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## Treatment of an alternative water source for drought relief

**Talbott Howard** 

ECT Services & Solutions Inc., USA

**Background:** With only less than 1% of all water on earth being of potable quality, a recent report states that in approximately 25 years, fresh water may become very scarce. After 3 years of research, the report went on to state that the entire world's population may go thirsty by 2040. Also as remarkable, is that by 2020, 40% of the world's population could be adversely affected by global water shortages. The drought conditions currently being experienced in California are of historical significance and have been categorized as D2, (moderate) through D4, (exceptional).

Manufacturing Water Footprint: With an ever growing population, the ongoing demand for commercial goods requires water for manufacturing. This industrial practice particularly in time of drought only continues to aggravate the potentials for looming water shortages. The water footprint of a product is the amount of water which is consumed and polluted in all processing stages of its production. A product water footprint is the indicator of how much pressure is being put on our freshwater resources.

**Agriculture Example:** As an example, the global average water footprint in growing grapes is approximately 161 gallons or 610 liters per kilogram raised. One kilo of grapes produces approximately 7 liters of wine with the water footprint being approximately 230 gallons or 870 liters of water per liter of wine. This relates that one glass of wine (125 ml) requires 29 gallons or 110 liters to produce.

**Petroleum Example:** Energy Production like farming also requires large amounts of water for not only petroleum extraction but also for bi-product production. As an example, to extract 1 barrel of petroleum, (42 gallons/158 liters) between 3 barrels to 7 barrels of water, (7 barrels=294 gallons/1,111 liters) is required.

**Solutions:** While recycling of water by industry is becoming more commonly practiced, the time has come for all to do their part in protecting our valued water resource. While industrial water recycling technologies have been slow to evolve, Environmental Conscious Technologies, Inc., (ECT) has developed technologies to bring water back to a recyclable state for most industrial applications.

## **Biography**

Talbott Howard has completed his BBA from University of Mississippi and he directs a team of award winning engineers that are changing the way the world cleans water. He is the CEO of www.DOTECT.com, a premier clean water R&D firm and deployment service organization. His ECT team has published more than 19 papers in reputed journals. ECT is engaging the state of California, FEMA and the largest oil producers in Bakersfield California on their pioneer applications.

talbott@dotect.com

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