

Where the Water Goes
Life and Death Along the Colorado River
by David Owen, 2017, 274 pages

Would you recommend this book to class members? Yes!

What did you get out of this book? The big picture of the whole Colorado River basin from the headwaters to the Gulf of California and where the water is used.

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

There is a tremendous amount of information in this book. It is not an easy read and I kept my Google Maps app open to keep up with the locations he was discussing. The book reads like a novel at times, which at first made me skeptical of information presented. The author is from Connecticut and has written books on a wide variety of topics, none of which are about water. After I read the last section of the book, "Acknowledgements and Selected References," I understood all the research he did. The information presented appears to have been carefully researched. The author has a website with supplemental photographs and information, including a few errata notes. He welcomes comments and corrections.

Owen's explanation of the Colorado River Compact of 1922 is fascinating. The Compact was based on 17 million acre-feet annual flow. It is now known that this estimate, done in the early 20th century, was based on the wettest period since the 1400's. The upper basin states (CO, WY, UT, NM) got an allocation of 7.5 million acre-feet and the lower basin states (CA, NV, AZ) got 7.5 million acre-feet, with 2 million unallocated (what about Mexico and the Indian lands?). The problem is that there is far less than 17 million average annual flow. Since the 1920's, there have been years when the total flow has been a third of the 17 million assumed. The true average annual flow is more like 14 million acre-feet. The lower basin states are taking the acre-feet of water that the Colorado River Compact and other agreements allow them to take. The upper basin states in 2012 took only 60% of their theoretical entitlement and are still below their entitlement. The situation downstream is critical, with Lake Mead (formed by the Hoover Dam) and Lake Powell containing less than half the water these lakes did in 1998. In the author's words: "The Compact says that the upper-basin states 'will not cause the flow of the river at Lees Ferry (the dividing point between the upper and lower basins) to be depleted below 75 million acre-feet for any ten consecutive years.'" But what if the depletion is caused not by actions of the upper-basin states, but by changes in precipitation? This is a legal issue that has not been fully tested (until there is a Compact call!).

Owen also tells the sad stories of the Salton Sea and the non-existent outlet to the Gulf of California.

Many interesting factoids are included in the book, for example: 1) If all the water from an entire year's flow was spread over the entire river basin, the depth would be only 1", 2) Colorado has 20,000 abandoned mines, many of which pose a threat to the Colorado River's water quality, 3) Organic veggies require more water, because they are less productive, 4) The Colorado River carries a ton of salt per acre-foot..

The author gives a good summary of the issues and perspectives in last chapter "What Is To Be Done." One of the many points Owen makes is that frequently "The dynamic is that land-use authorities approve development, and then the water utility is expected to find the water to serve it.."

Amazon: \$19.22; Kindle edition \$14.49.