperatures and climate patterns that impact Tucson's water security. Harvesting water and solar energy is also vital to our community's vision of restoring Tucson's seven desert rivers.

One of the biggest and least talked about environmental benefits of solar is the reduction of the massive amounts of water needed to cool natural gas, coal-fired plants, and nuclear facilities. The Homescape Harvest Tour offers models of how to power your home with water-saving solar energy, and features unique and beautiful examples of water-harvesting systems that support gardens, edible forests, and wildlife habitat, along with supporting shade trees that help cool down our neighborhoods. Water-harvesting systems of various scales are on display and inform how buildings of all sizes can help reduce the use of groundwater and reliance on Colorado River water. There's even some examples of how to get completely off the grid!

The majority of these sites are hosted by people who participated in the Watershed Management Group's Green Living Co-op; all of the schools were part of WMG's Schoolyard Program. The Green Living Co-op works with homeowners and renters to install water-harvesting systems at their homes; WMG's Schoolvard Program engages K-12 schools to create demonstration sites at the neighborhood scale.

A huge thanks to our tour sponsors who make this event possible and support our community's vision of restoring our watershed and the flow of our desert rivers! We hope that you'll share your appreciation with them the next time you use their services. You can find their ads throughout the program, and a resource guide on page 19.

Let's harvest together!



FAQs

How does it work?

This is a self-paced tour, so you can visit the sites in any order between 10 a.m. and 3 p.m. on Saturday, October 19. Choose the sites with your favorite features or try to visit them all – it's up to you! Explore each site for as little or as long as you'd like (within reason). Some of the houses may have pets, so please leave your beloved fur-babies at home.

How will I know I'm in the right place?

All the sites on this tour will post a sign reading: "Watershed Management Group Homescape Harvest Tour site," so you'll know you are in the right place!

What do I need to bring?

You don't need to show a ticket, as you will have your program in hand or the PDF on your portable device, but you will be asked to sign in at each site. Prepare to be outside: Bring water, don a hat, and wear sunscreen. Some sites may offer light snacks. We hope you plan to join us at WMG's Living Lab to enjoy fresh coffee and tea from Ren Coffeehouse, get a tour, and interact with Tucson Water and Sierra Club, two great sponsors of the Homescape Harvest Tour!

Look for these symbols that include solar, edible harvests, greywater, schoolyards & chickens to plan your route!



Solar energy in use

Edible vegetation fed by rain/greywater



Greywater in use



WMG Schoolyard Program



Fresh eggs & composting

Watershed Management Group develops and implements communitybased 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.

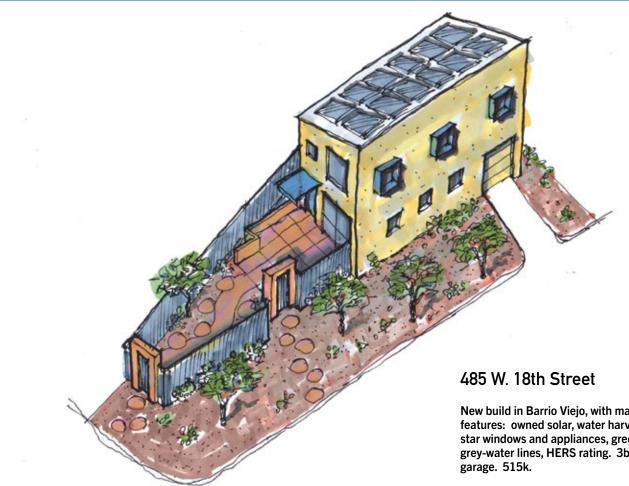


1. Canyon del Oro High School 25 W. Calle Concordia, Oro Valley

No bus service 🍈 📠

We at WMG loved working with CDO! The students were energetic about changing the world and enthusiastic about applying math to the rain garden assessment and design process. With help from WMG staff, the students calculated surface areas to understand surface and roof runoff as the plants' water supply, and balanced it with the expected plants' water demand. Schools that have abundant roofs, sidewalks, and other hard surfaces contribute to heat island issues, but create ample stormwater runoff – which makes for great opportunities for rainwater harvesting to support shade trees and plants! Students transformed a corner of campus as a demonstration for how the school could adapt and expand these rain gardens across campus. The rain garden was installed May 2019 with about 40 volunteers, mostly students, and has the capacity to capture 10,000 gallons of runoff.

Features: Rain Gardens, Native Plants & Urban Wildlife Habitat, Active Solar, Schoolyard program





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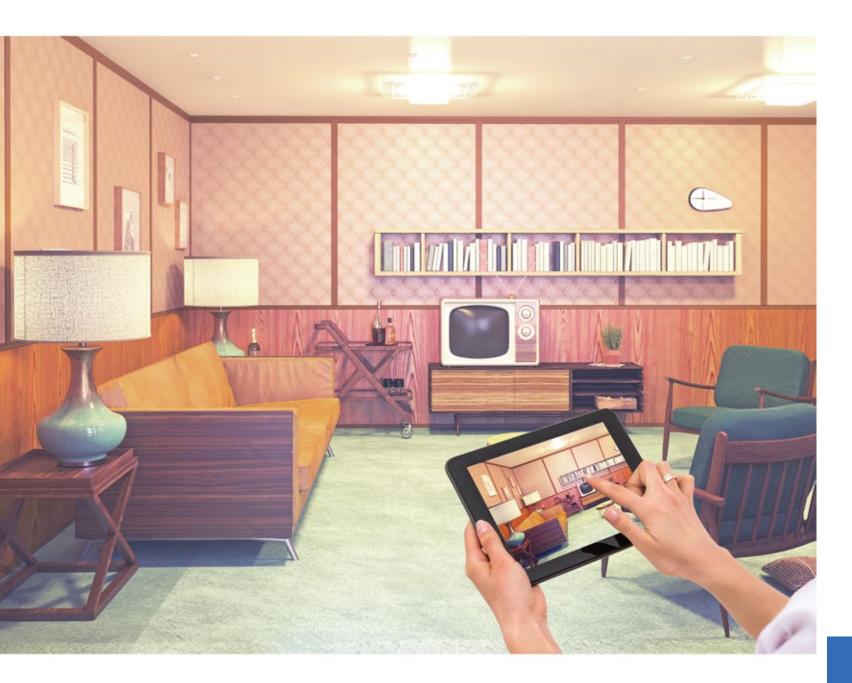


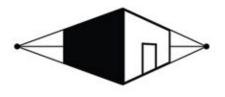


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2. David 3112 W. Avenida Cresta Bus Route 20

This west-side home of a long-time WMG supporter and Co-op member beautifully showcases sustainable desert living. With projects installed through WMG's Water Harvesting Certification Course and Co-op workshops, a number of DIY projects, and extensive solar energy, David's site is also off the water grid! In addition to all the water- harvesting features, tour participants can learn about pumping and purifying cistern rainwater and generating electricity from the sun. David says, "I like working with WMG on projects because the projects teach other students and community participants about water harvesting so they can do projects, too." Over the last six years, David's vegetation has matured nicely with his water-harvesting love. Get to this site early and you'll be treated to mesquite chocolate chip cookies and rainwater on tap!

Features: Rain Tanks, Rain Gardens, Greywater, Active Solar, Native Plants & Urban Wildlife Habitat, Compost, Fruit Trees, Veggie Gardens, Composting Toilet, Hosted a WMG Co-op workshop, Outdoor Shower, Rainwater on Tap

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3. Carol & Duane 511 N. Cuesta Ave. Bus Route 3 Se habla Español

In October 2015, our property was a Bermuda grass and Goathead infested pancake yard, and a greenhouse-gas-hogging house, with lots of potential. This urban yard is now verdant with fruit trees and desert natives watered by rain saved up for dry times and protected by mulch. And the house produces more energy than we use! In May 2016, WMG's Co-op brought friends to join in digging basins and installing two 2,500-gallon rainwater cisterns. We've also added laundry-to-landscape and other greywater features, an outdoor shower, composting for everything the chickens don't get first, and solar photovoltaic generation with battery storage to power electric appliances and a car.

Features: Rain Tanks, Rain Gardens, Greywater, Active Solar, Passive Solar, Native Plants & Urban Wildlife Habitat, Compost, Hosted a WMG Co-op workshop, Outdoor Shower

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4. Drachman Montessori K-8 Magnet School 1085 S. 10th Ave. Bus Routes 4, 12

"This part of our school is ugly and it's hot!" students at Drachmann Montessori told WMG staff one of the first times we met with them. "Yes it is!...would you like to transform this into a beautiful cool spot?" was our response. The students stated a resounding "YES!" Using the STEAM (science, technology, engineering, art, math) approach, the students studied, designed, and transformed a bare landscape area of the campus – which borders a residential neighborhood – into a beautiful place for humans and nature. Now students enjoy an outdoor living lab and the neighbors are thrilled with the beautification process and outcome. The school's rain garden can capture over 15,000 gallons of rainwater from five rooftop downspouts. The harvested water supports pollinator plants and shade trees that cool the building and shade the sidewalk. Students are monitoring pollinators and differences in temperatures from the street, sidewalks and different surfaces of the rain garden.

Features: Rain Gardens, Native Plants & Urban Wildlife Habitat, Active Solar, Schoolyard program



5. Brian & Anna 713 N. 10th Ave. Bus Routes 4, 10, 16, 19

Our property features two large streetside basins with curb cuts and earthworks that surround three sides of the house. WMG's custom-designed Co-op project added shape to the space and incorporated a shade structure and patio. Our streetside basins, designed with sediment traps, have performed well over the past two-and-ahalf years, creating a bountiful landscape!

Features: Rain Gardens, Native Plants & Urban Wildlife Habitat



6. Martha 415 E. Seneca St. Bus Routes 6, 9, 19

When I first moved in, my house was surrounded by a yard that consisted of crushed rock out front and a formidable crop of Bermuda grass in back. Even worse, the neighborhood grapevine told me that previous owners had experienced backyard flooding. Including water that flowed into the house. I tried to solve this problem by building a drainage swale, but it never worked well. Fortunately, Tucson is blessed with WMG. Among other things, WMG operates a Green Living Co-op that offers learning-by-doing workshops. I joined this co-op when it started in 2008, and I've since hosted four water-harvesting workshops. Three were devoted to building earthworks and the fourth installed greywater harvesting from the washing machine. The greywater system irrigates three fruit trees, native grass, and a small vegetable garden.

Features: Rain Gardens, Greywater, Active Solar, Native Plants & Urban Wildlife Habitat, Compost, Fruit Trees, Veggie Garden, Hosted a WMG Co-op workshop





7. Kathy & Michael 3686 N Prince Village Pl Bus Routes 15, 17

These long-time WMG supporters and Co-op members had big plans for transforming their little yard. Kathy says, "The WMG staff were key players in the design and success of our backyard project. In the initial discussion, they listened to our ideas and gently made suggestions for better pollinator-attracting native plants. The grand-pets enjoy the grasses best and I love the native chiltepin." Through the Green Living Co-op Program they installed a variety of water-harvesting features including a laundry-to-landscape greywater system and two 530-gallon Bushman cisterns. Earthworks were also created to catch and retain rainwater and tank overflow. This site is complete with a composting system, fruit trees, an array of native plants, and solar panels. Come enjoy lemonade, tea, and cookies from their rooftop porch!

Features: Rain Gardens, Greywater, Active Solar, Native Plants & Urban Wildlife Habitat, Compost, Fruit Trees, Veggie Garden, Hosted a WMG Co-op workshop



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8. Lisa & Catlow 2611 E. Allen Rd. **S** Bus Route 17

As we are adjacent to a natural park and the Rillito River, we are focusing on extending the mesquite riparian system through capturing and infiltrating neighborhood stormwater in our broad landscape. In addition to 7,500 gallons of rainwater storage, an outdoor shower, laundry and sink greywater supporting fruit trees and veggies along with a composting toilet help us to reduce our city water demand to less than 12 gallons per person per day. WMG's Co-op volunteers helped us tremendously through three different workshops to install the earthworks, greywater, and rain tanks.

Features: Rain Tanks, Rain Gardens, Greywater, Active Solar, Native Plants & Urban Wildlife Habitat, Compost, Composting Toilet, Hosted a WMG Co-op workshop, Outdoor Shower, Chickens, Veggie Garden, Fruit Trees





9. Living Lab and Learning Center 1137 N Dodge Blvd Bus Routes 4, 11

WMG's Living Lab and Learning Center is the cream of the crop and beats the pants off LEED standards! WMG docents will be giving tours so you can learn about all the systems in detail. WMG's educational center is also our office headquarters -12 staff are on campus regularly using the composting toilet, outdoor shower, and solar oven. Bring kids to enjoy the Raindrop Retreat, a children's playhouse featuring a rain tank,



play kitchen with greywater, and sandbox. And don't forget to visit our flock of laying hens. Factoid: did you know WMG is off of city water most of the year? We have rainwater on tap and typically meet 100% of our indoor and outdoor water needs with rainwater, greywater, and stormwater.

Features: 10,000-gallon underground cistern, Rainwater on Tap, Rain Tanks, Rain Gardens, Greywater, Active Solar, Native Plants & Urban Wildlife Habitat, Compost, Composting Toilet, **Outdoor Shower, Fruit Trees, Chickens**



10. Melanie 3018 E. Drachman St. Bus Route 4

Large rainwater basins and earthworks have transformed my backyard from a flat patch of dirt into a landscape full of native plants and wildlife. Lizards and birds were present before, but a much greater number of lizards and greater variety of bird species are here now. Even small mammals that were not here before come around, and I had monarchs in yard exactly one year after plantings which included three varieties of milkweed. Also, watching the trees and bushes grow has been enjoyable, and the tree fruits (growing near greywater infiltration basin) have been delightful to eat. But, the highlight has been the wildflowers; there is something blooming almost every month of the year, and I am always excited to see what will bloom next! I could not be happier with the yard design from WMG, many edible plants for wildlife, and how extremely well everything has grown in just one year to make my yard look like natural desert habitat.

Features: Rain Tanks, Rain Gardens, Greywater, Active Solar, Passive Solar, Native Plants & Urban Wildlife Habitat, Compost, Fruit Trees, Veggie Garden, Hosted a WMG Co-op workshop, Composting Toilet and outdoor shower planned



11. Dave & Wynne 1619 N. Catalina Ave. Bus Route 5

We currently have 3,350 gallons of rainwater capacity (with 1,150 more in the planning stage) that enables our rainwater-fed irrigation and rainwater-fed pool auto-fill. We also have an automatic switchover from rainwater to city water when rainwater isn't available. Our property also includes a pollinator garden, two raised-bed vegetable gardens, and wood-chip ground cover to slow evaporation. We have participated in the rainwater-harvesting class and the rain tank maintenance class at WMG, and used WMG services to help plan our system.

Features: Rain Tanks, Native Plants & Urban Wildlife Habitat, Fruit Trees, Veggie Garden, Solar Pool heating, Rainwater-fed Pool (and planned fishpond)



12. Richard & Susan 2833 E Arroyo Chico Bus Routes 8,17

In 1990, we moved into our home and began planting fruit trees. We now have 14 mature fruit trees in our yard designed to provide organic food for our family every month of the year, as part of what we jokingly call our "fruit of the month club." In 1995, we began watering our trees with greywater from the washing machine. After volunteering with WMG in 2008, we installed our first cistern that same year. Thanks to WMG, we now have 3,400 gallons of rainwater storage in cisterns, and more storage in basins. Combining the rainwater with greywater from the laundry and an indoor shower/bathtub, and curb cuts harvesting street runoff into two basins, we are able to water the landscape and a small garden using only rainwater, greywater, and street runoff for most of the year. In 2010, we began collecting desert plants that could thrive and produce food without added water for installation along the Broadmoor neighborhood's six block-long Treat Walkway. As the Treat Walkway and neighborhood medians became filled with maturing plants, our collection gradually became the Treat Walkway Nursery, a source of tough desert plants at reasonable prices for the Tucson community, open on occasional weekends and during the Homescape Harvest Tour.

Features: Rain Tanks, Rain Gardens, Greywater, Native Plants & Urban Wildlife Habitat, Fruit Trees, Veggie Garden





13. Joaquin & Christian 4419 E. 15th St. Bus Routes 1, 11 Se habla Español 🍎 💕 🏠 💕

WMG's Cultural Ecologist Joaquin and WMG supporter Christian love to watch the rain "do its thing" on their site as it slowly spreads and infiltrates into their rain gardens. These homeowners have seen their landscape come to life with the installation of passive water-harvesting systems, and they are passionate about educating others. Additionally, these wildlife enthusiasts have installed a pollinator garden to increase monarch habitat in the Sonoran Desert. Joaquin says, "It's been great to see the full monarch life cycle from larvae to pupa to butterfly, right in front of the house." They recently installed a patio area with interesting Mexican brick design, expanded their vegetable garden, and they claim they have the most beautiful outdoor shower and composting toilet in Tucson! In the backyard, you can say hello to their desert tortoise named "Tortuga," explore their vibrant chicken coop, and enjoy straw-bale seating area. Arrive early and you might receive a fresh egg. They've just installed a 2,500-gallon cistern in time for the tour.

Features: Rain Tanks, Rain Gardens, Greywater, Active Solar, Native Plants & Urban Wildlife Habitat, Compost, Composting Toilet, Outdoor Shower, Veggie Garden, Chickens

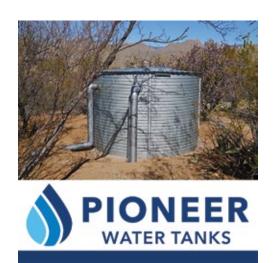


14. Esperero Canyon Middle School 5801 N. Sabino Canyon Rd. No bus service

The school's first rain garden, constructed March 2018, was a student-led project. Students selected the site, took measurements, conducted calculations and developed the design. Students then invited staff, other students and parents (over 40 volunteers) to come and help shape the earthworks, plant pollinator vegetation, and spread mulch. After this successful experience, students and school staff wanted more! The 6th grade science teacher, Casey Virgil, secured additional funding for a second-phase expansion. In April 2019, with another 40 volunteers to construct more water-harvesting basin capacity the school achieved over 30,000 gallons of basin storage to create habitat for pollinators, reduce erosion and sediment, and soak in stormwater. Native plants include Sonoran Desert grasses, milkweeds, Indian mallow, chocolate flowers, among others.

Features: Rain Gardens, Native Plants & Urban Wildlife Habitat





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15. Jennifer 6050 E. 33rd St. Bus Routes 3, 4



My site is alive after years of struggling with Bermuda grass, dust, a prickly pear forest and inefficient watering. Now, it is a pleasure to spend time outside and know that the outdoor shower water, utility sink water, washing machine water, and rain harvested from my roof is going to where it is stored or needed, and all water is staying on the property.

Features: Rain Tanks, Greywater, Active Solar, Native Plants & Urban Wildlife Habitat, Fruit Tree, Veggie Garden, Chickens, Outdoor Shower



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Join WMG's River Run Network to discover Tucson's hidden riparian gems with us at our upcoming creek walks, clean-ups, and restoration work days.

When you join the River Run Network, you can discover Tucson's hidden riparian gems with us at our creek walks and restoration work days.
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Oct 26: Creek Walk: Flowing Waters - From Farms to River Restoration
Nov 12: Flow365 Monitoring Training
Nov 29: Creek Walk: Black Friday & Beavers at Ciénega Creek
Dec 14: River Clean-Up at Shamrock Park along the Rillito River
Register at Watershedmg.org/river-action

