# Texas Rain

Texas Rain Overview & Rainwater Capture Prepared Feb 1, 2016







# **Texas Rain – The Company**

- Texas based (Smithville) Founded in 2009
- Texas Management and employees
- Texas investors
- Texas product Bottled Natural Texas Rainwater from the skies above Smithville Texas
- Unique collection and bottling process produces the highest quality water on the planet!
  - Special roof collects 20,000 gallons of rainwater for every 1" of rain
    - > 30 yr Smithville rainfall avg = 35" to 42"
    - ➤ 5 yr drought avg = 20" to 25"
    - > 36,000sf roof collection system easily expanded
    - > 138,000 gal holding capacity easily expanded
  - Filtered 4X (25 micron, 20 micron carbon, < 1 micron X2)</p>
  - > High intensity UV for maximum purity
  - > Oxygenated with ozone



### **Texas Rain – The Product**

- Higher quality than other premium priced waters including Fiji, Evian, Perrier, Iceland Pure, etc
  - TR never touches the ground = no ground contaminants including human and animal waste, fertilizers, pesticides, industrial waste, etc
  - No added chemicals
  - Naturally distilled by mother nature
  - Lowest total dissolved solids (TR < 10mg/ltr, Fiji = 230mg/ltr, Evian 320mg/ltr, Iceland Pure = 48mg/ltr) = great taste
  - Best purity (oxygen and hydrogen) and organization (low surface tension) = maximum absorption into and hydration of human cells
    = more energy, vitality, disease resistance, higher uptake value
- Lower prices vs. other "premium" bottled waters
- Uniquely available in private, customer labels to enhance your business/product name recognition and commitment to quality



### **Texas Rain and Some of Our Customer Labels**





# **Texas Rain Bottling Plant**



Smithville\_Bottling\_Line\_10\_7\_2011 010







Smithville\_Bottling\_Line\_10\_7\_2011 028



Smithville Bottling Line 10 7 2011 001



Smithville\_Bottling\_Line\_10\_7\_2011 022



# **Texas Rain Bottling Plant**







Smithville\_Bottling\_Line\_10\_7\_2011 038



Smithville\_Bottling\_Line\_10\_7\_2011 002



Smithville\_Bottling\_Line\_10\_7\_2011 033



Smithville\_Bottling\_Line\_10\_7\_2011 032



Smithville\_Bottling\_Line\_10\_7\_2011 014



# **Texas Rain Bottling Plant**







### **Texas Rain – Hydrologic Cycle**

Water follows the classic evaporation – condensation precipitation cycle, hydrologic cycle or H2O cycle that we all learned about in science. Water evaporates from bodies of water into the sky and comes back down as naturally distilled as condensation or rain. The natural state of rainwater is clean even without the filtering.

According to the Journal of the American Medical Association (JAMA), March 1888, and reprinted in 1988, "during the lightning storm, the high potential electricity produces hydrogen peroxide." When there is high potential electricity over oxygen it converts oxygen into ozone (O3), this ozone oxidizes environmental pollutants and cleans the air. Water is H2O, hydrogen peroxide is H2O2. God knew what he was doing, have no doubt! When ultraviolet light from the sun penetrates to the oxygen layer around the earth, it turns O2 into O3. Ozone is a bluish gas and that is why the sky is blue when the air is clean!



### **Texas Rain – Water Usage**

### Water Works for Use at Home and Work

### Municipal/Domestic Use

The amount of potable water used in the home—domestic use—varies with the family's habits and location of their home. In the United States, households use an average of 2,000 gallons per month for laundry, the toilet, showers, and dish washing. Of that, only about one gallon per person per day is used for drinking and cooking.

According to the Texas Water Development Board, inside the average Texas home, 45% of the water is used to flush toilets, 30% for bathing, 20% for laundry and dishes, and only 5% for drinking and cooking. The average *total home* water use for each person in the U.S. is about 50 gallons per day.



### **Texas Rain – Water Amounts**

### Is Fresh Water Scarce?

Seventy-five percent (75%) of the earth's surface is covered by water. Ninety-seven percent (97%) of the total volume of water available is saltwater. The remaining three percent (3%) is considered fresh water. About two percent (2%) of that fresh water is locked in polar icecaps and glaciers.

This means that **just one percent (1%) of all the water on earth is accessible fresh water**. Half of that fresh water is trapped in underground reservoirs called aquifers. This underground water is called ground water, and wells must be dug to access this precious supply. The other half-percent of fresh water is surface water contained in our rivers, streams and lakes.

### For every 1000sq ft of Roof you get 623 gallons for each 1" of Rain!

### Texas Rain – Why Rainwater Capture

#### Groundwater and Aquifer Characteristics

Most of the fresh water on earth is underground in water-bearing, geological formations called **aquifers**. Water from an aquifer is called **groundwater**. A little more than 50% of the U.S. population depends on groundwater for their drinking water.

By 2050. Texas' population is expected to double to 40 million people. Municipal water demand is expected to increase by at least 67%. Unfortunately, today's infrastructure for supply water can barely meet helf of the projected demand in 2050.

In Texas, we are already taking out far more groundwater than nature puts back in. Our consumption of 9.4 million acre-feet from the major aquifers far outstrips their estimated 4.1 million acre-feet of recharge.

### Rain Texas Rain – Why Rainwater Capture

#### Is Fresh Water Scarce? - continued

#### Desalination/Demineralization

Today, the world's population is over 7 billion, and although our earth receives more than four *trillion* gallons of rainfall *per day*, 70% returns to the air by evaporation. Water conservation is taken seriously in many countries and in the drier western United States. Desalination of a seemingly limitless supply—the oceans—may be the ultimate answer. There are currently more than 15,000 desalination plants operating worldwide.

Now, the cost of desalination prevents widespread use of salt water. Because it is energy intensive, desalination is double—or quadruple—the cost of treating fresh water. The national average cost for water supplied to a home is about \$2.00 per 1,000 gallons, or 5 gallons for a penny. The cost of converting salt water to drinking water ranges from \$3.00 to \$7.00 per 1,000 gallons.

# Texas Rain – Why Rainwater Capture

- Rainwater is a relatively clean and absolutely free source of water
- > You have total control over your water supply (ideal for cities with water restrictions)
- It is socially acceptable and environmentally responsible
- It promotes self-sufficiency and helps conserve water
- Rainwater is better for landscape plants and gardens because it is not chlorinated
- It reduces storm water runoff from homes and businesses
- It can solve the drainage problems on your property while providing you with free water
- It uses simple technologies that are inexpensive and easy to maintain
- > It can be used as a main source of water or as a backup source to wells and municipal water
- > The system can be easily retrofitted to an existing structure or built during new home construction
- > System are very flexible and can be modular in nature, allowing expansion, reconfiguration, or relocation, if necessary
- > It can provide an excellent back-up source of water for emergencies

### Texas Rain – Why Rainwater Capture

### What are the uses of collected rainwater?

You can essentially use rainwater anywhere you use tap water. The idea of using drinking water to flush our toilets and water our lawns is wasteful and irresponsible, especially in light of population growth and water shortages across the country. Rainwater collection is a technique to green your home and to lessen your environmental footprint.

> There are basically three areas where rainwater can be used:

>Irrigation use

>Indoor, non-potable use

>Whole house, potable use

Here are some ideas for specific uses of rainwater:

>Hand water your lawn and garden

Connect rainwater collection system to irrigation/sprinkler system

➤Wash your vehicles

>Wash your pets

Refill your fountains and fish ponds

Refill your swimming pool

>Replace the use of tap water with rainwater to wash your driveways and sidewalks (if you don't use a broom)

>Use it for all indoor non-potable fixtures (toilets and clothes washer)

>Use it for all potable needs when properly filtered and disinfected

>Use it for industrial processes instead of municipally treated water

### Texas Rain – Rainwater Capture Potential

### How much rain can I collect?

The amount of rainfall that you can collect is governed by the following formula: 1" of rain x 1 sq. ft. = 0.623 gallons Or 1" of rain from 1,000 sq. ft. will provide 623 gallons



# Texas Rain Texas Rain – Rainwater Capture Setup

- 1. Collection Surface
- 2. Collection Gutters
- 3. Gutter Protection
- 4. Rain Head Inlet Filter
- 5. First-flush Diverter
- 6. Inlet Screen
- 7. Collection Cistern
- 8. Overflow Port
- 9. Auto-fill / Automatic Top-up Mechanism
- 10.Pump
- 11.Water Filter
- 12.Water Level Indicator



### IR, Texas Rain

### **Texas Rain – Rainwater Capture Cost**

### COST

> Most non-potable systems range between \$10,000 and \$30,000 installed, not including the roof.

> Potable systems or very large commercial systems will likely have a higher cost range.

> The largest expense is the storage tank, ranging from \$0.50 per gallon for large fiberglass tanks to up to \$4.00 per gallon for welded steel.

- Professionally installed gutters range from \$3.50 to \$12 per foot.
- > Pre-filtration equipment ranges from \$50 to over \$800.
- Pump costs run from \$385 for the low-end pump to more than \$1,000 for combined high-end pump and pressure tank.
- > For potable systems, filtration/disinfection can cost up to \$1,000 or more.

A simple rain barrel system for watering plants will cost around \$200.