

## JULY 2009 REPORT



### CODES/REGULATIONS COCHISE COUNTY GREEN BUILDING CODE

Cochise County recently passed a green building code that provides incentives for building energy efficient and water conserving residences. The water efficiency standards include the following:

- Install a rainwater harvesting system capable of retaining between 10% and 50% or more of the average annual rainfall on the structure's catchment surface.
- Install a gutter and downspout system or canals that tie to stormwater infiltration trenches, bioswales or rain gardens.
- Install separate greywater and sanitary sewer distribution lines on residences with greywater lines stubbed out to exterior.
- Install a point-of-use tankless hot water heater that uses only cold water supply or solar-assisted preheating for any fixture greater than 20 pipe run feet from water heater.
- Install a manual or motion activated on-demand hot water circulation pumping system.
- Install lavatory faucets, toilets and irrigation systems that meet EPA's WaterSense criteria.
- Install a vegetative roof system that uses a non-potable water source over at least 50% of the total roofed area.
- Design for pervious driveway and walkway surfaces between 50% to 100% of site hardscape.

# CONSERVATION/EDUCATION <u>WATER WISE 2009 RAINWATER HARVESTING TOUR</u>



On July 11<sup>th</sup>, Water Wise hosted a tour of five rainwater collection sites in the Sierra Vista area. Approximately 100 citizens participated. The sites included those at the University of Arizona South, the City of Sierra Vista Animal Care Center and private residences.

The rainwater that is collected from the University of Arizona South system is used to irrigate outdoor landscaping. Since the irrigation of outdoor landscaping is often a large consumer of groundwater, substituting the use of rainwater for groundwater is a significant water conservation measure.

The U of A South system collects water from a 532 square foot rooftop. Half of the roof surface is comprised of corrugated galvanized metal and half is painted aluminum rolled roofing. The rainwater container is a 2,500 gallon polyethylene tank. The tank was painted with a tinted rubberized roof paint and the mural was painted with standard latex paint. A U of A art student designed the mural and painted it onto the tank. This tank is proof that, with a little creativity, rain tanks can fit harmoniously into their surroundings.

The City of Sierra Vista installed its first rainwater collection system at the Nancy J. Brua Animal Care Center. The rainwater collected at this site is used to irrigate the animal care center's courtyard landscaping. The rain is collected from a 1,577 square foot rooftop. The roofing material is painted corrugated metal. The storage tank is a 2,500 gallon polyethylene tank that is painted with tinted rubberized roof paint. This system is equipped with a Davey pump and Davey Rainbank system that allows the irrigation system to switch to municipal water if rainwater is insufficient.

Three Sierra Vista area residences were toured that featured passive and/or active rainwater harvesting systems. The most elaborate of the systems consists of linked rainwater collection tanks that use a shallow well pump to maintain constant water pressure. The pump makes it possible to run a drip irrigation system for a vegetable garden. The residence's passive rainwater system diverts surface water flows into sunken retention holding basins. Trees and other plants use this water.

Upon request, Water Wise will visit properties, free of charge, and provide site-specific advice on the installation of a rainwater harvesting system. The Upper San Pedro Partnership, the City of Sierra Vista, Cochise County and Fort Huachuca provide financial support to the Water Wise program.



# **LOCAL AUTHORITY: SAN PEDRO WATER DISTRICT ORGANIZING BOARD**

The Upper San Pedro Water District Organizing Board continued to review its draft Comprehensive Plan. The Board agreed to post the draft plan on the Arizona Department of Water Resources website. The Organizing Board further discussed its plans to retain an Outreach consultant.

## PROJECTS

### FEASIBILITY STUDY

Bob Strain, Partnership Advisory Commission Chair; Holly Richter, Executive Committee Chair; Pat Call, Vice Chair, Partnership Advisory Commission and Vice Chair, Executive Committee; and Chuck Potucek, Sierra Vista City Manager; met with Eric Holler, Bureau of Reclamation; Eve Halper, Bureau of Reclamation; and Carol Lynn Erwin, Bureau of Reclamation Phoenix Area Office Manager; to discuss the Feasibility Study. Many procedural and substantive issues were clarified including the alternative projects that may be considered within the study, the time in which the study must be completed, rules regarding the funding match and the next steps in the Feasibility Study process.

# COMMITTEES/WORKGROUPS

At its July meeting, the Executive Committee discussed a potential Intergovernmental Agreement between the Bureau of Reclamation and the Partnership and/or its member agencies regarding the Feasibility Study process and the required local match of 55%.

### TECHNICAL COMMITTEE

The focus of the July 2009 Technical Committee meeting was the final review of the 2009 321 Report. Bruce Gungle, U.S. Geological Survey, presented the new organizational formatting of the report as well as substantive scientific data. The Technical Committee carefully examined the scientific data within the report and accepted the report's release to the Partnership Advisory Commission.

#### 321 REPORT WORK GROUP

Bruce Gungle, Chair of the 321 Report Work Group, distributed the final draft of the 321 Report that will be provided to the Partnership Advisory Commission for review and approval at its August 2009 meeting. The 321 Report Work Group suggested minor changes to the report. If approved by PAC, the 321 Report will be forwarded to the U.S. Department of the Interior in September 2009.



Catch Rain, Where Rain Falls. Anonymous