

## AGENDA ITEM MEMO

**BOARD MEETING DATE:** October 5, 2023

**TO:** Board Members

**THROUGH:** Jeff Walker, Executive Administrator  
John T. Dupnik, P.G., Deputy Executive Administrator, Water  
Science and Conservation  
Ashley Harden, General Counsel

**FROM:** John Sutton, Manager, Conservation  
Shae Luther, Program Specialist, Conservation

**SUBJECT:** 2023 Texas Rain Catcher Awards

### ACTION REQUESTED

Presentation of the 2023 Texas Rain Catcher Awards

### BACKGROUND

Rainwater harvesting is a valuable conservation strategy and drought-resilience tool. Collecting and storing rainwater can reduce the demand on local public water supplies by providing an alternative water source for a variety of beneficial uses. In the 2022 State Water Plan, three regional water planning groups (Regions E, J, and K) recommend rainwater harvesting as a water management strategy. If implemented, these recommended strategies would produce an estimated 5,000 acre-feet of new water supply by 2070.

The TWDB launched the Texas Rain Catcher Award in 2007 to promote rainwater harvesting, to educate the public about the benefits of rainwater harvesting, and to recognize those businesses, organizations, and individuals dedicated to conserving Texas' precious water resources. Since the program's inception, the TWDB has bestowed 67 awards and recognized 4 honorable mentions.

#### Our Mission

Leading the state's efforts  
in ensuring a secure  
water future for Texas

#### Board Members

Brooke T. Paup, Chairwoman | George B. Peyton V, Board Member | L'Oreal Stepney, P.E., Board Member  
Jeff Walker, Executive Administrator

**KEY ISSUES**

The TWDB received a total of 18 applications before the June 30th deadline for this year's award cycle. A panel of five judges consisting of TWDB staff scored applications based on five criteria:

1. Demonstration of how the rainwater harvesting system has helped conserve surface water and/or groundwater through reduced dependency on conventional water supply systems;
2. Demonstration of how the rainwater harvesting system has saved money for the owner;
3. Originality and innovation as evidenced by the application of new knowledge, new application of existing knowledge, or an innovative mix of existing and new knowledge;
4. Demonstration of how the system has benefited the environment (for example, reduced erosion or the threat of flooding) without itself adversely impacting the environment; and
5. Uniqueness of the rainwater harvesting system or project.

Each judge scored the applications based on these criteria and then ranked them. These rankings were then combined, and the applications with the highest ranking were selected for awards in each of five categories. No applications were submitted for the Commercial/Industrial category. One high-ranked application did not fit one of the five listed categories, so the judging panel classified it as "Regional."

The following awardees are recommended for the 2023 Texas Rain Catcher Awards:

Agricultural – Baker Equestrian Center

Educational – Tarrant Regional Water District Rain Barrel Education and Scholarship Fundraiser

Governmental – City of Austin OSCAR & CLARA Onsite Water Reuse Demonstration Project

Residential – Standen Residence

Regional – Delta Reclamation Project

**RECOMMENDATION**

Based on the rankings and recommendations of the judges, the Executive Administrator recommends presenting each of the five identified applicants with a 2023 Texas Rain Catcher Award.

Attachment 1: Recommended 2023 Rain Catcher Award project descriptions.

# Attachment 1

## Recommended 2023 Rain Catcher Award project descriptions

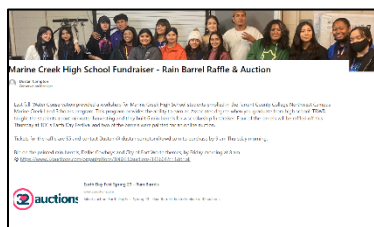
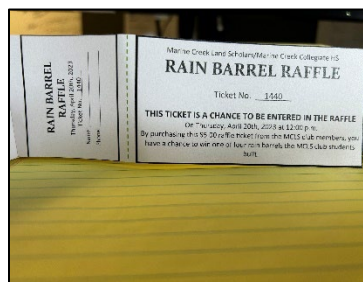
### Agricultural: Baker Equestrian Center (Hays County; Dripping Springs)

The Baker Equestrian Center provides full-service horse boarding, grooming, and riding facilities and found an opportunity to match heavy water usage in these activities with a rainwater collection system that can provide all the water needed to perform daily operations. The center captures rainwater from the 20,000-square foot arena roof and stores it in a 100,000-gallon collection tank. The captured water is used to wash and water the horses, as well as moisten the arena surface daily. The center can collect approximately 12,400 gallons of water for every inch of rainfall providing over 400,000 gallons of rainwater collected annually. The system not only saves the owners thousands of dollars annually but preserves groundwater resources and reduces flooding in the adjacent pasture, which also increases the horses' grazing area.



## Educational: Tarrant Regional Water District (TRWD) Rain Barrel Education and Scholarship Fundraiser (Tarrant County; Fort Worth)

Tarrant Regional Water District (TRWD) provided a rain barrel education program to the Marine Creek Land Scholars, a joint venture between Tarrant County College - Northwest Campus and the Fort Worth ISD Marine Creek Collegiate High School, where they learned about water conservation and rainwater harvesting. Fifteen high school students attended the education program held in the fall of 2022 where TRWD provided six 50-gallon barrels, hardware, and gift cards for painting supplies. The students completed and decorated all rain barrels and then held a raffle and auction as part of the Tarrant County College Earth Day festival in April 2023. Through their efforts, they raised \$1,250 towards college scholarships for the Land Scholars students. Using the Texas Water Development Board's Municipal Water Conservation Planning Tool, the TRWD estimates the project can save approximately 9,500 gallons per year with a 15-year expectancy and, with proper management, can result in approximately 142,500 gallons saved over time. The TRWD plans to continue to offer the program as a unique, hands-on education opportunity promoting rainwater harvesting and water conservation.



## Governmental: City of Austin OSCAR & CLARA Onsite Water Reuse Demonstration Project (Travis County; Austin)

The City of Austin's new, 260,000-square foot Permitting & Development Center has an onsite collection and reuse (OSCAR) system where an underground 40,000-gallon collection and reuse system captures rainwater and air conditioning condensate and uses it for landscape irrigation and a water feature. The closed-loop advanced reclaimed assembly (CLARA) system can treat up to 5,000 gallons of wastewater per day onsite to be reused for toilet and urinal flushing. Utilizing the two systems together allows for more effective and efficient onsite water management that also helps extend the city's core water supplies. OSCAR and CLARA are expected to save the city nearly 1.5 million gallons of drinking water annually and reduce the site's potable water use by 75 percent.



**OSCAR** is an On-Site Collection and Reuse system that collects air-conditioning condensate and rainwater to reuse for irrigation and landscape maintenance around the building.

Look for the sign in the lawn area to learn more about OSCAR's fit-for-purpose approach to water management.

Meet  
**OSCAR & CLARA**  
The Future of Water Management

Together, OSCAR and CLARA are helping the City of Austin to save over one million gallons of drinking water each year, reducing the site's potable water use by 84%.

As Austin's population grows and climate change stresses drinking water supplies, more OSCARs and CLARAs installed throughout the city will help to extend our water supplies and conserve precious drinking water.

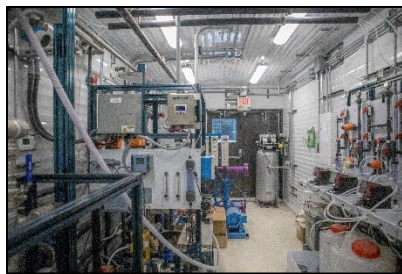





**CLARA** is a Closed-Loop Advanced Reclaimed Assembly that treats the building's wastewater and recycles it for toilet and urinal flushing.

Head to the steps in the courtyard to find out more about CLARA's closed-loop water recycling system. Look carefully, the casual eye may miss CLARA at first!





**Residential: Standen Residence (Travis County; Austin, Texas)**

The Standen residence was designed and built with rainwater harvesting in mind since municipal water service is unavailable in the neighborhood. The design provides for 100 percent of the household needs by maximizing the 4,000-square foot metal roof collection area while minimizing the conveyance distance between roof eaves and storage tanks. The two 10,000-gallon storage tanks are located underneath an exterior deck, allowing the system to conform to the natural slope of the lot while keeping the tanks out of sight. By collecting and capturing rainwater, Mr. Standen has been able to conserve local groundwater resources by avoiding drilling a well, minimizing erosion, and providing water back into the watershed through an underground overflow pipe.



## Regional: Delta Reclamation Project (Hidalgo County; La Villa, Texas)

The Delta Reclamation Project collects rainwater/stormwater through its regional canals and stores the captured water in a 100-acre detention pond. The project will provide flood control for the most populated areas of Hidalgo County and establish a treatment process to reclaim the water for municipal and irrigation use. The project is proposed to be constructed in three phases and includes an off-line stormwater detention pond and treatment facility. The project is currently piloting advanced treatment technologies, including micro-filtration and reverse-osmosis focused on treating the water to ensure its suitability for various end purposes such as drinking water. Utilizing a holistic approach to water management on a regional scale, the project reduces the reliance on traditional water sources, conserves valuable resources, minimizes the threat of flooding, promotes sustainable water management practices, and addresses water scarcity concerns in the region by providing an alternative water supply source. By showcasing the successful recapture and beneficial reuse of rainwater/stormwater, the project expects to set a precedence for sustainable practices and serve as a blueprint for other regions in the state.

