

Water Conservation – Landscape And Drought

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Xeriscape In The Hill Country Does Not Mean Zero Color



Hill Country Xeriscape Does Mean

- Respect The Local Conditions
 - Balance The Landscape - 30% Turf/30% Hardscape/30% Plants
 - Plan For Drought
 - Consider Competition From Deer
- Turf
 - Native Grass Such As Buffalo
- Hardscape
 - Native Stone and Timber
- Plants
 - Natives and Adaptive Species
- Key: Go Native

Typical Conditions



Drought Conditions



Drought In Texas

- Hill Country
 - Long Periods of Drought Interrupted By Short Periods of Floods
- Drought of Record
 - 1950-1957 (1954 Recorded 10. 29” Of Rain In Boerne)
 - Tree Ring Studies Indicate Far Longer And Drier Periods
- Groundwater Pumping Can Only Be Managed By Local Groundwater Conservation Districts
 - Drought Contingency Plans Can Cut Pumping up to 50% for wells with operating permits
 - Wells used for Domestic and Livestock use are “exempt” from the operating permit process
- Kendall County-Cow Creek Groundwater Conservation District

Keep Plants Alive In Stage Five

- Water Conservation Strategies
 - Condensate Recovery
 - Reuse Grey Water
 - Rainwater Capture
- Take Inventory
 - Not All Plants Require Supplemental Water
- Use Stored Water Sparingly
 - Apply Two Quarts Per Plant Every Third Day

Put Away The Hose



Condensate Recovery System

Save Water Produced By Air
Conditioner

Typical Summer Daily Production 8-10 Gallons



1/3 HP Transfer Pump



Condensate to Storage



Reuse Grey Water

- **What Is Grey Water?**
 - Any Water Used In The Home, Except Water From Toilets, Is Called Grey Water
 - Dish, Shower, Sink, And Laundry Water Comprise 50-80% Of Residential “Waste” Water
 - May Be Reused For Other Purposes, Especially Landscape Irrigation

Typical Daily Recovery
Dishes: 5 Gallons
Bathing: 3-5 Gallons Per Person



Water Storage

Remove Screw - On Top

Remove Water With Bucket



Rainwater Collection

- 1" Rain On 1,000 Sq Ft Roof Can Yield 600 Gallons Of Water For Capture
- Boerne Area Average Annual Rainfall
 - 33.74 (1893-2008)
- Highest Annual Rainfall
 - 64.17 (1992)
- Lowest Annual Rainfall
 - 10.29 (1954)

Basic Rainwater Capture



Improved Rainwater Capture



Basic/Improved Collection

- Shortfalls
 - Inefficient Capture
 - Insufficient Storage
 - Evaporation
 - Mosquitoes
- Better Way?
 - Increase Capture and Storage
 - Seal Water From Elements

200 Square Foot Roof



Install Gutters



Increase Storage (1550 Gal)



Add Collector Pipe



Gravity Feed To Storage



Sunlight Does Get Inside Tank

Problem: Algae Growth

Solution: Paint Exterior



Next Project



Questions?

