Rainwater Collection
For Landscape & Wildlife

Rainwater Harvesting –
Capturing Nature’s Best for your Landscape
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All Rainwater is Valuable

Cisterns of Early Texans - The only source of water many had before electricity and well drillers

Renewed Interest in Collecting Rainwater

- Increased Demand for a Decreasing Supply
- Escalating Environmental and Economic Costs
- Health Concerns
- Conservation and Drought
- Providing Water to Areas Without Water
- Reducing Storm Water
- Rainwater’s Purity

Value of rainwater

- Low pH – 6.0 to 7.0
- Makes You Conservation-Minded
- High-quality pure water – “Made Between Heaven and Earth”

Why Collect Rainwater

- Have Enough Water
- Cost of Water
- Quality of Water
- It is a Viable Option
Rainwater Uses:
- Attract and provide water for wildlife, birds and butterflies
- Add interest, soothing sound and beauty

Rainwater Uses:
- Supplement landscape water needs
- Provide water for nurseries or special needs
- In Home

Passive Collection
Berms and Basins
Every Raindrop is Important

Wildscaping Landscaping

Complex Rainwater Harvesting

How to Collect Rainwater:
- Roof - tin is best but any will work
- .6 gallons per square foot roof
- 2,000 sq. foot roof X 1" rain = 1,200 gal. water
- 1,200 gal. X 20" rainfall per year = 24,000 gal/yr
Roofs and Collection Surfaces

- Roofs
- Collection Surfaces

The Black Gap and Elephant Mountain WMA Guzzlers

- Built in the 1960's for Big Horn Sheep introduction, Mule Deer, Antelope and other wildlife.

Gutters and Roof Washers

- Gutters - Nothing special
- Roof washers - removes trash, debris & dust

Gutters and Downspouts

- Gutters
- Downspouts

Cisterns

- What is it used for?
- Durable and water tight - material
- Size - where does it go & how much will you collect and need
- Cost - $.30 - 1.25 per gallon collected
Cisterns are available in many sizes and types of material.

The Other Parts
- Gate valve and facets
- Distribute Water

Screens to Keep Out Trash and Mosquitoes
- The clear plastic hose allows water to rise to the level the water is inside the tank.

Water Gauge

Overflow Pipe
- The overflow allows water to run out of the tank when it is full rather than backing up into the gutter.

Pump and Pressure Tank
- Shallow well pump and Pressure tank.
**Filters and Sanitizers**

- Distribute Water to Desired Location
  - Drip irrigation
  - Water garden
  - Wildlife and Livestock water
  - Sprayer tanks
  - Sprinklers, misters & watering with pressure
  - In home

- Water Guzzler on Bamberger Ranch
- Bird Bath With Dripping Water From Drip Irrigation Emitters
- Bird Bath for Landscaping at San Marcos Grade School
- Drip Irrigation for Potted Plants, Landscapes and Gardens

**Gutter and Drain**

**Water Storage Underneath a Greenhouse**

**Business Independence**

- Dog Kennel Totally Self Sufficient On Rainwater
- Convenient Store
Wildscape at School

1000 gallon collection tank to supply water for bird bath and pond in native landscaped area.

Drip Irrigation at School

1000 gallon tank to provide water in drip irrigation system.

School Container Gardening

Raised Bed Gardening

Water Features

Rainwater can be used to provide water using floats to keep the water level high enough to run re-circulating pumps.

Menard County Ranch House

9,000 square feet of roof all guttered with drain underground.
Downspouts carry water through 4 inch PVC pipes from the front and back.

Water drains into 18,000 gallon rocked collection tank to be used for watering the landscape.

**My Home and Barn**
- 4900 sq. foot of roof
- 4900 x .6 gallons/foot = 2,900 gallons of water per 1” rain

**Storage Capacity**
- 15,000 gallons

**Filtration**
- 80 Micron Filter
- 2 Nylon Filters
- UV Light

**Costs For The System:**
- Tanks - $900 each = $4,500
- Pump and Pressure Tank - $550
- Filter and UV - $750
- Valves, piping - $200
- **TOTAL = $6,000**

(Does not include labor or gutters)
Water Usage

• 35 gallons per person per day
• 2 people - 70 gallons per day
• 2100 gallons per month
• 70 x 365 days = 25,550
• 25,550 / 2,900 = 8.81” per year
• Drought of Record -
  
  1951 = 7.64”
  1953 = 9.22”

Trash Can Water

Harvest Water For Gardens, Landscape, Wildlife, Pets and People

Thank You
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Rainwater
– Capturing Nature’s Best

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