

The Texas Water Development Board



Rainwater Harvesting Program

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Innovative Water Technologies



TWDB Activities

- Customer Enquiries
- Texas Rain Catcher Award
- Research Projects
- Legislative Items
- Future Plans



Customer Enquiries

- Requests for Texas Rainwater Harvesting Manual
- Funding
- System database
- Rules, ordinances, standards
- Technical information



Texas Rain Catcher Award

- Established in 2007 to promote rainwater harvesting.
- Open to all individuals, businesses, and governmental entities.
- Judging done by a panel of TWDB and outside experts.
- Procedures currently in revision. Will be available on our Web site March 30, 2009.
- **<http://www.twdb.state.tx.us/iwt/rainwater.asp>**



Texas Rain Catcher Award

- Five awards made in 2007-2008
- Medical office building, Webster
- Kight residence, Boerne
- Larrison residence, Georgetown
- Carver Center School, Midland
- Redbud Center at LCRA, Austin

1. Medical office building: Webster

- 175,000 gallons total capacity (4' x 8' culverts)
- 14,500 square-foot roof area
- Non-potable use (irrigation and toilet flushing)



Culverts being installed in the parking lot.



Green roof atop the medical office building.

1. Medical office building: Webster



Medical office building. The culverts are buried under the parking lot.

2. Kight residence: Boerne

- 34,650 gallons total capacity
- 6,400 square-foot roof area
- Potable and non-potable use



The Kight residence



5,000-gallon storage tanks

2. Kight residence: Boerne



Sock filter to remove coarse debris.



Ultraviolet filters for potable water system.

3. Larrison residence: Georgetown

- 6,500 gallons total capacity
- 2,625 square-foot roof area
- Potable and non-potable use



The Larrison residence. Barn is located behind the house.

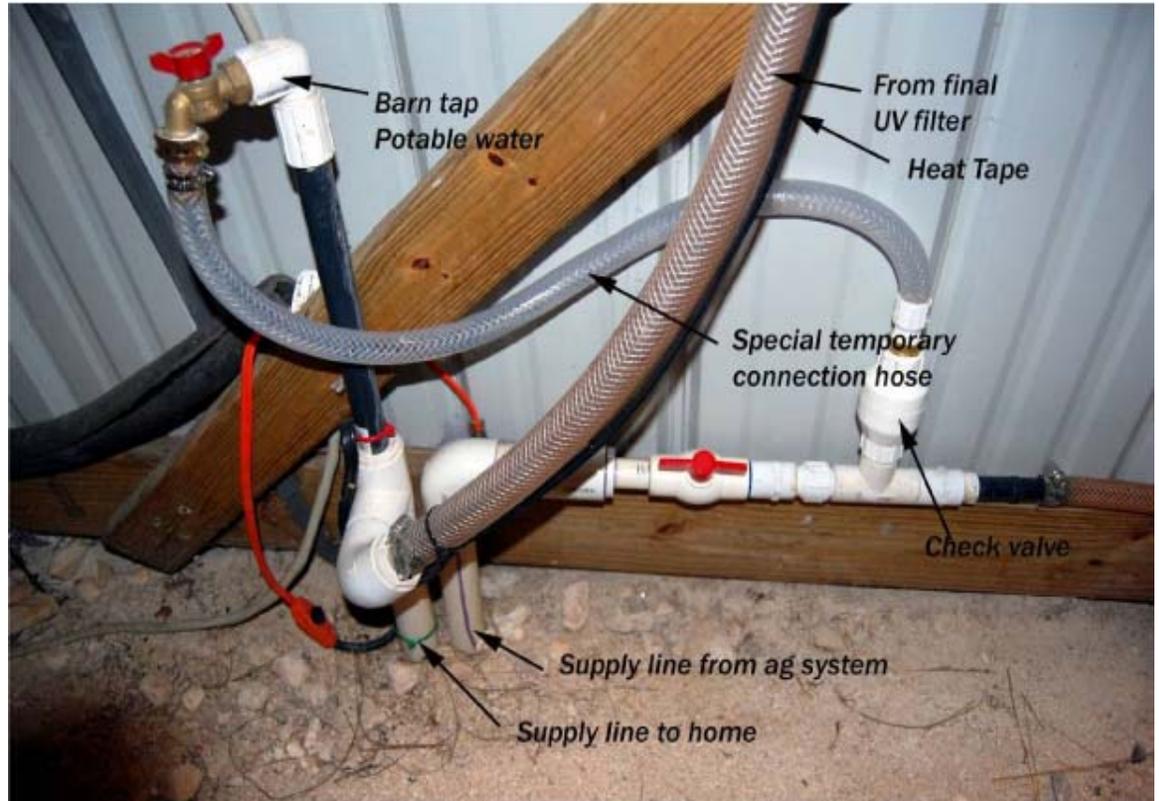


2,500-gallon storage tank inside the barn.

3. Larrison residence: Georgetown



Valves, filters, pressure tank.



Close-up view of plumbing inside the barn.

4. Carver Center School: Midland

- 4,100 gallons total capacity
- 4,068 square-foot roof area
- Non-potable use (irrigation and pond)



Children assembling the system.



A view of the cistern.

4. Carver Center School: Midland



Garden behind the school.



Happy children in front of the completed system.

5. Redbud Center at LCRA: Austin

- 31,100 gallons total capacity
- 16,000 square-foot roof area
- Non-potable use (irrigation, toilet flushing, and water feature)



Entrance to the Redbud Center.



Main building and 6,500-gallon cisterns.

5. Redbud Center at LCRA: Austin



Water feature: Mansfield Dam



Water feature: Wirtz Dam

Research Project

- Recipient: Dr. Mary Jo Kirisits, UT-Austin
- Summary: Study the effect of roof material on the quality of harvested rainwater.
- Start Date: October 2008
- Completion Date: December 2009
- Total Project Cost: \$61,400
- TWDB Cost: \$50,000
- Project Status: Water sampling from the full-scale roofs has been occurring since the start of the project. Pilot roofs have been recently set up at Lady Bird Johnson Wildflower Center.

Research Project



Frames for Pilot-Scale Roofs.



Sampler gutter insert.

Legislative Item

- House Bill 1818, 80th Texas Legislature, 2009
- Impact to TWDB:
 - Develop and conduct quarterly training seminars.
 - Comptroller's office can request assistance from other agencies to develop standards.
 - If funds are appropriated, TWDB will administer contracts for rainwater harvesting projects.



Future Plans

- Continue the Texas Rain Catcher Award.
- Update and translate into Spanish the Texas Manual on Rainwater Harvesting.
- Exceptional item request of \$250,000 annually in the 2010-2011 Legislative Appropriations Request for rainwater harvesting educational and demonstration projects.

Wrap Up

- Comments or Questions?
- Contact Information:
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- TWDB Rainwater Harvesting Web Site:

www.twdb.state.tx.us/iwt/rainwater.asp