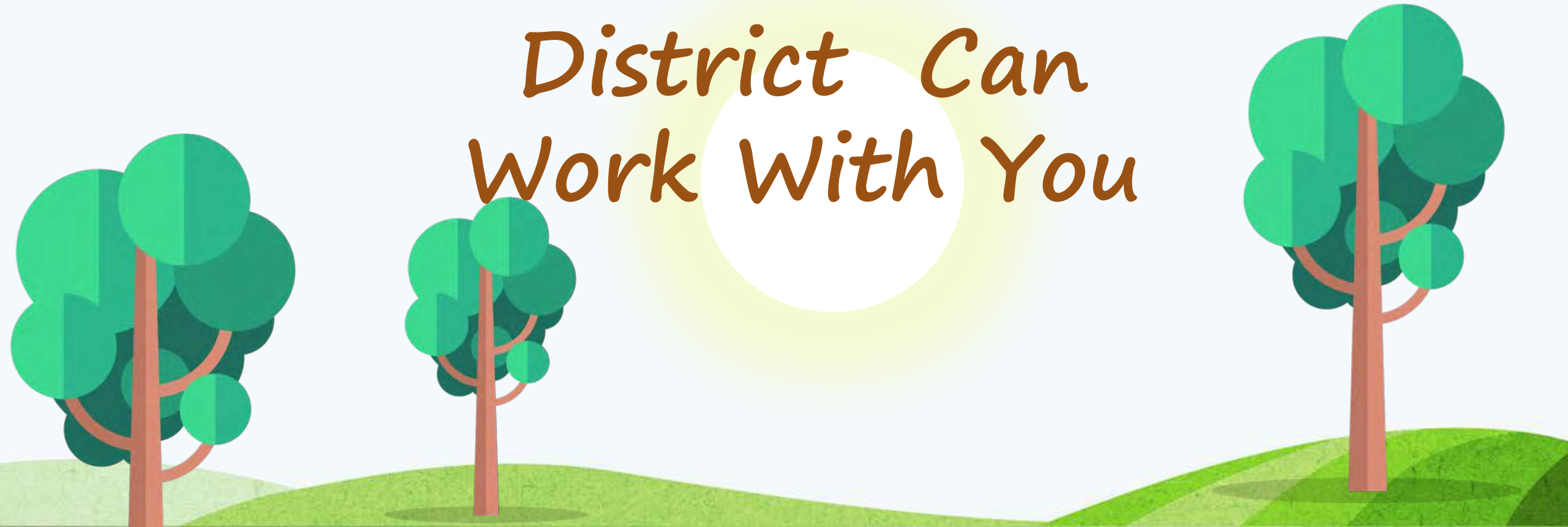
Welcome to Lucy Hill Patterson Memorial Library

Doug Box Education Coordinator
February 28, 2019

Post Oak Savannah
Groundwater Conservation District

Who we are and How can Post Oak Savannah Groundwater Conservation District Can Work With You



What We Will Cover Tonight:

- Who we are
- Irrigation Alternatives for Rainfall Harvester
- Installing your own Rainwater Harvesting System
- Saving Water in your Garden
- Become an Aquifer Conservancy Partner
- And More

Who is Post Oak Savannah GCD

- Created by Citizens of Burleson and Milam Counties

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- Empowered by Texas Law

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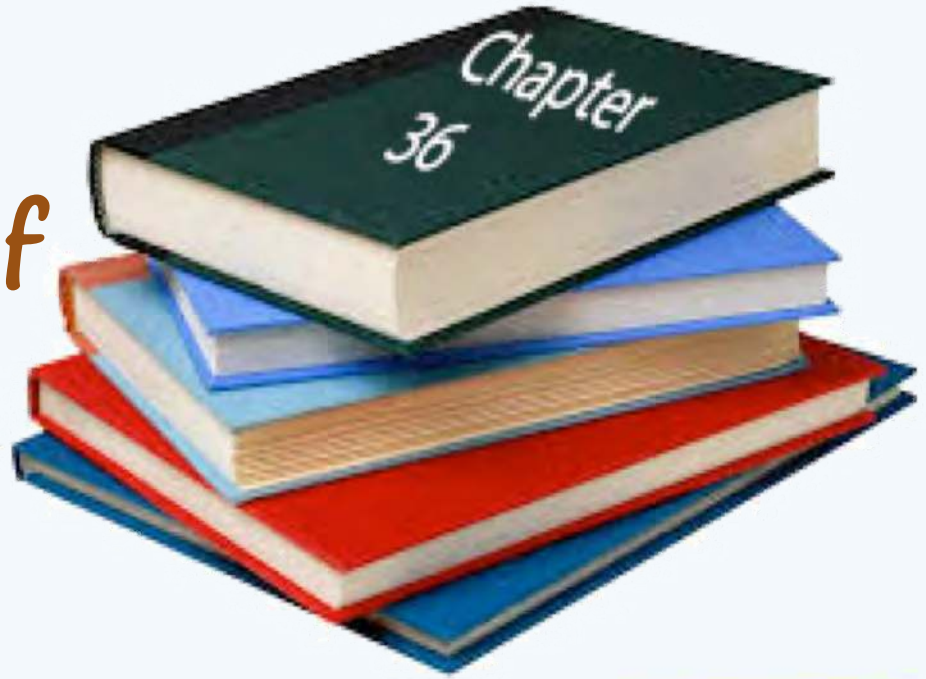
- Governed by Chapter 36 of Texas Water Code



Who is Post Oak Savannah GCD

- Created by Citizens of Burleson and Milam Counties
- Empowered by Texas Law
- Governed by Chapter 36 of Texas Water Code
- Our Board and Staff

Who is Post Oak Savannah GCD

BOARD OF DIRECTORS

POST OAK SAVANNAH GROUNDWATER CONSERVATION DISTRICT

Sidney Youngblood
Board President
Milam Co Industrial

Steven Wise
Board Vice President
Milam Co At Large

Tommy Tietjen
Board Secretary
Burleson Co Municipal

Lee Alford
Director
Burleson Co Industrial

Becky Goetsch
Director
Burleson Co At Large

Durwood Tucker
Director
Milam Co Agriculture

Chris Whittaker
Director
Milam Co Municipal

Jay Wilder
Director
Burleson Co Agriculture

Bob Wilson
Director
Milam Co Rural Water

Robert Ware
Director
Burleson Co Rural Water

STAFF

POST OAK SAVANNAH GROUNDWATER CONSERVATION DISTRICT

Gary Westbrook
General Manager

Bobby Bazan
Water Resources Specialist

Elaine Gerren
Administrative Assistant

Ralph Sifuentes
Field Technician

Doug Box
Education Coordinator

What does Post Oak Savannah GCD Do

- Protect Landowner Property

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You Own the Water Under your Land

What does Post Oak Savannah GCD Do

- Protect Landowner Property
- Treat all Water Producers Equally

What does Post Oak Savannah GCD Do

- Protect Landowner Property
- Treat all Water Producers Equally

Whether you have:

An Exempt Well
Farmer
Local Water Utility
Or You Chose to Lease your Water Rights

What does Post Oak Savannah GCD Do

- Protect Landowner Property
- Treat all Water Producers Equally
- Evaluate Condition or Aquifers by well Monitoring System

What does Post Oak Savannah GCD Do

- Protect Landowner Property
- Treat all Water Producers Equally
- Evaluate Condition of Aquifers by well Monitoring System
- Protect Groundwater with Management Plan

What does Post Oak Savannah GCD Do

- Encourage Water Conservation

What does Post Oak Savannah GCD Do

- Encourage Water Conservation
- Assist Landowners with Cost of Plugging Abandoned Water Wells

GROUNDWATER
WELL ASSISTANCE PROGRAM

POST OAK SAVANNAH
GROUNDWATER CONSERVATION
DISTRICT

What does Post Oak Savannah GCD Do

- Encourage Water Conservation
- Assist Landowners with Cost of Plugging Abandoned Water Wells
- Assist Fire Departments with cost of Water Conservation Efforts

What does Post Oak Savannah GCD Do

- Encourage Water Conservation
- Assist Landowners with Cost of Plugging Abandoned Water Wells
- Assist Fire Departments with cost of Water Conservation Efforts
- Grants to Local Water Utilities for conservation

What does Post Oak Savannah GCD Do

- Grants to Local Water Utilities for conservation

Since 2006 POSGCD has Awarded Grants to City of Rockdale Over $600,000 and South West Milam Water Supply Over $1,000,000

Installing your own Rainwater Harvesting System

Rainwater Harvesting Grants

- The rainwater harvesting system must be installed within the District
- Applicants must complete an approved Rainwater Harvesting 101 course to qualify for the reimbursement
- A maximum of no more than $3,000.00 can be awarded per household per lifetime
- Reimbursements are $1.00 per gallon of rainwater storage of the completed system up to $3,000.00
- (the per gallon capacity rebate amount includes tank, gutter, tank foundation, overflow and miscellaneous materials needed to create the system)

Why Collect Your Rainwater

POST OAK SAVANNAH GROUNDWATER CONSERVATION DISTRICT

BURLESON AND MILAM COUNTIES AVERAGE

= 37 INCHES

OF RAIN PER YEAR

1000 SQUARE FOOT ROOF

CATC 600 GALLONS OF WATER IN A 1" RAIN

= 320 GALLONS

AVERAGE HOME WATER USE PER DAY

100 GALLONS

USED OUTDOORS DAILY

RAINWATER HARVESTING BENEFITS

- REDUCES DEMAND ON EXISTING WATER SUPPLY
- REDUCES RUN-OFF
- REDUSES ERROSION
- REDUCES CONTAMINATION OF SURFACE WATER

RAINWATER

- HELPS RECHARED AQUIFERS
- IS VALLUED BECAUSE IT SUPPORTS LANDSCAOE HEALTH
- IS FREE OF SODIUM AND CHORAMINES
- PH IS OPTIMIZED TO SUPPORT PLANT & MICROBIAL SOIL LIFE

RAINWATER CAN BE USED


LANDSCAPE USE


CAR WASHING


PET WATERING


FIRE PROTECTION

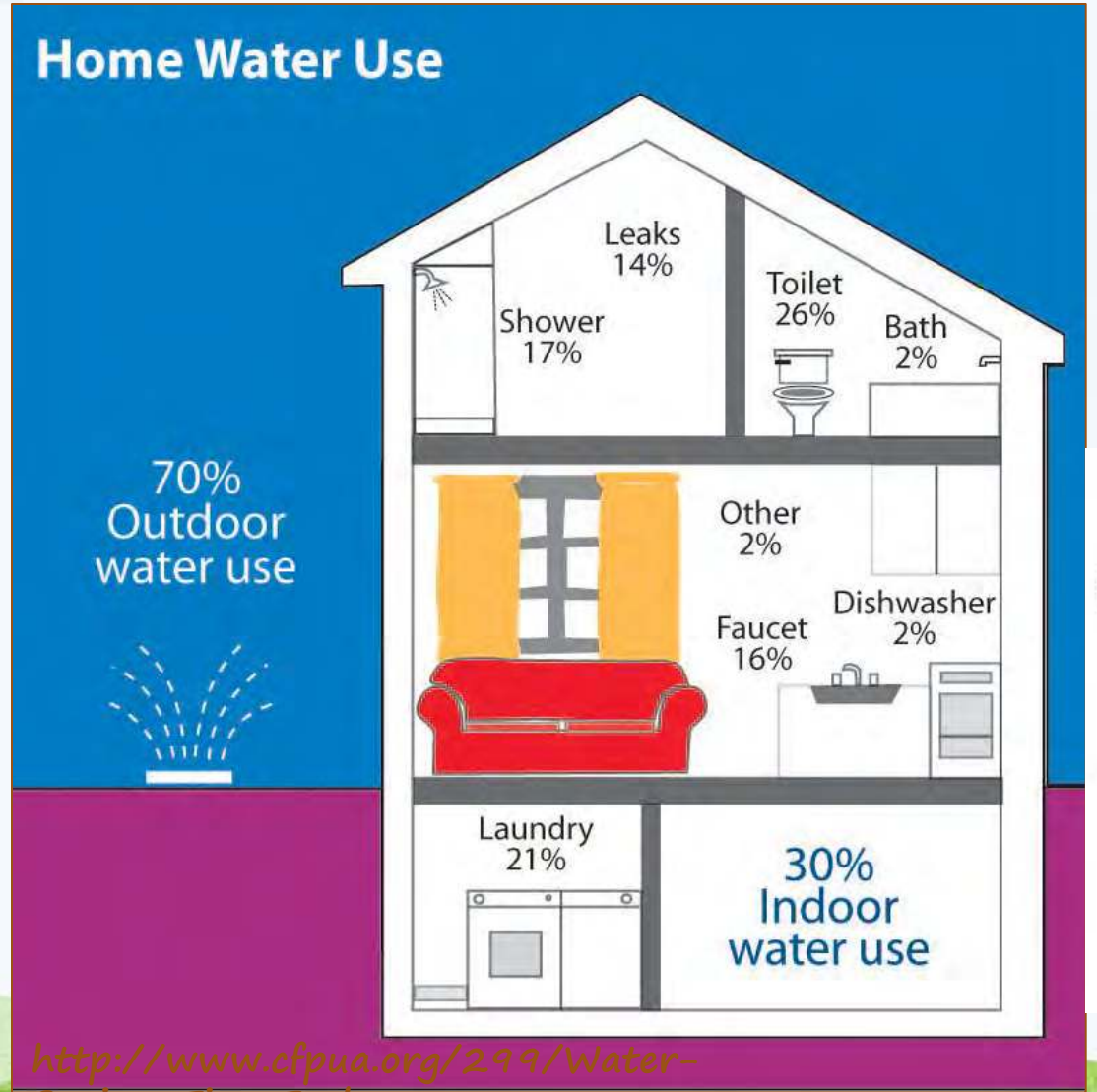
RAINWATER HARVESTING GRANT PROGRAM

Conserving a Precious Resource

Rainwater harvesting is the capture, diversion, and storage of rainwater for use in landscaping, rangeland, and other purposes

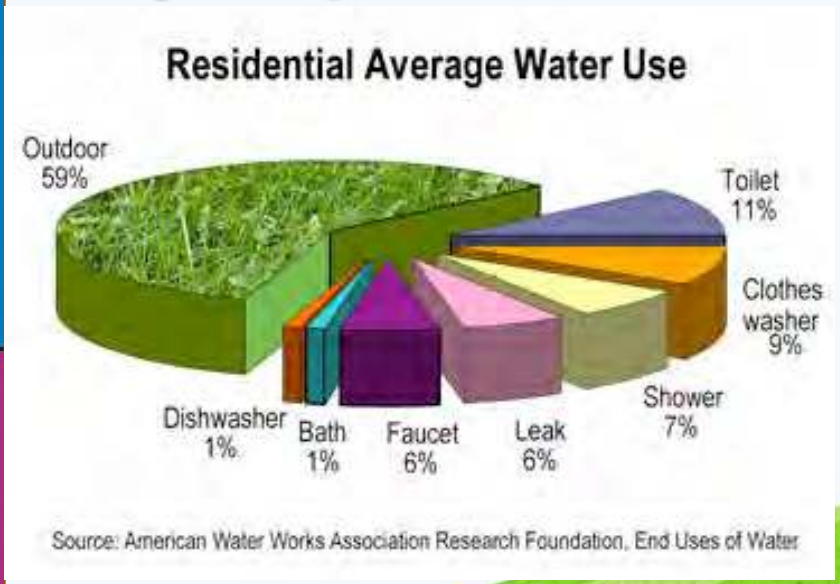
Texas A&M AgriLife Extension

How Do We Use Water?



http://www.cfpua.org/299/Water-

Outdoor use is about 60 – 70% (estimates vary slightly)!



Texas A&M AgriLife Extension

Advantages of Rainwater Harvesting

- Is a conservation practice
- Can reduce storm water runoff, and so reduces pollutants entering water bodies
- Rainwater is of superior quality: zero hardness, sodium-free, and nearly neutral pH (neither acidic nor basic)
- When properly managed, rainwater harvesting eliminates the need for costly treatment and distribution systems
- Apart from costs to collect, store, treat, and convey the water into the facility, rainwater harvesting is free

Texas A&M AgriLife Extension

Texas Water Development Board

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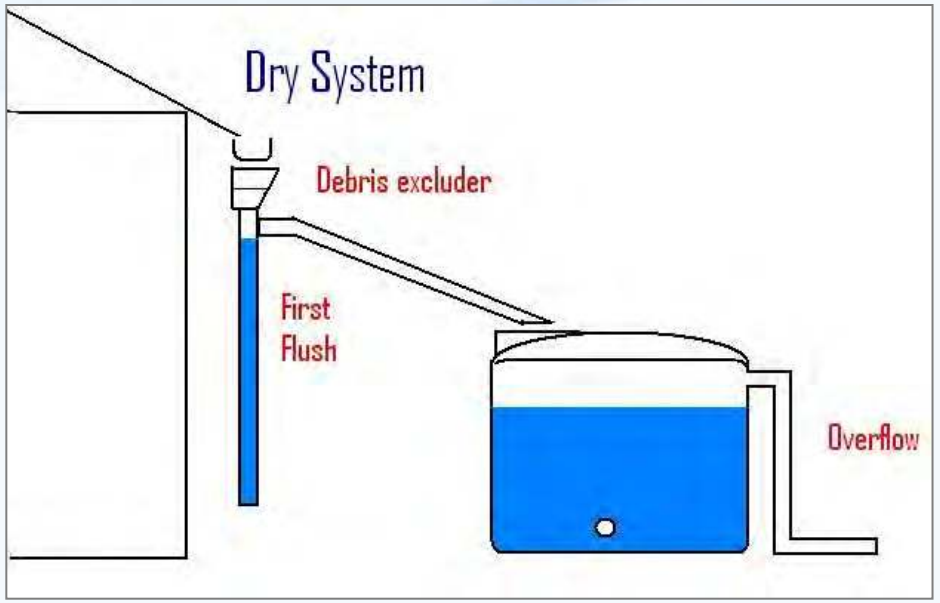
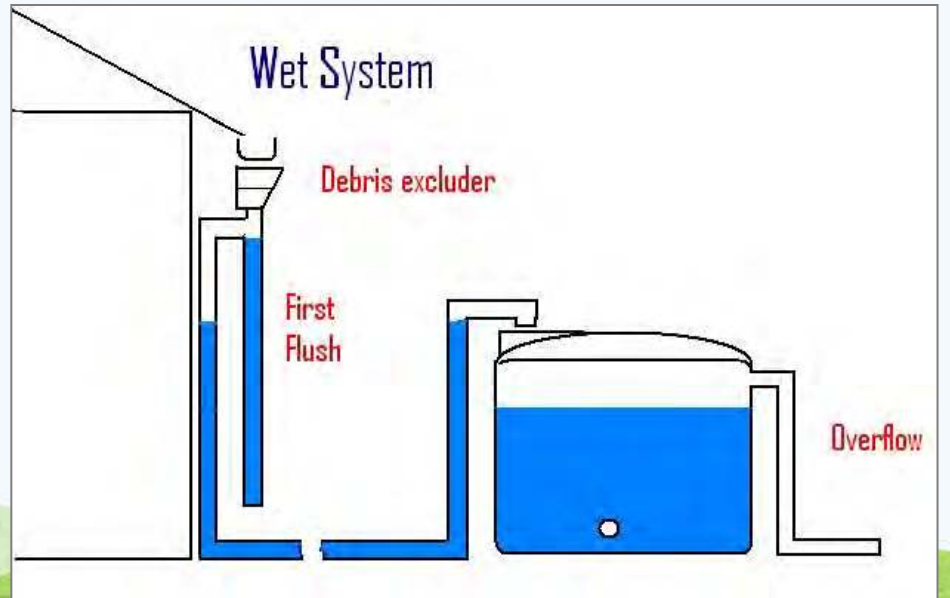
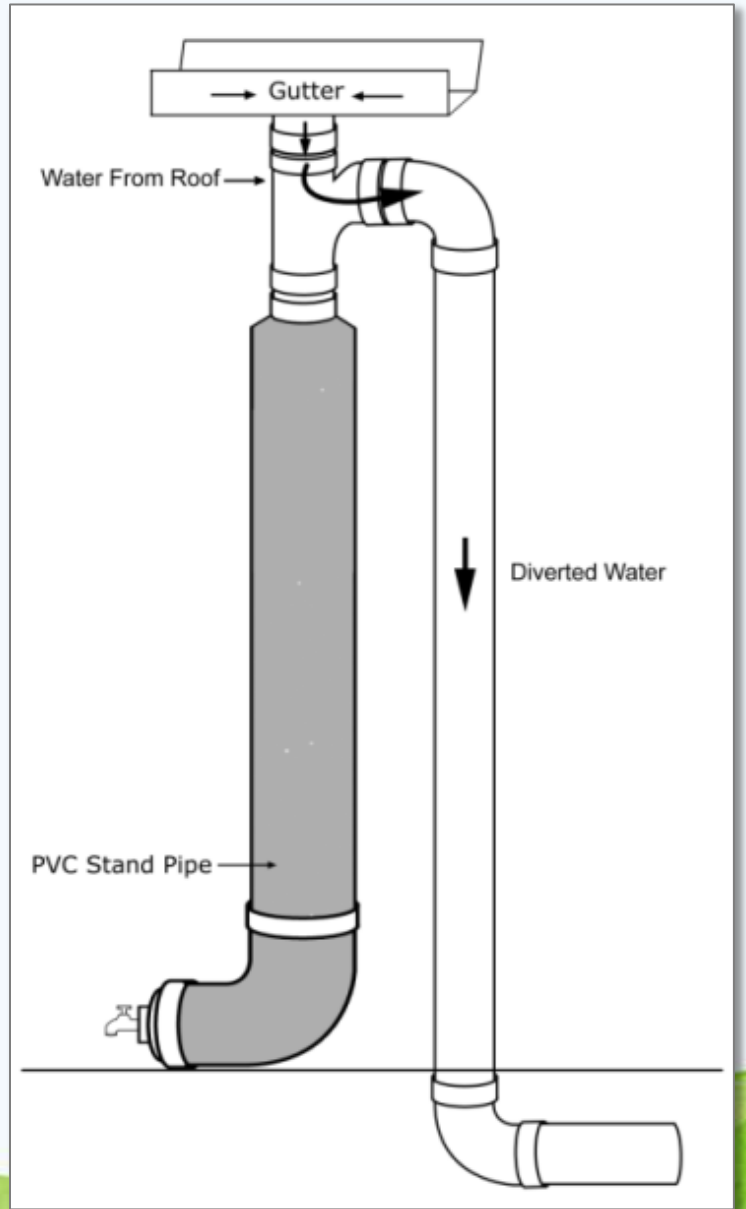
Conveyance







TEXAS A&M AGRILIFE EXTENSION

Different Gutters and Downspouts

TEXAS A&M AGRILIFE EXTENSION

Primary Filtration

- Leaf screens
- Downspout filters
- Strainer baskets
- Self cleaning filters
- First flush diverters

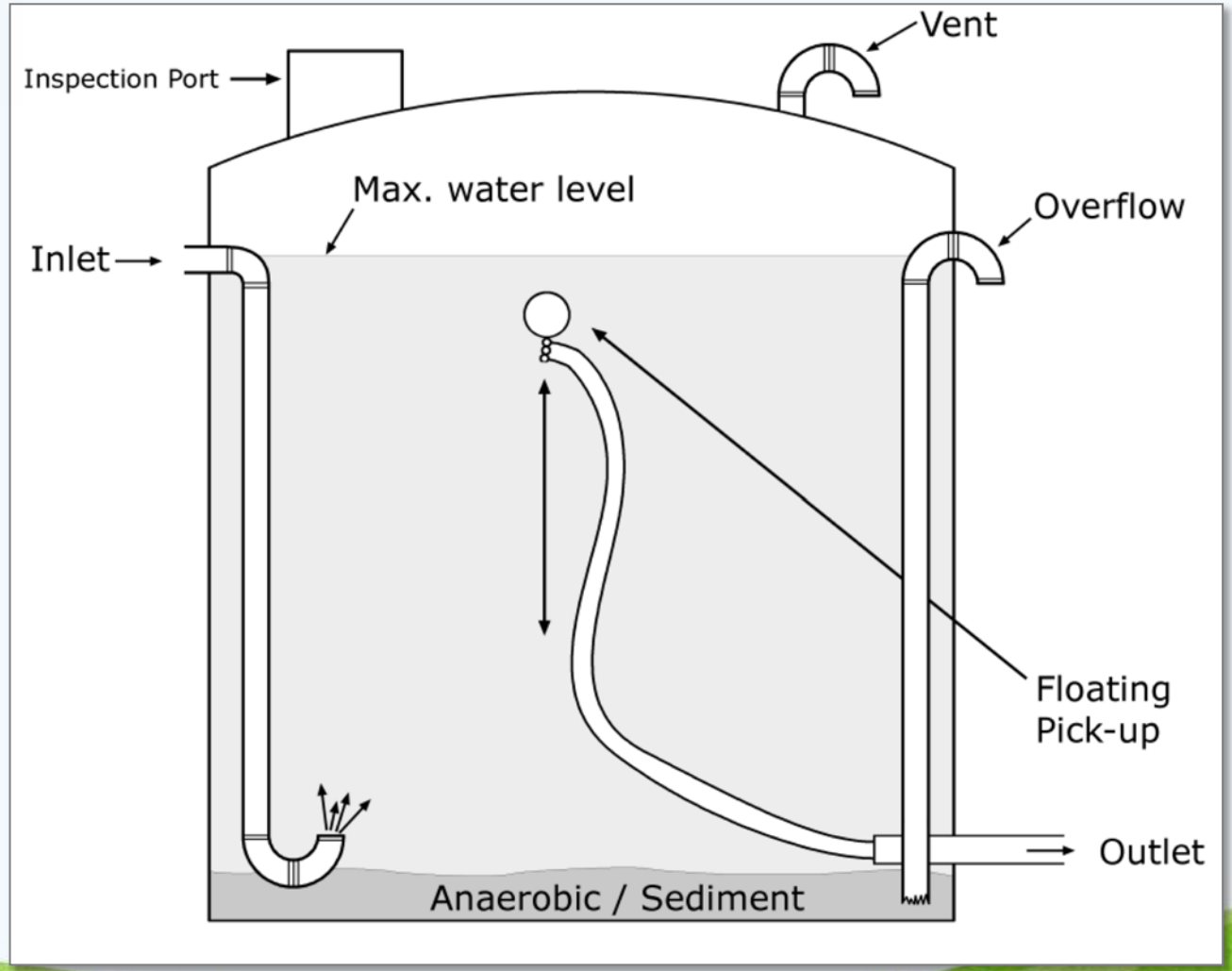
Texas A&M AgriLife Extension

Tanks

TEXAS A&M AGRILIFE EXTENSION

Water Going In and Out of Tank

- Inlet – side or top or bottom
- Outlet – 4 inches from bottom
- Overflow – side near top
- Inspection port
- Vent



Texas A&M AgriLife Extension

The Steps for POSGCD Rainwater Harvest Grant

1. Attend Rainwater Harvest 101 class at POSGCD Office

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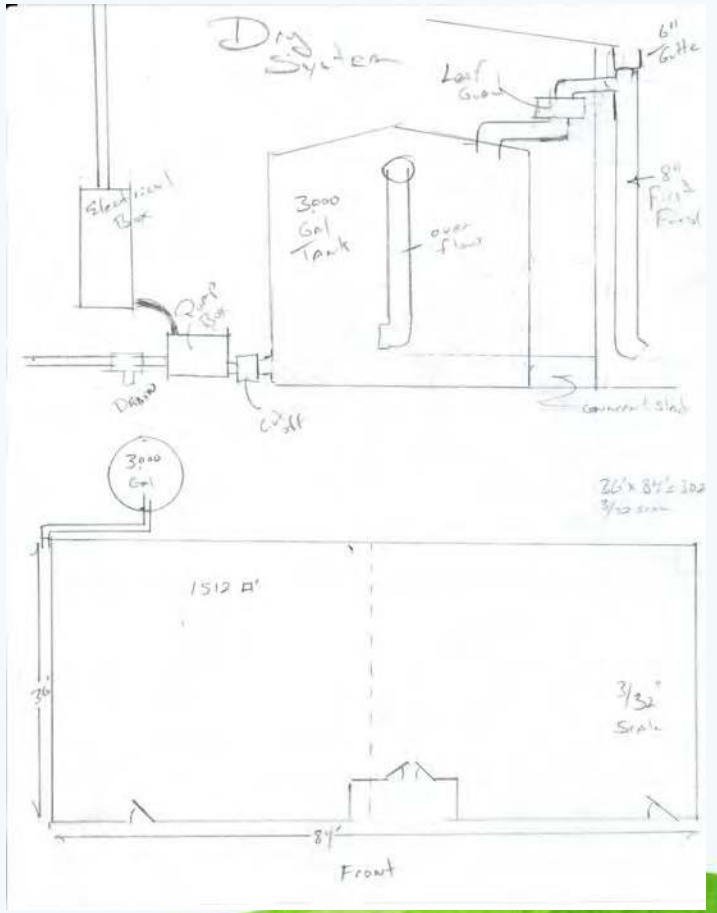
2. Draw Plans for your Rainwater Harvest System



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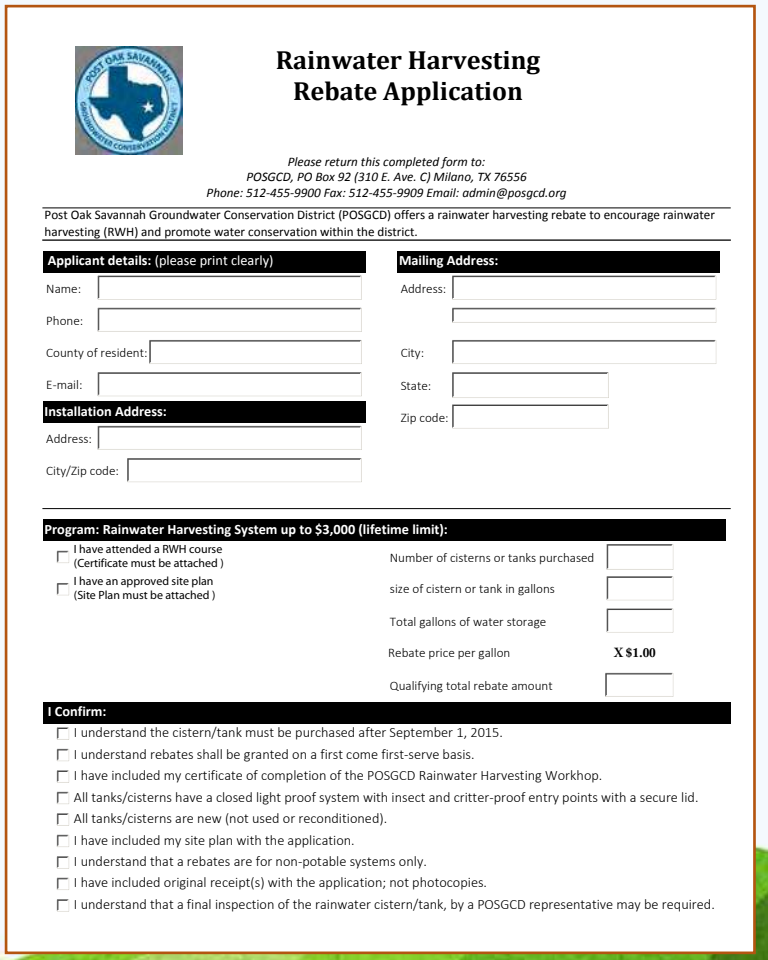

Rainwater Harvesting Rebate Application

Please return this completed form to:
POSGCD, PO Box 92 (310 E. Ave. C) Milano, TX 76556
Phone: 512-455-9900 Fax: 512-455-9909 Email: admin@posgcd.org

Post Oak Savannah Groundwater Conservation District (POSGCD) offers a rainwater harvesting rebate to encourage rainwater harvesting (RWH) and promote water conservation within the district.

Applicant details: (please print clearly)

Name:
Phone:
County of resident:
E-mail:

Mailing Address:

Address:
City:
State:
Zip code:

Installation Address:

Address:
City/Zip code:

Program: Rainwater Harvesting System up to $3,000 (lifetime limit):

- ☐ I have attended a RWH course (Certificate must be attached)
- ☐ I have an approved site plan (Site Plan must be attached)

Number of cisterns or tanks purchased
size of cistern or tank in gallons
Total gallons of water storage
Rebate price per gallon X $1.00
Qualifying total rebate amount

I Confirm:

- ☐ I understand the cistern/tank must be purchased after September 1, 2015.
- ☐ I understand rebates shall be granted on a first come first-serve basis.
- ☐ I have included my certificate of completion of the POSGCD Rainwater Harvesting Workhop.
- ☐ All tanks/cisterns have a closed light proof system with insect and critter-proof entry points with a secure lid.
- ☐ All tanks/cisterns are new (not used or reconditioned).
- ☐ I have included my site plan with the application.
- ☐ I understand that a rebates are for non-potable systems only.
- ☐ I have included original receipt(s) with the application; not photocopies.
- ☐ I understand that a final inspection of the rainwater cistern/tank, by a POSGCD representative may be required.

The Steps for POSGCD Rainwater Harvest Grant

1. Attend Rainwater Harvest 101 class at POSGCD Office
2. Draw Plans for your Rainwater Harvest System
3. Submit Application with Plan to POSGCD Office
4. Receive "OK" on your application

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1. Attend Rainwater Harvest 101 class at POSGCD Office
2. Draw Plans for your Rainwater Harvest System
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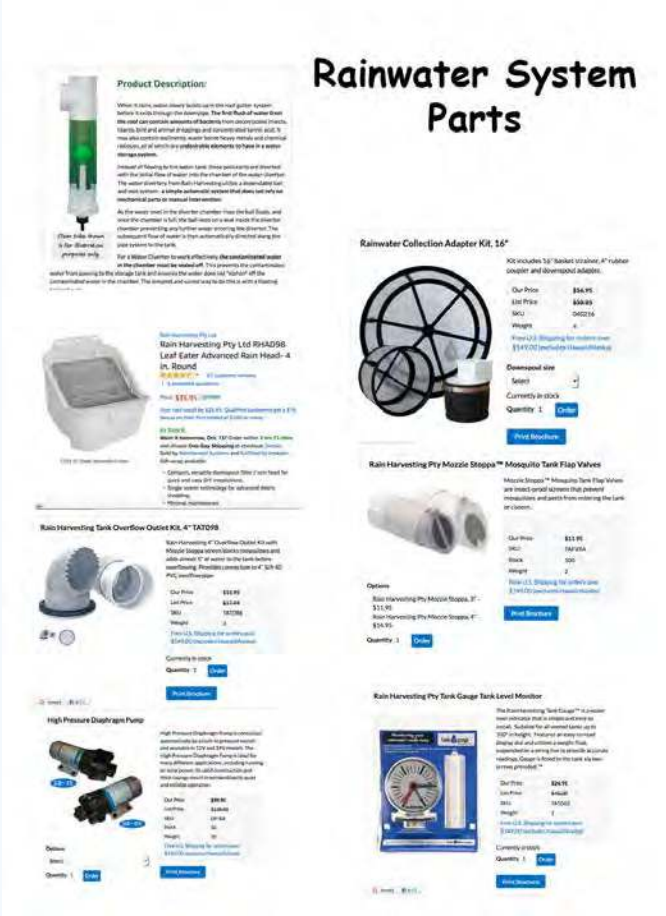
4. Receive "OK" on your application
5. Install RWH System



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5. Install RWH System
6. Contact Bobby Bazan at POSGCD for inspection

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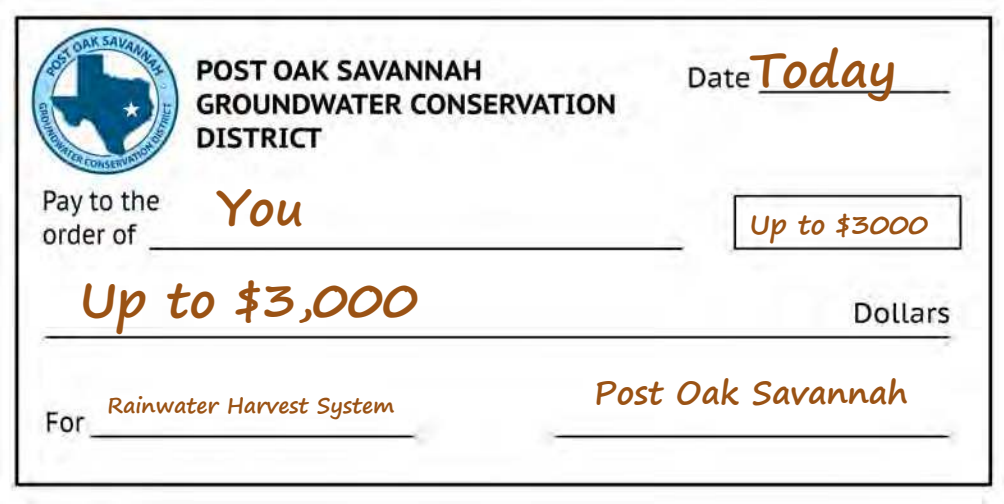
2. Draw Plans for your Rainwater Harvest System
3. Submit Application with Plan to POSGCD Office
4. Receive "OK" on your application
5. Install RWH System
6. Contact Bobby Bazan at POSGCD for inspection
7. Receive Reimbursement check from POSGCD



Next Rainwater Harvest Class

Rainwater Harvesting 101 Workshop

March 22, 2019 1pm- 4pm

14 Ways to Conserve Water

- Water Timers
- Add Mulch
- Make your own Compost
- Group Plants by water needs
- Select Later Use Plants
- Drought Tolerant Perennials
- Use a Rain Gauge
- Collect Rainwater
- Use Drip Irrigation
- Use Spray Nozzles that cut off
- Use a Moisture Meter
- Re use Household water
- If you have fish, re-use the water from the tank to provide nourishment to you r houseplants
- Wash the dog on an area of the lawn that needs water

Hydroponics!

GreenStalk 5 Tier Plastic Vertical Planter

8

$129.00

~~$165.00~~ 22% Off

Select Color: Black

See Full Details

EARTH-KIND®

Landscaping for Beauty and Water Conservation

TEXAS A&M AGRILIFE EXTENSION

Proper Plant Placement

- North side: shade & heavy water-users
- East side: part shade / heavy water users
- West / Southwest: arid / heat-tolerant
- South side: tropical / tender plants

Texas A&M AgriLife Extension

Raised beds: simple, but extremely effective

Texas A&M AgriLife Extension

Soil analysis

Texas A&M AgriLife Extension

Wildflower Meadows

Texas A&M AgriLife Extension

Regular water use plants

- Most turf grasses
- Vegetables
- Wax leaf begonia
- Dianthus
- Sweet William
- Coleus
- Impatiens
- Caladium
- Gerbera daisy
- Geranium
- Pentas
- Nasturtium
- Banana
- Zinnia
- Snapdragon
- Pansy
- Elephant ear
- Croton
- Hosta
- Day lily
- Gingers

Medium water use plants

- Lantana
- Verbena
- Firebush
- Most ornamental grasses
- Esparanza
- Bird of Paradise (*Caesalpinia*)
- Artemeisa
- Hibiscus
- Most Iris
- Perennial herbs
- Turk's cap
- Perennial phlox
- Crinum lily
- Amaryllis
- Liriope
- Cast Iron Plant
- Asparagus fern
- Mealy sage
- Echinacea
- Autumn sage
- Mexican bush sage
- Mexican mint marigold
- Gomphrena
- Purslane and moss rose
- Wandering Jew
- Vinca
- Rock rose
- Society garlic
- Holly fern

Low water use plants

- Asiatic jasmine
- Yaupon holly
- Possumhaw
- Crepe myrtle
- Oleander
- Primrose jasmine
- Flowering quince
- Red yucca
- Elaeagnus
- Natal plum
- Cotoneaster
- Pitosporum
- Earth-kind roses
- Crimson barberry
- Desert willow
- Chinese pistache
- Cedar elm
- Bald cypress
- Yuccas
- Agaves
- Texas redbud
- Mexican plum
- Monterrey and Chinkqpin oak
- Live oak

Texas A&M AgriLife Extension

Highly Recommended by ***Texas A&M AgriLife***

Texas Superstar®

Texas Superstar® Plants are tested and selected for
superstar performance
in the Texas landscape.

Home | Texas Superstar Plants | Selecting Superstars | Press Room | Wholesalers | Retailers | Partners

Texas Superstar Plants
Highly recommended by Texas A&M AgriLife

Selecting Superstars
How we ensure highlighted plants perform well for Texas consumers

Growing Tips
Resources to help you get the most from your plants

Press Room
Recent news about Texas Superstars

Wholesalers
Browse our list of team members or conduct a refined search

Retailers
Search for nurseries and landscape contractors in your area

Henry Duelberg' Salvia - Low maintenance, heat tolerant, native perennial with masses of showy blue flowers.

AgriLIFE RESEARCH & EXTENSION
Texas A&M System

For further information on the Texas Superstar® program, contact Dr. Brent Pemberton, b-pemberton@tamu.edu, Texas AgriLife Research.

TEXAS A&M AGRILIFE EXTENSION

Texas Natives

Texas A&M AgriLife Extension

Sprinkler irrigation

- Spray heads
  - Small areas of turf and beds
- Rotors
  - Large areas of turf
- Hose-end sprinklers

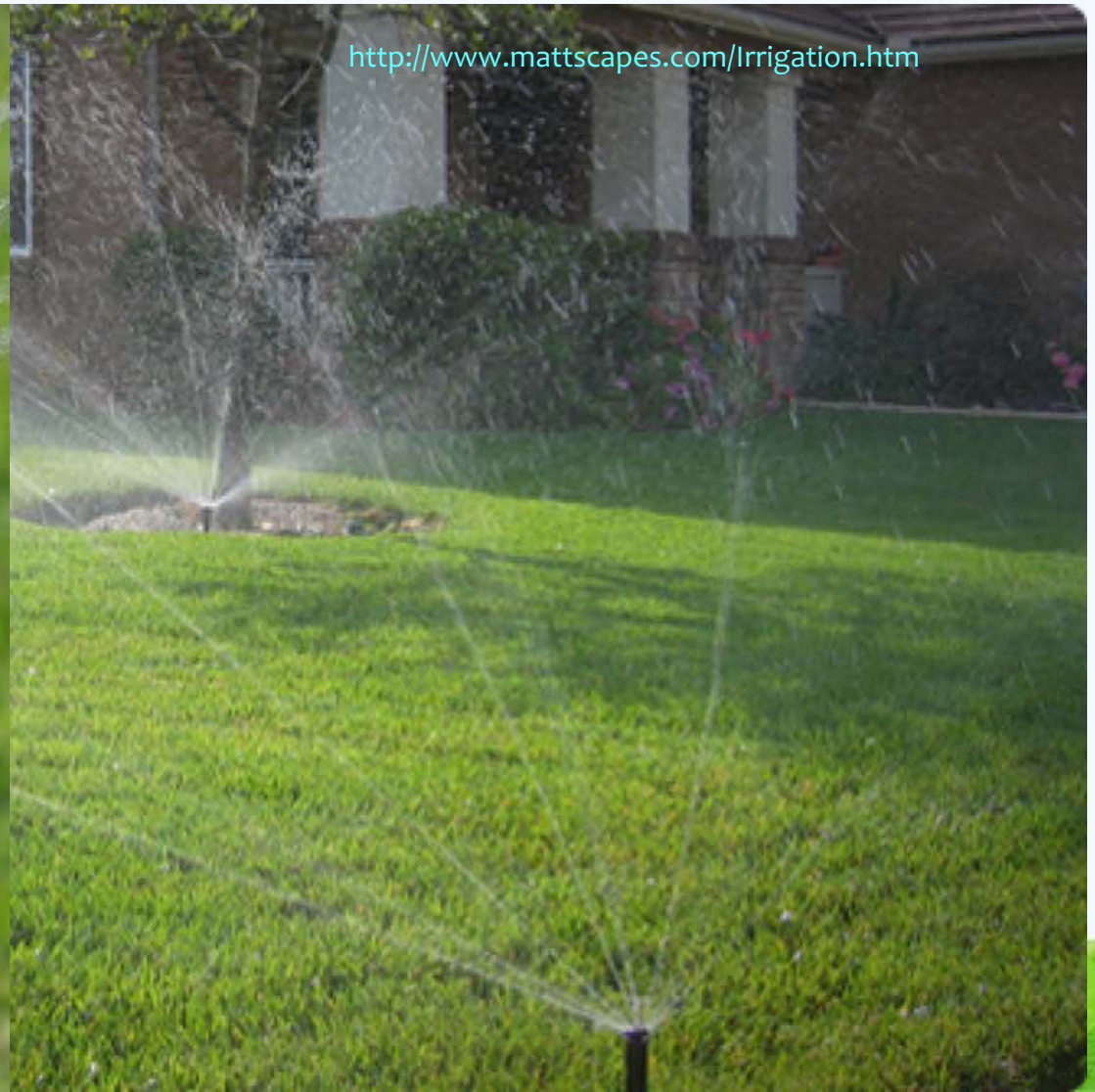
TEXAS A&M AGRILIFE EXTENSION

Sprinkler Irrigation: 50% to 70% efficiency

Texas A&M AgriLife Extension

There are improvements…

https://www.hunterindustries.com/support/mp-rotator-rotating-stream-sprinklers-and-rebates



http://www.mattscapes.com/Irrigation.htm

Texas A&M AgriLife Extension

Drip and Micro-irrigation

- **≈90% efficiency**

✓Low-volume emission

✓Reduces runoff loss

✓At or near-ground application

✓Evaporation loss eliminated

✓Precise, targeted delivery

Texas A&M AgriLife Extension

Additional benefits of drip irrigation

Photo credit: Juan Anciso

Texas A&M AgriLife Extension

Next Class
Irrigation Alternatives for the Rainfall Harvester

Irrigation Workshop
Class March 2, 2019
9am- noon

AQUIFER

CONSERVANCY PROGRAM

POSGCD Aquifer conservancy Program (ACP)

Would you like to conserve your water for future generations by placing all or part of your water rights into a conservancy stewardship?

Join the Post Oak Savannah Aquifer Conservancy Program by placing your land in the Conservancy

You do not give up any of your water rights?
You simply agree not to lease or permit that water during the term of commitment.

You will receive payment for not leasing or pumping your water. Of course, you can still have an Exempt Well for personal and livestock use.

You choose the length of commitment
five years, ten years or twenty years.

You will be able to cancel the agreement at the end of the term, if you sell your property, transfer it to your heirs or at the time of death of the landowner.

You can commitment all of your water rights or keep part
for row crops, pecan grove, irrigate a hay patch, etc.

Why would you want to commit your water rights into the ACP?

As Texas continues to grow, demands will increase on all resources.

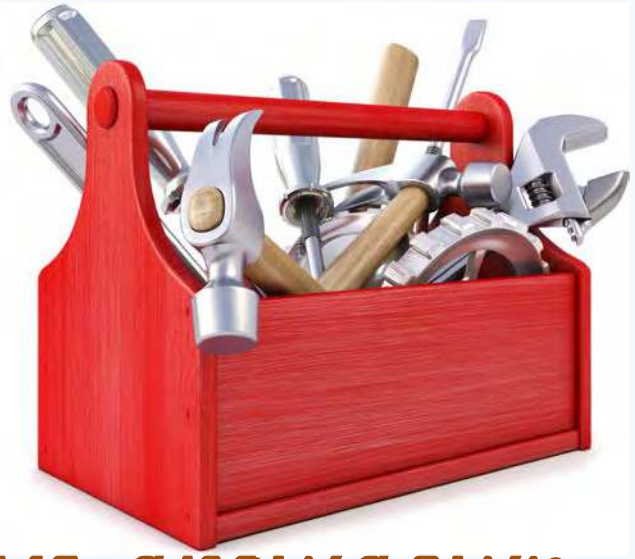
The ACP allows landowners to work with the District to help Conserve water for future generations.

The purpose of ACP

- Empower landowners through stewardship
- Establish a legacy of conservation
- Compliment current sustainable practices
- Conserve groundwater
- Add a long-term tool to the current Toolbox of management strategies

POSGCD Toolbox for Conservation

Post Oak Savannah GCD Toolbox are the strategies and practices used by the District to manage groundwater.



- Spacing requirements
- Contiguous acreage requirements
- Maximum Production limits
- Ability To Adjust Permit terms
- Monitoring water levels
- Desired Future Conditions & protective arawaown limits -NEW tool-
- Aquifer conservancy program (ACP)

Flexible commitment Options

Enrollment Incentive - $10/acre for 2019

A. Five years- $5 per acre per year
B. Ten years- $8 per acre per year
C. Twenty years- $10 per acre per year
D. there is an option with no payment

We will begin signup June 1, 2019

Would You Like To Help?

Become an ACP Ambassador!

Post Oak Savannah Groundwater Conservation District

Aquifer Conservancy Program

For more info see our website

www.POSGCD.org

or call our office

512-455-9900