

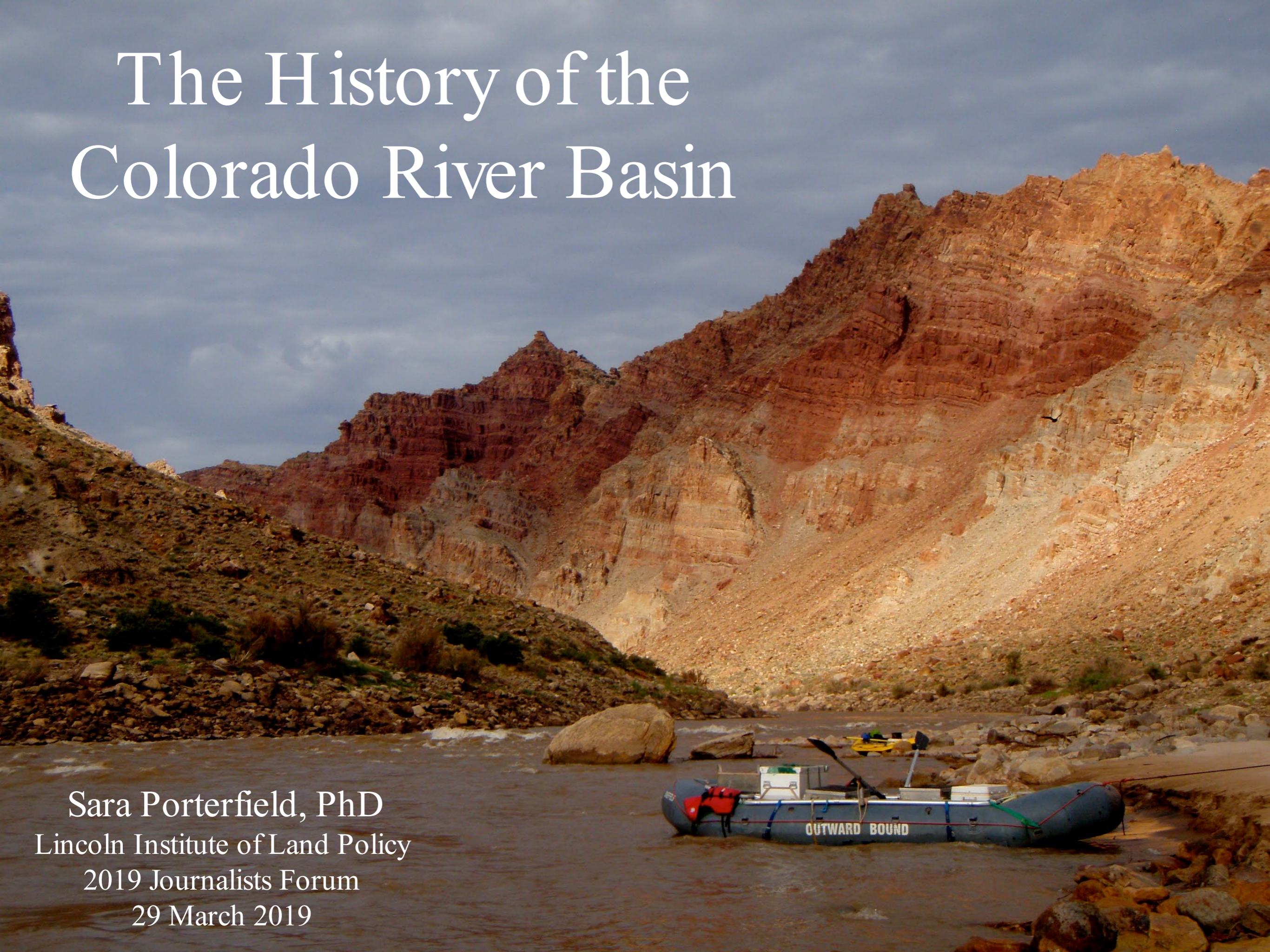
The History of the Colorado River Basin

Sara Porterfield, PhD

Lincoln Institute of Land Policy

2019 Journalists Forum

29 March 2019



1869 Phase I: Exploration & Debate, 1869-1902

John Wesley Powell's first expedition

1860s-1870s (& on)

William Gilpin & other boosters advocated theory that "rain follows the plow"

1872

Coffin v. Left Hand Ditch Company confirmed prior appropriation

1878

Powell's *Report on the Lands of the Arid Region of the West* published

1888-1893

Powell's irrigation survey

1890

Robert Brewster Stanton Expedition floated Green & Colorado to survey possible railroad route

1891

National Irrigation Congress formed to promote irrigation & settlement of the West

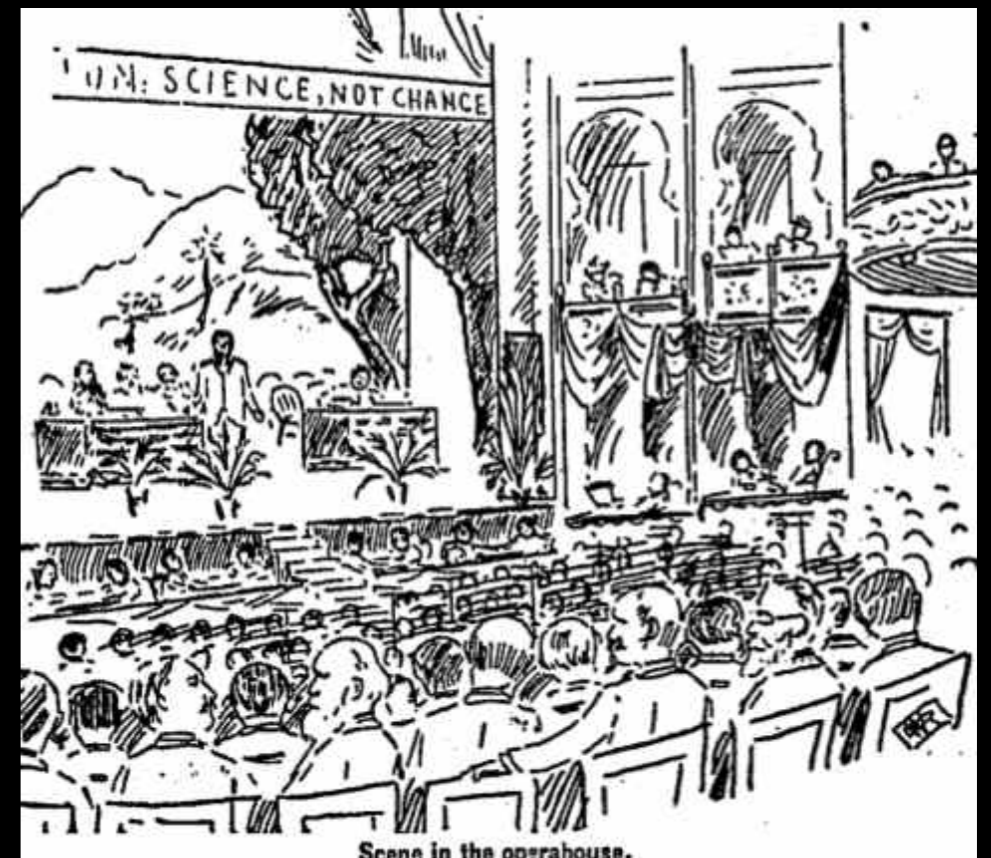
1902

National Reclamation Act passed



Powell's Second Expedition

Source: OARS



Scene in the operahouse.

1893 Irrigation Congress

Source: Wikipedia

Phase II: Laying the Foundations, 1902-1948

1905-1907

Imperial Valley floods created the Salton Sea

1908

Winters v. U.S. confirmed reserved water rights for tribes

1911

Roosevelt Dam on Salt River finished

1922

Fall-Davis Report published

Colorado River Compact negotiated & signed

1925

MWD formed to bring Colorado River water to Southern California metropolitan areas

1928

Boulder Canyon Project Act passed

1944

U.S.-Mexico treaty signed allocating Mexico 1.5 maf

1948

Upper Colorado River Basin Compact signed



Imperial Valley Floods

Source: *San Diego Reader*



Colorado River Compact Negotiators

Source: University of Arizona

Phase III: The Era of Big Dams, 1936-1968

1936

Hoover Dam finished

1937

Colorado-Big Thompson Project authorized

1941

Colorado River Aqueduct finished

1942

All-American Canal finished

1946

The “Blue Book” published

1956

Colorado River Storage Project Act passed

1963

Glen Canyon Dam finished

1964

Flaming Gorge Dam finished

Arizona v. California decided by SCOTUS

1968

Colorado River Basin Project Act passed



Hoover &
Glen
Canyon
Dams

Source: Bechtel &
USBR

Phase IV: Diversifying Uses & Stakeholders, 1956-Present

1952-1956

Echo Park battle defeated proposed dam

Late 1950s-Early 1960s

Public opposition to Glen Canyon Dam

1960s

Successful fight against proposed Grand Canyon dams

1973

Minute 242 required decreased salinity of water delivered to Mexico

1977

Carter cut funding to Western water projects

1979

SCOTUS appointed Special Master to review tribal rights

1983

SCOTUS rejected Special Master recommendation that tribal water rights be recognized

1992

Grand Canyon Protection Act passed

Ten Tribes Colorado River Basin Partnership formed

SHOULD WE ALSO FLOOD THE SISTINE CHAPEL SO TOURISTS CAN GET NEARER THE CEILING?

EARTH began four billion years ago and Man two million. The Age of Technology, on the other hand, is hardly a hundred years old, and on our time chart we have been generous to give it even the little line we have.

It seems to us hasty, therefore, during this blip of time, for Man to think of directing his fascinating new tools toward altering irrevocably the forces which made him. Nonetheless, in these few brief years among four billion, wilderness has all but disappeared. And now these:

- 1) There are proposals before Congress to "improve" Grand Canyon. Two dams would back up artificial lakes into 148 miles of canyon gorge. This would benefit tourists in power boats, it is argued, who would enjoy viewing the canyon wall more closely. (See headline). Submerged underneath the tourists would be part of the most revealing single page of earth's history. The lakes would be as deep as 600 feet (deeper for example, than all but a handful of New York buildings are high) but in a century, siltling would have replaced the water with that much mud, wall to wall.
There is no part of the wild Colorado River, the Grand Canyon's sculptor, that would not be maimed.
Tourist recreation, as a reason for the dams, is in fact an afterthought. The Bureau of Reclamation, which has backed them, has called the dams "cash registers." It expects the dams would make money by sale of commercial power.
They will not provide anyone with water.
- 2) In Northern California, four lumber companies have nearly completed logging the private virgin redwood forests, an operation which to give you an idea of its size, has taken fifty years.
Where nature's tallest living things have stood silently since the age of the dinosaurs, much further cutting could make creation of a redwood national park absurd.
The companies have said tourists want only enough roadside trees for the snapping of photos. They offered to spare trees for this purpose, and not much more. The result would remind you of the placers on your face you missed while you were shaving.
- 3) And up the Hudson, there are plans for a power complex—a plant, transmission lines, and a reservoir near and on Storm King Mountain—effectively destroying one of the last wild and high and beautiful spots near New York City.
- 4) A proposal to flood a region in Alaska as large as Lake Erie would eliminate at once the breeding grounds of more wildlife than conservationists have preserved in history.
- 5) In San Francisco, real estate interests have for years been filling a bay that made the city famous, putting tract houses over the fill; and now there's a new idea—still more fill, enough for an air cargo terminal as big as Manhattan.
There exists today a mentality which can conceive such destruction, giving commerce as ample reason. For 74 years, the Sierra Club (now with 46,000 members) has opposed that mentality. But now, when even Grand Canyon is endangered, we are at a critical moment in time.
This generation will decide if something untrammeled and free remains, as testimony we had love for those who follow.
We have been taking ads, therefore, asking people to write their Congressmen and Senators; Secretary of the Interior Stewart Udall; The President; and to send us funds to continue the battle. Thousands have written, but meanwhile, Grand Canyon legislation still stands a chance of passage. More letters are needed and much more money, to help fight the notion that Man no longer needs nature.*

David Brewer, Executive Director
Sierra Club
Mills Tower, San Francisco

Please send me more details on how I may help.
Here is a donation of \$_____ to continue your effort to keep the public informed.

Send me "Time and the River Flowing," famous four color book which tells the complete story of Grand Canyon, and why T. Roosevelt said, "leave it as it is." (\$17.00)


Send me "The Last Redwood" which tells the complete story of the opportunity as well as the destruction in the redwoods. (\$17.50)

I would like to be a member of the Sierra Club. Enclosed is \$14.00 for entrance and first year's dues.

Name _____
Address _____
City _____ State _____ Zip _____

*The previous ads, urging that students exercise a constitutional right of petition, to save Grand Canyon, produced an unprecedented reaction by the Internal Revenue Service threatening our tax deductible status. IRS says the ads may be a "substantial" effort to "influence legislation." Undefined, these terms leave organizations like ours at the mercy of administrative whim. (The question has not been raised with any organizations that favor Grand Canyon dams.) So we cannot now promise that contributions you send us are deductible—pending results of what may be a long legal battle.

The Sierra Club, founded in 1892 by John Muir, is nonprofit, supported by people who, like Thomas, believe "in wilderness is the preservation of the world." The club's program is nationwide, includes wilderness trips, books and films—as well as such efforts as this to protect the remainder of wilderness in the Americas. There are now twenty chapters, branch offices in New York (Biltmore Hotel), Washington (Dojour Civic Building), Los Angeles (Academy Building), Albuquerque, Seattle, and main office in San Francisco.



Anti-Grand Canyon Dam Ad, Sierra Club

Source: University of Arizona

So, what can we learn from this history?

1. The system we've created has been around for a long time, and it's been *very* difficult to change.

Powell's Watershed Map
Source: Smithsonian



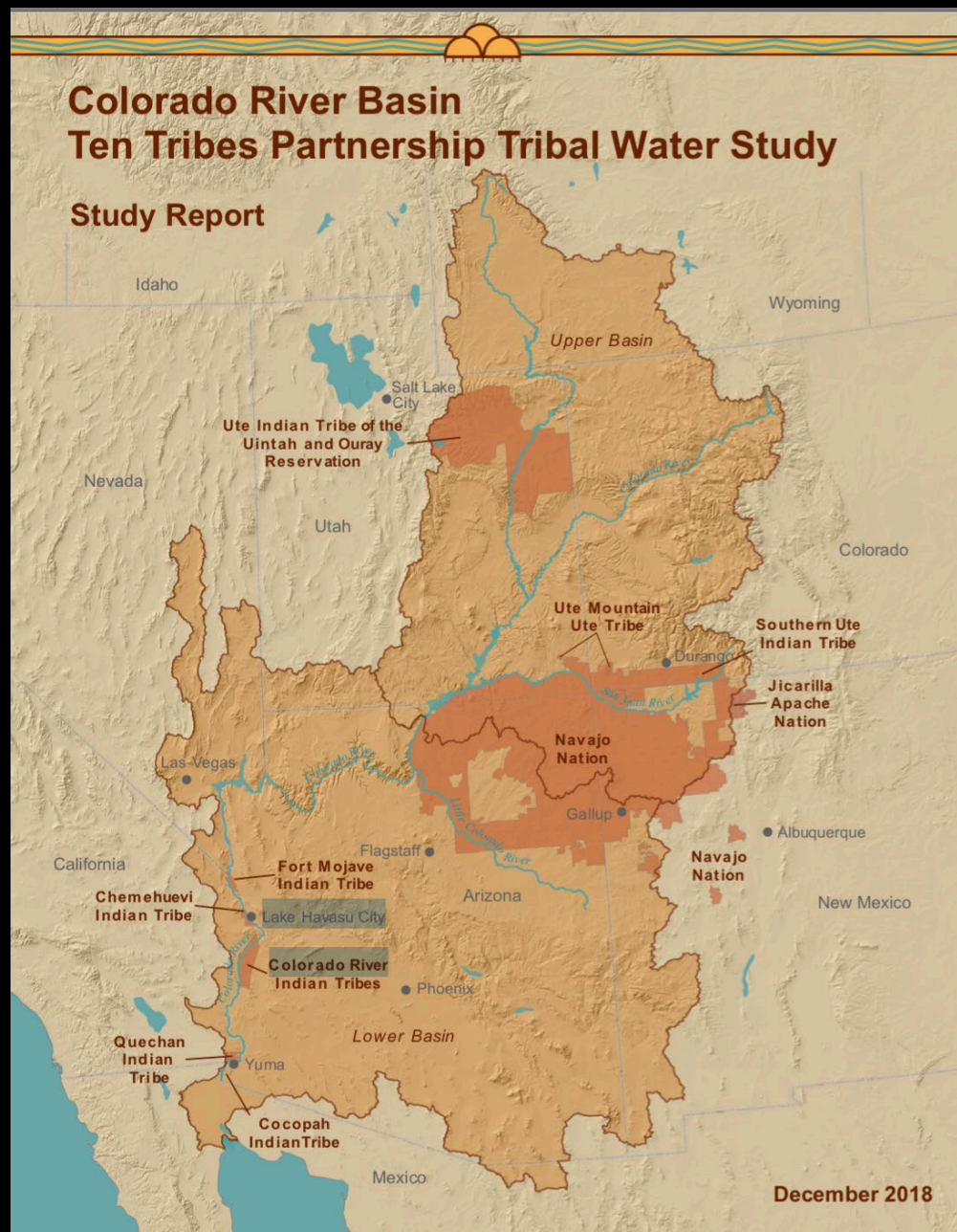


Hoover Dam & 2016 Pulse Flow

Source: TravelNevada & National Geographic



2. That being said, nothing's set in stone. Colorado River Basin development and use can and will change—because it *has* changed over time.



Tribal Water Study & Humpback Chub

Source: USBR & GCNP

3. Finally, beginning in the second half of the 20th century, there's been a realization that the Colorado River is a diverse place geographically, demographically, ecologically, culturally, politically, etc. and this diversity needs to be managed, protected, and legislated.

What else can we learn from history?



Source: George Davidson, *Irrigation and Reclamation of Land for Agricultural Purposes, As Now Practiced in India, Egypt, Italy, Etc.*, Ex. Doc. 94, 44th Cong., 1st sess. (Washington, D.C., 1875)



Source: Sierra Club, *This Is Dinosaur*

This diverse river system has always existed whether we've recognized it or not, and recognition of the varied perspectives, voices, and effects in the past can help us bring more voices to the table and make more informed decisions in the present and future.