



# COCHISE COUNTY Master Gardeners

## University of Arizona Discovery Gardens

FEATURED: A large roof on Groth Hall on the University of Arizona Sierra Vista campus collects rain for storage in a cistern that supplies high quality water to ornamentals, native plants, and trees growing in the adjacent Cochise County, Master Gardeners' Discovery Gardens.



### System Statistics:

- Harvesting water use:* Irrigation in the Discovery Gardens
- Irrigation Delivery System:* Pressurized with 1 hp internal pump to drip system
- Annual rainfall:* 14"
- Collection Area:* 7,000 square feet of roof
- Roof Materials:* Metal and Elastomeric-coated roof surfaces
- Annual potential collection:* 51,896 gallons
- Number of inches of rain to fill tank:* 5.39 inches

*First flush wash:* No

*Roof Conveyance System:* A wet delivery system from the roof of Groth Hall via three downspouts.

*Container:* 20,000-gallon metal tank

*Autofill:* If rainwater is insufficient, an auto-fill, using a motorized ball valve and a float switch inside the tank, allows city water into the tank maintaining a 12" minimum water level in the tank. There is an air-gap between the municipal water fill valve and the highest water level in the tank to ensure against cross-contamination of rainwater and municipal water.

*Overflow:* To the landscape.

*Passive harvesting:* Berms and swales to direct rainwater to plantings.



This project was installed by Oasis Water Harvesting and funded by the Cochise Water Project in 2015.



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