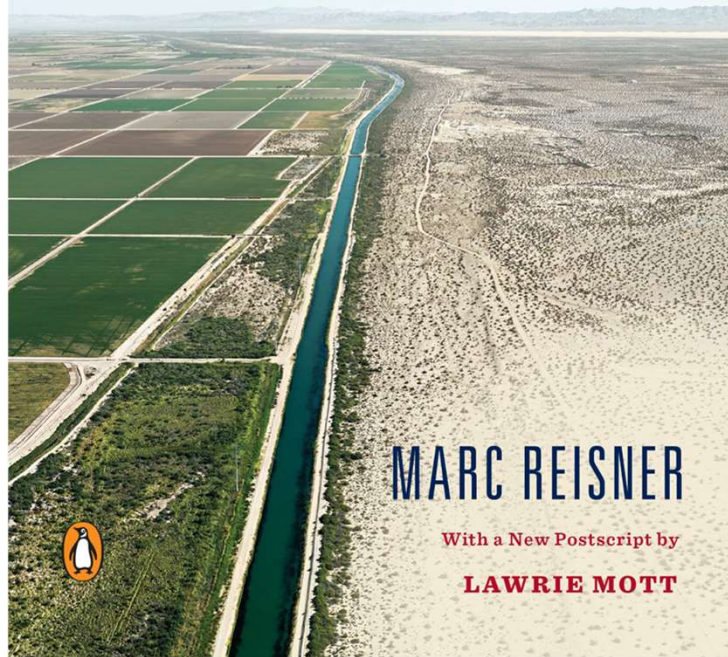


"The definitive work on the West's water crisis." —Newsweek

CADILLAC DESERT

THE AMERICAN WEST *and its*
DISAPPEARING WATER



MARC REISNER

With a New Postscript by

LAWRIE MOTT



The Move West

- Powell's expedition of 1869
 - Found no vegetation
 - Called it the Great American Desert
- Homestead Act
 - A "fair chance" at life
 - Promoted the movement West
- Rain Follows the Plow
 - Proven to be a false myth in the Great Plains



<https://coyotegulch.blog/2019/07/16/john-wesley-powell-expedition-reached-confluence-150-years-ago-july-16-1869/>

Federal Government's Involvement

- Series of droughts around 1900's
 - Storage of water was key
 - Water wasted into the oceans
- Federal Gov became active when the scale of dams exceed what small government could do
- Reclamation Act of 1902
 - required that water users repay construction costs from which they received benefits



<https://www.history.com/topics/great-depression/dust-bowl>

Growing the Country

- Early 1900's - Idea of needing hydroelectricity and irrigation to grow the country
- Led to the growth and competition of the Corps of Engineers and the Bureau of Reclamation
 - Many unnecessary dams built using taxpayer dollars



https://en.wikipedia.org/wiki/Grand_Coulee_Dam#/media/File:Grand_Coulee_Dam.jpg

Continued Government Involvement

- FDR's New Deal
 - A series of new dams to create jobs and develop the West
- Federal Dam Building Program
 - Everyone wanted to get a dam for their constituents



<https://www.britannica.com/topic/Hoover-Dam>

Government Subsidized Water

- Encouraged farmers to move West by subsidizing their water costs
 - Led to unsustainable water usage
- Paying top dollar to store water for the West when the East could do the same for cents on the dollar
- Dams by the Army Corps of Engineers and Bureau of Reclamation are paid for by the taxpayers and unexpected to be paid back

The Influence of Politics and Money on Water

- Los Angeles and the Owen's Valley
 - “Theft” of water
- Natural rivers permanently damaged
 - Hurt the natural flow for ag and irrigation operations
- Bills passed with dams in the amendments
- Water flows towards money



<https://curatingla.com/cla/2012/10/13/new-audio-tour-sheds-light-on-the-owens-valley-and-los-angeles-aqueduct/>

Vulnerability

- West's dependence on the distant and easily disreputable and aqueducts
- Life sustaining lakes and reservoirs
- Saltification of the soil
- Groundwater mining
- Efficient irrigation systems are costly



<https://slidetodoc.com/millerspoolman-living-in-the-environment-chapter-13-water/>

Not All is Pessimistic

- California's Agricultural Production
 - \$45 billion in agriculture sales in 2017
- Created diverse economic growth
- New technology creates new solutions
- Drip Irrigation
- Water education will lead to more encompassing solutions



https://www.growersupply.com/farm/supplies/cat1%3Bgs_growing_supplies-gs_greenhouse_irrigation%3Bgs_drip_irrigation_systems.html

What Are We Going To Do Next?

- Primitive offspring reservoirs
 - Rather than engineering feats
- More drought resistant crops out West
- Salt removal processes
- Crops with high salinity thresholds
- Non-subsidized water to promote conservation of water
- Endless more...