



P.O. Box 65953  
Tucson, AZ 85728  
[www.watershedmg.org](http://www.watershedmg.org)

**Course Announcement**  
**WMG Water Harvesting Certification**  
**November 12-21, 2010 – Tucson, AZ**

Watershed Management Group (WMG) is accepting applications for its *WMG Water Harvesting Certification* course to be held November 12 - 21, 2010, in Tucson, Arizona. Applications are accepted until October 11, with priority given to the earliest applicants.

The WMG Water Harvesting Certification program is a hands-on training course that provides certification in water harvesting system design and implementation. WMG's goal is to transfer water harvesting knowledge to those who will utilize them in their professions and teach these practices to others. Our program provides the highest quality and greatest depth of training in integrative water harvesting offered in the nation.

**Program Description**

The WMG Water Harvesting Certification program is designed for professionals, educators, and community organizers seeking comprehensive instruction in water harvesting systems design and construction. The program offers a unique combination of hands-on and classroom instruction that provides participants with a thorough, on-the-ground understanding of the core practices in this increasingly popular field.

The course teaches design, implementation, and installation of greywater systems, water harvesting earthworks, and plastic and steel cisterns. The curriculum emphasizes a sustainable and integrated approach to land use and appropriate plant selection for retrofitting urban areas. A typical day includes a 4-5 hour hands-on outdoor workshop in the morning, followed by 2-4 hours of lectures or site assessments in the afternoon.

**Upcoming Program Dates:**

Fall 2010, Tucson, AZ – *9-day intensive course, Nov. 12-21*  
Winter 2011, Tucson, AZ – *Feb. 4-6, Feb. 11-13, Feb. 19-20, & Feb. 26*  
Spring 2011, Phoenix, AZ – *March 18-20, March 25-27, April 1-3, & April 9*  
Spring 2011, Tucson, AZ – *9-day intensive course, April 29-May 8*

**Registration Deadlines:**

To be considered for the November 2010 course, applicants must submit a one-page resume and application form by the following dates:

Early Registration: \$1050 course fee  
Applications must be postmarked by September 20, 2010.



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Once accepted for the course, applicants must pay the full course fee by September 30, 2010.

Regular Registration: \$1200 course fee

Applications must be postmarked by October 11, 2010.

Once accepted for the course, applicants must pay the full course fee by October 22, 2010.

Applicants will be notified of the status of their application on a rolling basis. **Program fee is non-refundable after October 22.**

Scholarships:

WMG offers subsidies of \$100 to \$300 to help defray the cost of the course. To be considered for a subsidy, please include an explanation of your financial need in your application.

### **Course Requirements and Qualifications**

Application to the Water Harvesting Certification is competitive; it is possible we will not be able to accommodate all the applicants we receive.

Though there are no prerequisites nor educational or professional requirements to participate in the course, preference is given to those applicants who demonstrate that they have the capacity to utilize the skills and knowledge learned in their profession and/or community in a direct way.

In addition, all applicants are required to commit to participating in the entire program, including attending all course sessions and completing all readings and written assignments.

### **Meaning of Certification**

Certification signifies that the participant has received a thorough training and has demonstrated a mastery of essential core concepts in the water harvesting topics outlined in the curriculum.

The Water Harvesting Certification course is designed and administered by WMG staff with assistance from an advisory board comprised of professionals who teach and implement water harvesting practices in their careers. The lectures and trainings are taught by WMG staff and well-respected guest instructors.

Participants who complete the Water Harvesting Certification will be able to:

- Integrate water harvesting systems with other design considerations (energy conservation, aesthetic design, food production, wildlife habitat, etc.)
- Calculate rainwater runoff potential of catchment areas and determine soil percolation rate
- Create a water budget and use water harvesting systems to match landscaping to available water supply
- Choose, size, and build appropriate earthworks features for different applications (basins, berms, swales, French drains)
- Design greywater systems from laundry machines, bathroom sinks, and bathroom shower water



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- Build gravity-fed greywater systems from laundry machine water to irrigate landscape
- Size and build steel-culvert cisterns
- Size and install plastic cisterns
- Design water harvesting systems to support small-scale food production (including earthworks design, cistern design and application, and soil improvements)
- Design all of the above systems while incorporating safety and health considerations

### Earning Certification

To earn certification, participants must:

- Attend all course sessions (consisting of lectures, hands-on site assessments, and training workshops to practice construction of water harvesting systems at public, residential, or commercial sites.)
- Complete all reading assignments and written homework to solidify knowledge gained in the lectures and workshops.
- Score 90% on a written examination of concepts and applications of water harvesting taught in the course. The exam is challenging, and focuses on critical thinking and practical application. Support is given throughout the course to prepare for the exam. If students do not pass the exam, they will receive personalized feedback from WMG staff and can re-test at the next scheduled test date without a fee.

Participants who earn certification are listed (if they desire) on WMG's web site as a *WMG Certified Water Harvesting Practitioner*, along with contact information for the participant or their business.

### Contact

If you have any questions about the training program or application process, please contact Lindsay Ignatowski by email at [lindsay@watershedmg.org](mailto:lindsay@watershedmg.org) or by phone at 520-396-3266. You may learn more about Watershed Management Group by visiting our website at [www.watershedmg.org](http://www.watershedmg.org) or about the Certification program at [www.watershedmg.org/certification](http://www.watershedmg.org/certification).

### Curriculum Details

- 1) Integrated systems design
- 2) Passive rainwater harvesting design and installation
  - a) Basins
  - b) Berms
  - c) Swales
  - d) French drains and infiltration features (design only)
- 3) Greywater harvesting design and installation
  - a) Bathroom sinks and showers (design only)
  - b) Laundry machine (design and installation)
- 4) Cistern systems design and installation



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- a) Steel culvert cistern
  - b) Plastic cistern
- 5) Sustainable Landscaping
- a) Fundamentals of landscape design
  - b) Native plants
  - c) Calculating water budgets
- 6) Water harvesting for food production
- 7) Water Harvesting Policy

Instructors:

- Brad Lancaster, consultant and author of Rainwater Harvesting For Drylands
- Catlow Shipek, WMG Senior Program Manager
- James MacAdam, WMG Project Manager
- Lincoln Perino, WMG Instructor and cistern installer with Technicians for Sustainability
- Lisa Shipek, WMG Executive Director
- James DeRoussel, WMG Project Manager