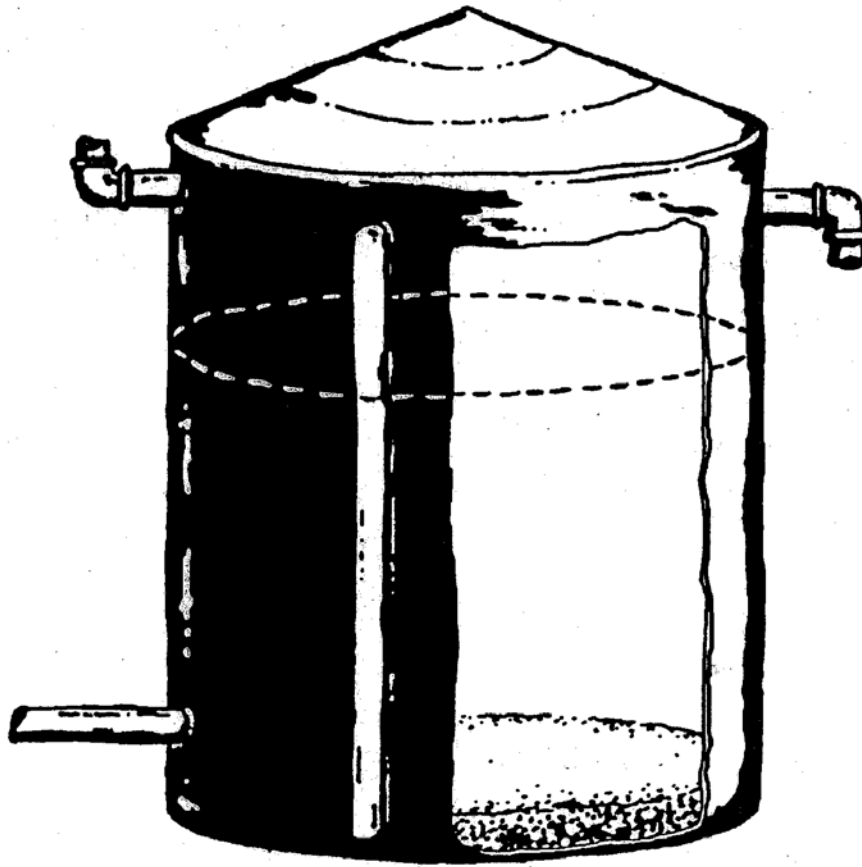


RAINWATER HARVESTING INCENTIVE PROGRAM



**WATER CONSERVATION DIVISION
P. O. Box 1088
AUSTIN, TX 78767
(512) 974-2199 FAX 974-6548
WATERCON@CI.AUSTIN.TX.US**

10/2004

PROGRAM GUIDELINES FOR RAINWATER HARVESTING REBATE COMMERCIAL OR RESIDENTIAL

General Purpose

The City of Austin Water Conservation Division offers a financial incentive to encourage the use of rainwater as a supplement to municipal water for irrigation use. Each application will be evaluated on a first come, first served basis. Due to budget issues, all requests may not be funded.

Eligibility

- o Applicant must receive 100% of its water from the Austin Water Utility or qualifying municipal utility.
- o A pre-inspection must be completed before any materials are purchased or installed.
- o Rainwater harvesting systems must collect a minimum of 300 gallons.
- o Life expectancy of the system should be a minimum of 20 years.
- o **Galvanized tanks are NOT eligible, due to their short life span.** However, metal tanks with liners may be approved on a case by case basis, tank specifications must be submitted.
- o Tanks that are not UV resistant must be painted or enclosed.
- o The applicant agrees to open the site to the public if so requested by Water Conservation Staff.

The application form includes a simplified method to calculate the optimum tank size for each site. The assumptions in this model are designed to reduce peak-day water use during typical dry summer months. Alternative approved calculation methods may be used. The “Texas Guide to Rainwater Harvesting” booklet offers additional guidance and information. You can obtain a copy through the Texas Water Development Board at 463-7955 or on our website at www.cityofaustin.org/watercon/rainwaterharvesting.htm

Rebate incentives are for a minimum of \$45 (300 gallons) up to a maximum of \$500 based on a combination of 15 cents per gallon of tank storage capacity plus half of the cost of specific components (pad materials, pump, pump switch, and first flush parts) for a complete, operational system. You may use gravity or pumps for distribution. The pump cost may include the cost of an in-tank level (float) switch to shut off the pump when the water in the tank falls below a certain level. Proposed rainwater projects cannot to be used for potable water systems nor can they be connected to the potable water supply system. All applicable building codes must be followed. Call 974-2199 with any application questions.

To Apply

1. Submit each of the following approximately *2 weeks* before you plan to purchase or install the system:

- **Application Form**
- **Site Plan** - Layout of buildings, streets, fences, gates and proposed tank location(s).
- **System Drawing** - Sketch of the proposed system including all design calculations, and how will the water travel from the roof to the tank to the landscape area.
- **Operation Guide and Maintenance** – Written description of how system will function and how maintenance will be performed.

Submit your application packet to: Fax (512) 974-6548 or

Mail : Water Conservation—Rainwater Harvesting

P. O. Box 1088

Austin, TX 78767

2. Wait until we contact you for the pre-inspection. Pre-inspections are mandatory and materials **cannot** be purchased until after you receive approval of your plan from City staff.
3. After completion, submit all qualifying receipts.
4. We will contact you for a final inspection. Rebate checks will be received 3-5 weeks after the final inspection.

CALCULATING OPTIMUM TANK SIZE

1. Determine the optimum tank capacity for the property size. An average of 10 inches falls during the months of June, July, August and September; the typical system can collect 80% since 550 gallons of water can be collected from 1000 square feet of roof area during a 1 inch rain. This means 4,400 gallons of water is collected per 1000 sq. ft. of area. (.80 X [550 gallons X 10 inches] = 4400 gallons)

Square footage of rainwater collection area _____ ÷ 1000 X 5000 = _____ gallons.

2. Assume that the typical **St. Augustine grass lawn** requires 1 inch of water per week or about 560 gallons per 1000 sq. ft. using conventional spray irrigation. During the 16 week peak-water-use period, the landscape would require approximately 9000 gallons (560 gallons per week X 16 weeks = 8960 gallons) of water per 1000 sq. ft. On average, about 5000 gallons of that is provided by summer rainfall. Thus the remaining 4000 gallons would be provided by stored rainwater. Keep in mind that less water may be needed if alternative irrigation and WaterWise principles (minimal turf, drought tolerant plants, etc.) are employed.

Square footage of landscape to be watered _____ ÷ 1000 X 4000 = _____ gallons.

Optimum tank capacity, for this program, is the lesser of these two figures; however, alternative calculations are welcome for consideration.

Example

The Jones family has a home with a 1500 square foot metal roof in Austin. About 550 gallons of rainwater can be collected from a 1000 square foot roof in a one inch rain. In the summer months (June, July, August, September), Austin receives approximately 10 inches of rain. Thus, 4400 gallons can be collected during the summer months from a 1000 square foot roof. (.80 X [550 gallons X 10 inches] = 4400 gallons)

Size of collection area ÷ 1000 sq. ft. X 5000 gallons = gallons of collected summer rainfall

1500 sq. ft. ÷ 1000 sq. ft. X 5000 gallons = 7,500 gallons of collected summer rainfall

The Jones family wants to water their St. Augustine lawn with the collected rainwater. They have approximately 850 sq. ft. of lawn. A 1000 sq. ft. St. Augustine lawn uses approximately one inch or 560 gallons of water per week. About 9000 gallons of water will be needed during the 16 weeks of the summer months for 1000 sq. ft. of lawn. During a one inch rain, a 1000 sq. ft. St. Augustine lawn will receive approximately 550 gallons of water. The 1000 sq. ft. lawn will receive about 5000 gallons of water from the average 10 inches of summer rainfall. Thus, an additional 4000 gallons of water should be provided by collected rainfall for this lawn.

Size of lawn (sq. ft.) ÷ 1000 sq. ft. X 4000 gallons = gallons of supplemental water

850 sq. ft. ÷ 1000 sq. ft. X 4000 gallons = 3400 gallons of supplemental water

The optimum tank size is 3,400 gallon rainwater system.

PRICE ESTIMATE WORKSHEET

Use this worksheet to keep track of your price estimates. Once completed, include a copy of this worksheet **OR** an itemized contractor bid. Include price, size, and quantity for all parts.

Tank (s)

- Tank type (material*): fiberglass, polypropylene, concrete, stone, other _____
***REMEMBER UNLINED, GALVANIZED METAL TANKS ARE NOT ELIGIBLE FOR THE REBATE.**
- Tank size (in gallons) _____
- Tank dimensions (ft.) _____
- Cost of tank and delivery _____

First Flush Components “First flush” is a system of piping to collect debris before it enters the tank. Refer to “Rainwater Collection with Several Options” schematic drawing on the Water Conservation web site (www.cityofaustin.org/watercon) _____

Pad Construction

- Material*: gravel, sand, concrete
***Wooden, above ground platforms will not be approved.**
- Site must be level.

Pump and Optional Float Level Switch

- Is a pump necessary? If yes, consider installing a float level switch to prolong the life of the pump.
- How far do you want to pump the water? _____ What horsepower do you need? _____

OPERATION AND MAINTENANCE

Operation Guide

Referring to your site plan and system drawing, describe in writing how the system will function. Include details such as type and size of collection (roof) surface; tank size, composition and location; piping and first flush details; pump type and location or other water distribution method. (You may attach separate sheets)

Maintenance Plan

Provide a detailed plan on how maintenance will be done, including scheduled bacteria control measures if spray irrigation is to be used. (You may attach separate sheets)

RAINWATER HARVESTING INCENTIVE APPLICATION FORM

Name (as it appears on water bill) _____

Physical Address: _____ Zip _____

Mailing address (if different) _____ Zip _____

Circle one: Residential Nonprofit Commercial

Contact person _____ Phone _____ Fax _____

Email address: _____

City of Austin Water Utility account number _____

If not Austin Water Utility customer, provide a copy of your water bill.

Construction start date _____ Estimated completion date _____

Application Packet Must Include All The Following:

Site Plan
 System Drawing
 Detailed Price Estimate
 Operation Guide
 Maintenance Plan
 Application Form

Agreement

The goal of the rainwater harvesting incentive program is to provide demonstration sites that introduce the concept of on-site rainwater harvesting to Austin citizens. The undersigned participant understands and agrees that rebated systems must remain operational for five years, or the City is entitled to recover a prorated portion of the incentive. The applicant agrees to allow public access to the system if requested by Water Conservation Staff. Only customers of the City Water Utility (or customers whose supplier receives 100% of its water from the Utility) are eligible.

The City of Austin makes no claims as to the safety or reliability of installed equipment or resulting water. **The participant agrees that the water is to be for non-potable uses only.**

I agree to the terms of Rainwater Harvesting Incentive Program.

Signature* _____ Print name _____ Date _____
(Same as on water bill) (Same as on water bill)

Title _____ for company name* _____ Date _____

*If applicant is a company or nonprofit, owner or authorized officer must sign.

City of Austin Use Only--Rebate Calculation:

Tank Size (gallons)	_____	X .15 (cents) =	Total \$ _____
Pump and switch	_____	X .5 (50 %) =	up to \$ 100 _____
Pad Materials	_____	X .5 (50 %) =	up to \$ 100 _____
1st Flush Parts	_____	X .5 (50 %) =	up to \$ 35 _____

Total Rebate not to exceed \$ 500 **Total Rebate** _____