# Rain Water Harvesting and Gray Water Reuse Resources



Rain Water Harvesting Rooftop Collection Estimation: 1 inch of rainfall on 1,000 sq.ft. roof could collect 600 gallons of water



## **WORKSHOPS:**

Check the U of A Pima County Cooperative Extension web site for upcoming classes
Harvesting Rainwater for Landscape Use
Pima County Cooperative Extension Office
4210 N Campbell Avenue

626-5161 http://cals.arizona.edu/pima/smartscape/index.html

Watershed Management Group, Inc.

Free hands-on water harvesting and greywater workshops & Co-op Program (see below for more information).

396-3266 http://www.watershedmg.org/

Sonoran Permaculture Guild

Call Teri at 626-5161 to register.

(Dan Dorsey) **624-8030** (Barbara Rose) **572-7221** 

http://www.sonoranpermaculture.org/courses-and-workshops/

# WEB SITES, BOOKS, RESOURCES:

Rainwater Harvesting (RWH)

• ARCSA
American Rainwater Catchment Systems Association

www.arcsa-usa.org / arcsa.htm

• AZ Dept. of Revenue Tax Incentive Revised May 2008 to include RWH

25% of costs up to \$1,000 for residential or \$200/home builder:

http://www.azdor.gov/Refunds%20and%20Credits/Graywater\_credit\_implementation.pdf

• City of Tucson Water Harvesting Guidance Manual

and CD-ROM available on-line to download at:

http://www.ci.tucson.az.us/water/harvesting.htm or http://www.dot.ci.tucson.az.us/stormwater/education/waterharvest.cfm

• Harvesting Rainwater for Landscape Use

University of Arizona Pima County Cooperative Extension (Tucson Water) **791-4331** http://www.ci.tucson.az.us/water/harvesting.htm

The Nature Conservancy

Rainwater Harvesting Demonstration Site Tours, Call for tour times 1510 E. Forth Lowell Rd. 85719

• Rainwater Harvesting for Drylands and Beyond-Volumes 1&2 author Brad Lancaster's book is available on his web site and locally at Native Seed Search on 4<sup>th</sup> Avenue Great Web site with lots of information and resources

http://www.harvestingrainwater.com/

622-3861

Major source of information from Brad Lancaster's website: http://www.harvestingrainwater.com/Brad Lancaster is the author of "Rainwater Harvesting for Drylands and Beyond"

 Rainwater Harvesting for the Mechanically Challenged Suzy Banks & Richard Heinichen

• Watershed Management Group, Inc.

396-3266 http://www.watershedmg.org/

Tucson based non-profit that helps install rainwater harvesting systems for educational-based projects. Free hands-on water harvesting workshops, consulting, Co-op (attend workshops to learn and assist in constructing home systems including your own home after attending four workshops).

#### Greywater

• Watershed Management Group, Inc.

396-3266

Tucson based non-profit that helps install water harvesting systems for educational-based projects. Greywater Co-op ~ attend workshops to learn and assist in constructing home systems including your own home after attending four workshops.

http://www.watershedmg.org/

• Graywater Guidelines, The Water Conservation Alliance of Southern Arizona (Water CASA)

626-2678

www.watercasa.org

• Create an Oasis with Greywater, Art Ludwig. Santa Barbara, CA, Oasis Design web site

805-967-9956 Oasisdesign.net/greywater

• AZ Department of Environmental Quality (ADEQ) Marci Mullins

602-771-4464

No permit needed for residential properties but commercial properties require a Type 3 Reclaimed Water Permit and subsurface irrigation for >400 gallons/day of greywater.

http://www.azdeq.gov/environ/water/permits/reclaimed.html

AZ Dept. of Revenue Tax Incentive

25% of costs up to \$1,000 for residential \$200/home builder stub-outs for Greywater

http://www.azdor.gov/Refunds%20and%20Credits/Graywater\_credit\_implementation.pdf

## WATER HARVESTING DESIGN AND CONSULTING

• Rocky Brittain (Commercial and Residential)

621-6751

• Barbara Rose (Residential)

572-7221

• Lisa Lucking Hoffman (Residential)

861-4741

• Zona Gardens - Scott Calhoun

867.8038

Landscape Design. No irrigation gardens. Fax 520.867.8039 www.zonagardens.com

• Watershed Management Group, Inc.

396-3266

http://www.watershedmg.org/

#### CISTERN SELLERS & INSTALLERS

**Boyd Equipment** 

792-2244

3625 S. Country Club- Norwesco tanks and fittings for adapting tanks for rainwater and greywater storage and delivery.

Clean Water 293-1561

Brent Cluff 1881 W. Prince . Sells tanks ranging from 100 gallons to 3,000 gallons

CISTERN SELLERS & INSTALLERS (CONTINUED)

Freeway Tank Sales 623-2573

1412 S. Freeway (I-10 Access/22<sup>nd</sup> St.); 35-10,000 gallon plastic and metal tanks

Glas-Tek 889-0181

Chuck McCain; 5041 E. Corona Rd.; Fiberglass tanks

Home Improvement & Maintenance, Inc. 981-4747

Justin Cupp; Rain water collection & Landscape consultation.

Loomis Tank Centers 889-1338

2610 E. Ganley Rd.; Sells: HDPE plastic tanks 300 – 10,000 gallons, rainhead screens for cisterns, cistern gauges, and greywater infiltration chambers for subsurface irrigation

Native Roots 425-9795

Omar Ore-Giron; Earthworks and Rainwater Harvesting

New Sonoran Rainscapes 520-624-9909

Kent Sorensen; Harvesting rainwater in sustainable landscapes. <u>www.newsonoran.com</u>

www.oasisrainwaterharvesting.com

http://www.watertanks.com/

http://www.plasticmart.com http://www.tank-depot.com/

http://polytanks.net/

Installs cisterns, landscape design, & Earthworks.

Oasis Water Harvesting 520-234-7681

Rick Weisberg; 4921 E. Hillcrest Dr. Hereford, AZ 85615 Sells rain chains, Norwesco tanks, and custom made plastic tanks of various sizes and colors. Installs cisterns.

Silverbell Nursery 622-3894

2730 N. Silverbell Rd.; Sells and installs cisterns.

Southern Arizona Rain Gutters 299-RAIN (299-7246)

8987 E. Tanque Verde Rd. #309-297, Sells Bushman plastic

tank systems. Installs cisterns. www.southernarizonaraingutters.com

Technicians for Sustainability 520 740-0736

Lisa Lucking Hoffman or Kevin Koch; Installs cisterns. www.techniciansforsustainaiblity.com

There are various **on-line tank** dealers that will deliver.

Make sure to consider the sun exposure if considering a plastic tank.

Here are a few dealers, search the Web to find more.

MECHANIZED WATER-HARVESTING EARTHWORK CREATION/EXCAVATION

John Litzel of Little John Excavating 520-730-9350

Goodwillie Earthworks 520-490-6956

Water-harvesting earthwork / water-harvesting landscape creation

New Sonoran Rainscapes 624-9909

Kent Sorensen mrmesquite868@aol.com

www.newsonoran.com

Wildworks Landscapes Incorporated 743-1309

Russ Buhrow and Dottie Motheral

Wildscapes 325-2444

Scott Knight wildscapes89@msn.com

WATER HARVESTING DEMONSTRATION SITES	
• The Nature Conservancy 1510 E. Ft. Lowell Rd.	622-3861
Offers regular rainwater harvesting tours. Passive and active harvesting systems.	
Variety of cistern types and extensive native plantings.	
• U of A Cooperative Extension Office 4210 N. Campbell	626-5161
Demonstration Gardens – Active and passive systems.	020 0101
• WalMart/Oro Valley Marketplace N. Oracle & W. Tangerine Rd.	
Underground tanks that capture rooftop runoff. No earthworks/passive water harvesting.	
• Los H Proven Family Conservation Learning Contar at the Tracer 7ce C Bandalah Way	001 4750
<ul> <li>Lee H Brown Family Conservation Learning Center at the Tucson Zoo S. Randolph Way</li> <li>Rainwater harvesting tanks &amp; grey water reuse. LEED Platinum certified building</li> </ul>	881-4753
Rantwater harvesting tanks & grey water rease. BEED Traumain tertified building	
• Tucson Audubon Society Historic Y building at University and 5th Avenue.	622-2230
Water harvesting depressions and plantings.	
• Smart Building 1661 N. Swan Rainwater harvesting basins	
Rantwater narvesting basins	
• Ward 1 Council Office 940 W. Alameda	791-4040
Active & passive rainwater harvesting examples	
• Ward 3 Council Office 510 E. Grant	791-4711
Active & passive rainwater harvesting examples	
• Ward 6 Council Office 3202 E. 1st St.	791-4601
Planted basins	771 1001
• Target 4040 N. Oracle Rd.	293-6191
Planted basins	
Burns Wald-Hopkins Office downtown - Culvert cistern in back	
burns watu-Hopkins Office downtown - Curvert distern in back	
• Country Club & Broadway – GreenLots NE corner – passive system with native plants	
<ul> <li>UA Visitor Center – Passive and active rainwater harvesting site</li> </ul>	
Originate – Large metal cistern	
• Rincon Heights Neighborhood Cherry Ave. just south of 6 <sup>th</sup>	
Good example of streetscape and right of way water harvesting.	

# **GREYWATER DEMONSTRATION SITE**

• Toltecalli Academy – 251 W. Irvington near 6<sup>th</sup>

• Esperanza en Escalante - 3700 S Calle Polar. Wilmot & Golf Links

Has a branched drain greywater system off laundry machine, open for public to view between 9am and 5pm

520-571-8294

From parking lot can see – basins, cistern, native plants, and vegetable garden

### **GREYWATER INSTALLERS**

**Technicians for Sustainability** 

Lisa Lucking Hoffman or Kevin Koch

520 740-0736 www.techniciansforsustainaiblity.com

Desert Sky Home Repair, LLC

PO Box 1765, Tucson, AZ 85702

520-622-0607

Guy Cloutier 991-4930

**GREYWATER SUPPLIES** 

Harrington Company 4141 E. Tennessee Ave

745-8433

Hose, pipe, fittings for adapting tanks and culverts for rainwater storage and delivery.

Plumbing Suppliers, Inc. 2555 E. Grant Road

326-6433

Flow Splitter parts

Irrigation & Sprinkler Supply Company Grey pipe for conveyance of greywater

2130 E. 12<sup>th</sup> St. **792-4652** 5120 N . La Cholla **292-6900** 

Catalina Spas and Pools 4001 N. Runway Dr.

888-4181

3-way Jandy valves

Any pool and spa supplier

Flexible hose & 3-way Jandy valve

# INTEGRATED RAIN WATER HARVESTING & GREYWATER DESIGN

**Technicians for Sustainability** 

**Brad Lancaster** 

520 740-0736

Kevin Koch or Lisa Lucking Hoffman

Barbara Rose (Residential & Community Design)

572-7221

**Art Ludwig** (Large Scale Greywater Design)

Oasis Design 805 967-9956

Fax: 967-3229; 5 San Marcos Trout Club Santa Barbara, CA 93105-9726

www.oasisdesign.net

http://www.harvestingrainwater.com/

## SITE/SOIL ASSESSMENT

For Kitchen Resource Drain (KRD) and Other Alternative Homescale Wastewater Reuse Systems

Nichols On-Site Engineering

520-743-1565

5010 W Sweetwater Dr, Tucson, Arizona 85745

## STATE TAX INCENTIVES

For Greywater and Rainwater Harvesting Systems

AZ Dept. of Revenue Tax Incentive

http://www.azdor.gov/

- 25% of costs up to \$1,000 for residential
- \$200/home builder stub-outs for Greywater

http://www.azdor.gov/Refunds%20and%20Credits/Graywater\_credit\_implementation.pdf