Post Oak Savannah Groundwater Conservation District: Water Conservation Program

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In collaboration with Texas A&M AgriLife Extension

Conserving a Precious Resource

Rainwater harvesting is the capture, diversion, and storage of rainwater for later use.

"Irrigation of the land with seawater desalinated by fusion power is ancient. It's called rain. " Michael McClary

Potential Rainfall Collection Volume

For every 1" of rain:

- Each square foot of a collection surface footprint generates about 0.6 gallons of water:

Total Gallons H_2O = Square Feet of Footprint X 0.6 Gallons/ft^2

~In other words~

- Each 2,000 square feet of collection surface generates 1,200 gallons of water

…Rainwater harvesting…

Tanks

Library, Bertrum, TX


RAINWATER HARVESTING
Rainwater harvesting reduces stormwater runoff and the problems associated with it. By harvesting rainwater and storing it, you can slowly release the water back into the soil, either through irrigation or direct application.
The capacity of the adjoining tank at the Dryland Learning Center is 5,000 gallons. Collected water will be used in the garden, rain garden, bioswale and native grass demonstration areas.
The roof is only partially guttered because the goal was to capture rainwater for the garden and demonstration areas only.
Components of this rainwater harvesting system include: gutters, piping to the tank, tank, pump and associated piping to the garden and demonstration areas.
Benefits of Rainwater Harvesting
What is Stormwater?
DO NOT DRINK

Why Harvest Rainwater?

- Reduce dependency on water in landscapes
- Water is a precious resource
- Rainwater is free! *(The water, not the infrastructure)*
- Water quality – rainwater is best water for soil and plants *(no salt, free natural fertilizer, helps balance pH of our alkaline soil)*
- Stormwater management – reduce on-site flooding and pollutant

POSCGD Water Conservation Program Objectives:

- Rainwater Harvesting Rebate Program
- Demonstration Sites at POSGCD Office
  - Rainwater Harvesting site
  - Garden site
  - Drip irrigation site
- Education workshops and Trainings

Demonstration Site

- Post Oak Savannah office
- RWH demonstration Site
- Drought tolerant landscape

POSCGD Water Conservation Program Goals:

- To encourage RWH and promote water conservation within the district
- Promote and adopt Best Management Practices maximizing the effectiveness of integrated rainwater harvesting systems
- Offer workshops on RWH

Site Analysis

- Supply
- Calculate catchment area
- Multiply by monthly rainfall
- Calculate yield of harvested rainwater in gallons
- Demand
- Plant selection
- Appropriate use and water budget
- Sizing tank
  - Checkbook method

POSGCD Rebate Program

- Incentive – rebate up to $3,000 based on gallon capacity of cistern
- $1.00 per gallon capacity of cistern

(The per gallon capacity rebate amount includes tank, gutter, tank foundation, overflow, and miscellaneous materials, which make up the system

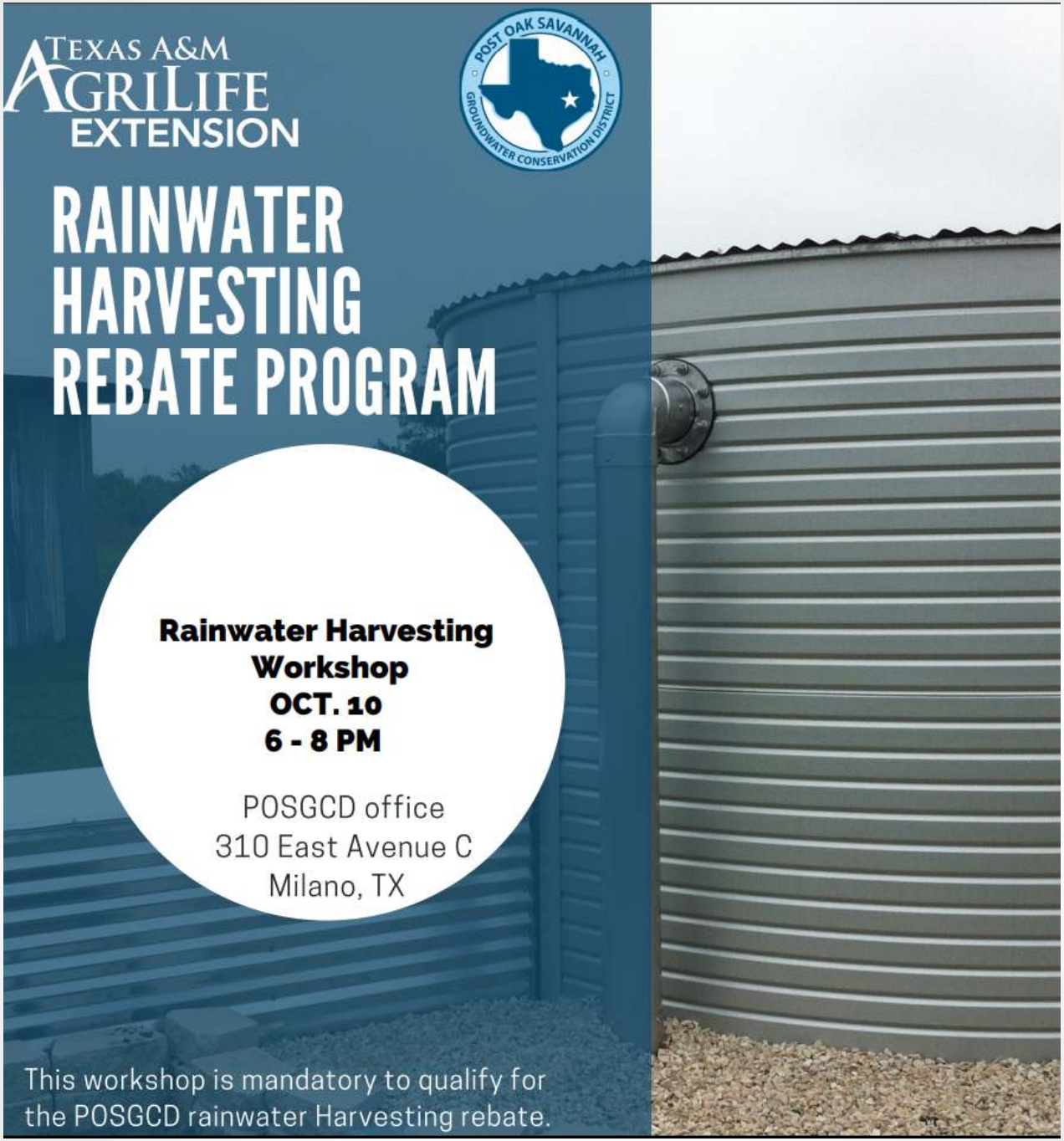
For example, you purchase a 550 gallon tank; install gutter, overflow and miscellaneous fittings. You would receive a $550 rebate that covers the complete system including the tank, gutter, miscellaneous fittings etc.

Rebate details:

- Applicant must be a resident or landowner in the District.
- The system must be installed within the district.
- Applicants must complete an approved rainwater harvesting course to qualify for the reimbursement.
- Only one application per household can be filed every 12 months.
- A maximum of no more than $3000 could be awarded per household per lifetime.
- Reimbursements would be limited to $1 per gallon of storage of the completed system.
- Site plans must be approved before expenses may be considered for the program.
- A completion inspection by qualified staff must be completed and filed along with qualifying receipts for reimbursement.
- Qualifying applicants may be eligible for short term financial assistance in purchasing tanks.

Program Instructions:

- Attend an approved Rainwater Harvesting Workshop.
- Turn in a RWH Site plan to the District for approval prior to purchase.
  - System site plan (can be hand drawn) including:
    - Location of cistern/tank
    - Outline of catchment area
    - Description of cistern/tank (size, type)
- Applicant will be notified of approval status and availability of funds.
- Complete a POSGCD RWH Rebate program application with the following attached:
  - Certificate of completion of POSGCD Rainwater Harvesting Workshop.
  - Approved site plan
  - Attach original receipts of cistern/tank.
- District staff will schedule a completion inspection prior to issuing rebate.


TEXAS A&M AGRILIFE EXTENSION
POST OAK SAVANNAH GROUNDWATER CONSERVATION DISTRICT
RAINWATER HARVESTING REBATE PROGRAM
Rainwater Harvesting Workshop
OCT. 10
6 - 8 PM
POSGCD office
310 East Avenue C
Milano, TX
This workshop is mandatory to qualify for the POSGCD rainwater Harvesting rebate.

Be Sure To Use The Right Tools!

For additional information:
http://rainwaterharvesting.tamu.edu

EarthKind Workshop

- Work with local Master Gardener Programs from Milam and Burleson counties to design garden
- Native and better adapted plants in landscapes are environmentally sustainable.
  - Drought Tolerance
  - Heat tolerance
  - Water efficiency
  - Lower fertilizer requirement
- Design/Assist in drip and water conserving irrigation

Texas A&M AgriLife Extension

EARTH-KIND® Water Conservation Workshop

Post Oak Savannah Groundwater Conservation District

Come learn how to make your landscape look better and save water, all while having fun!!!

Where: Post Oak Savannah Groundwater Conservation Office
(310 East Avenue C, Milano, TX)

When: November 6th, 2017
5:30 – 8:00 pM

Topics covered:

- Landscape design for water conservation
- Getting the most out of your soil
- Managing turf to save water and money
- Plant selection for beauty and drought-tolerance
- Mulching and other water-conserving practices
- Management for a low-maintenance landscape
- How to install a drip irrigation system
- How to identify and fix irrigation problems
- Rainwater harvesting

Registration:

512-455-9900

Public Outreach & Education

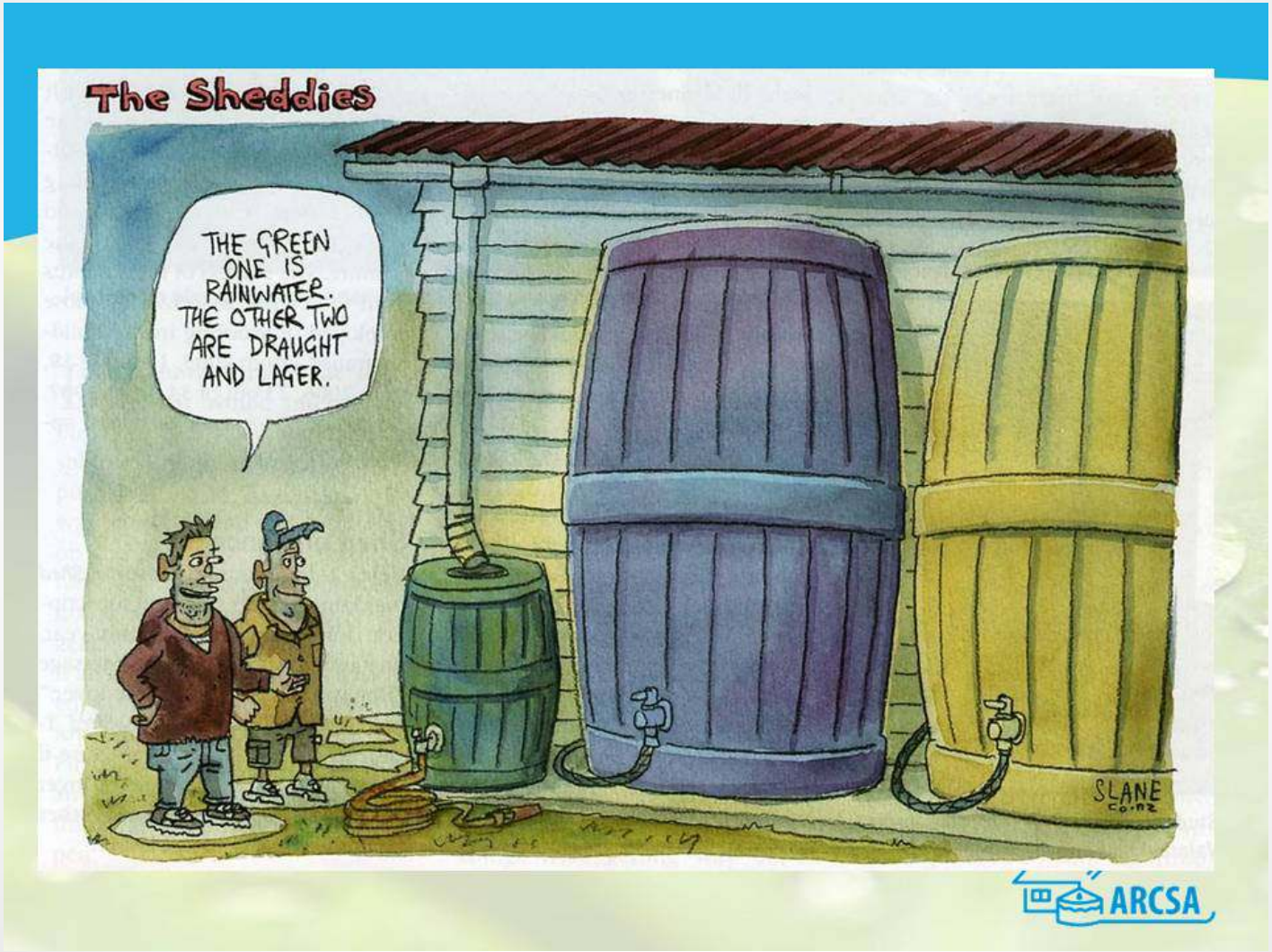
- Rainwater Harvesting 101
  - Making a rain barrel
- Advanced RWH Course
  - Design/ Construction
  - Calculate collection amount
  - Site plans
- Water Conservation Workshop
  - 40 Gallon Challenge
  - And More…
- Landscape Course
  - Earth-Kind Program
- Water Efficient Irrigation Course
- Heathy Lawns and Healthy Waters Program

Scheduled Workshops

- Rainwater Harvesting Workshop
  - October 10th
  - Must Register, space is limited
- Earthkind Workshop
  - November 6th
  - Must Register , space is limited

What Are You Going To Do With Your Rainfall?

Questions?


The Sheddies
THE GREEN ONE IS RAINWATER. THE OTHER TWO ARE DRAUGHT AND LAGER.
SLANE
ARCSA