WATER PROBLEMS AND SOLUTIONS- I attended and presented at the 9th annual

Water Smart Innovations (WSI) conference <u>https://www.watersmartinnovations.com</u> attended by a few hundred pioneer USA and global water departments.

WATER PROBLEM IDENTIFIED: 9 years ago, water conferences were expressing concern that in 10 years they wouldn't have water to sell to their constituencies. Populations are increasing and initiating increased water demand, while the supply of water is decreasing from over-allocated and depleted aquifer levels, reduced dam and lake levels, and reduced rainfall. Some water departments did run out of water. PIONEER WATER DEPARTMENT RESPONSE: (that we can expect the 53,000 USA water departments)

to follow)

Rates are increasing to pay for upgrading water infrastructure.

<u>Rebates</u> (that conserve 20% of water) are being offered for installation of water conserving devices such as: appliances, fixtures, equipment, & gray water irrigation systems.

Social Media programs campaign for conservation

<u>Smart Meters:</u> The water industry is going mainstream following the power industry in use of Automated Meter Infrastructure (AMI) <u>https://en.wikipedia.org/wiki/Smart_meter#Advanced_metering_infrastructure</u> & statistically tracking population quantity of resource use and times of day.

<u>The elephant in the room</u>: Water rates are increasing while water supply is decreasing. Where is the extra water going to come from?

BABY STEPS TOWARD MAINSTREAM LONG TERM SOLUTION:

<u>A Water Industry Task Force</u> is being formed to establish criteria for allowing reclaimed waste water to be used for mainstream water supply such as Toilet To Tap) <u>http://www.environmentalleader.com/2015/12/14/toilet-to-tap-wastewater-recycling-takes-off-as-water-supplies-shrink/</u>. The Task Force may take up to 10 years for to establish criteria for waste water re-use to become mainstream in the International Plumbing Code

CUSTOM SOLUTIONS AVAILABLE NOW: My 2016 WSI talk was : "How To Design Net Zero, Closed Loop, Grid-Optional Water Systems." That means use water, collect it, reclaim it, filter appropriate to intended use, and repeat cycle (*Using the same water over and over*).

The conference indirectly admitted that the topic of my talk IS the solution to provide ever increasing water demand. "

You can pursue Net Zero, Closed Loop, Integrated Water Management Systems now. You need an architect like me who is fluent on the system components together with the consultants I coordinate, and you can get a permit for a customized water system.

• If you would like to schedule a water system consultation regarding your property & facility, please contact me at <u>www.theGreenAndBlueArchitect.com</u>