

Water Literate Leaders Class

Book Review by: Troy Jones

Book: The Water Problem: Climate Change and Water Policy in the United States

What did you get out of this book?

It used to be that past experience would guide the parameters of the future when it comes to how much water is available for use within a given water system. This rule of thumb is no longer valid. With a changing climate, looking at the past no longer tells us what we need to know about the future. When an entire system's quantity of available water is reduced as well as the character of the sources of water in that system (example less snow and more rain), it becomes apparent that each state, city, and region that relies on that system, needs to work together with the other users of that system to find realistic solutions to share the burden of the reduced supply and changed characteristics. The book explores a variety of case studies from around the country, exemplifying a variety of water related problems, giving a synopsis of the past in each case, and their prospects for the future, including a look at:

- California's Sacramento/ & San Joaquin rivers (together have more flows than the Colorado River), and the unique problems associated with the river delta and estuary where they meet the San Francisco Bay ;
- San Diego's unique solutions to its water shortage including ocean water desalination and conservation measures;
- Nebraska's groundwater governance framework, and the governance system that is causing the depletion of the Ogallala Aquifer;
- The new technology of groundwater hydrogeological analysis as a solution to the depletion of our nation's groundwater depletions;
- Problems associated with ocean level rising in southeast Florida, including salt water inundation of freshwater aquifers;
- New York city's efforts to find a balance in developing resilient, sustainable water and wastewater supply systems;

Would you recommend it to class members?

Most certainly I would recommend this book. This book gives a helpful context of a variety of problems and solutions to water resource systems around the country. It is helpful to see that, although our water problems and solutions are unique to our region, that fundamentally, everywhere in the country has their own batch of water resource problems and their own unique solutions to solve those problems. We are not alone in this struggle.

What 3-5 key points would you like to discuss with the class?

Several of the more interesting solutions to the ___ problem include:

1. The changing circumstances causing the need to rethink the agreements in the Colorado River Compact;
2. Diversification of water sources (the San Diego example) including desalination of ocean water;
3. The groundwater problem, the depletion of the nation's groundwater, and the politics associated therewith (the Ogallala Aquifer example).
4. The groundwater solution using monitoring and math and recharging.