Forgotten Law of the River

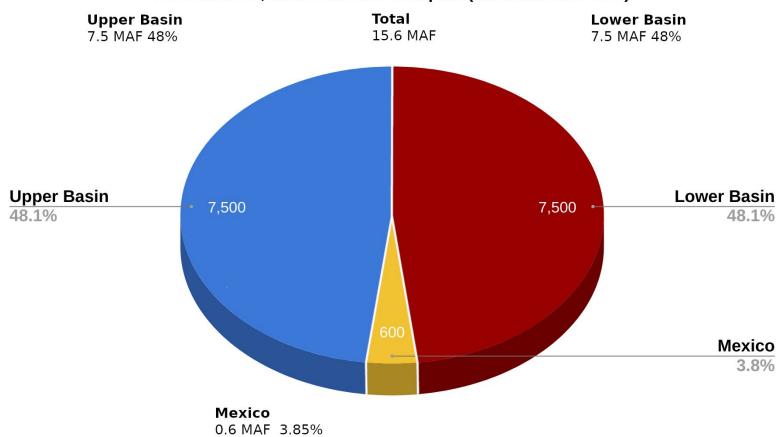
Section 603 and the Genesis of the Crisis on the Colorado, v4.4

Water in the Colorado River Basin

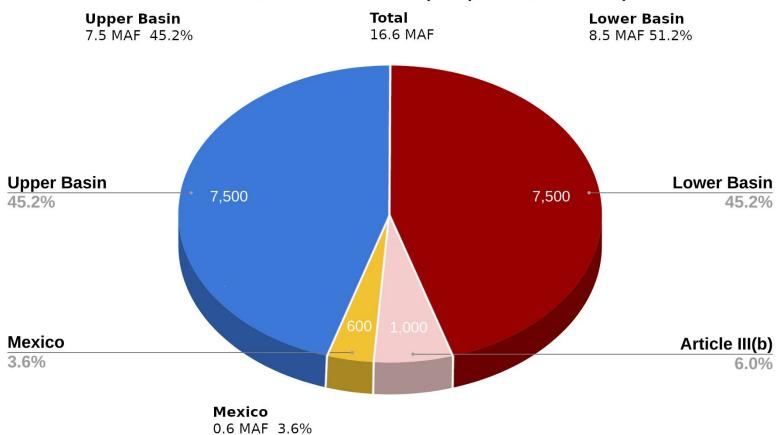
"... in an arid and semi-arid region where this most precious and coveted natural resource dictates who rises and falls, who enjoys life and livelihood, and who—in no uncertain terms—does not."

Equity and the Colorado River Compact, Robison, Kenney

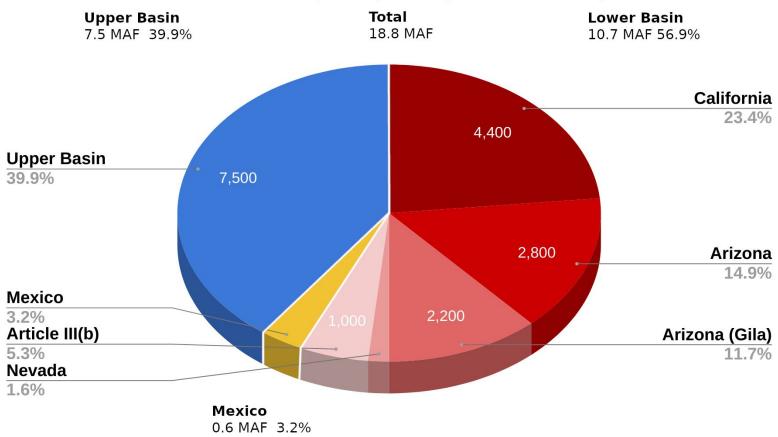
November 20, 1922 Colorado Compact (thousand acre-feet)



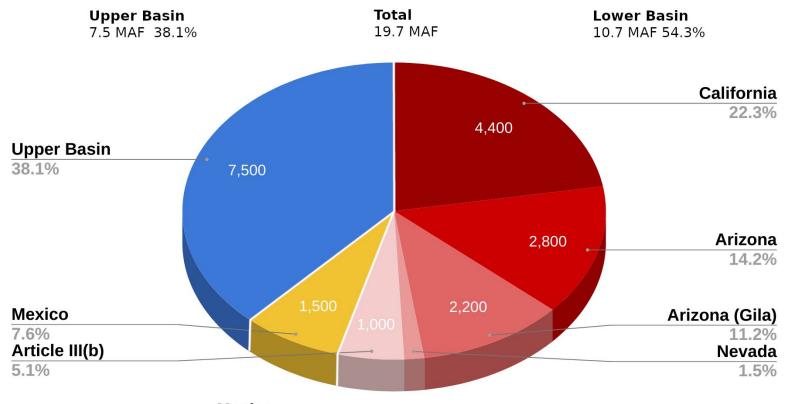
November 24, 1922 Colorado Compact (thousand acre-feet)



1928 Boulder Canyon Project Act (thousand acre-feet)

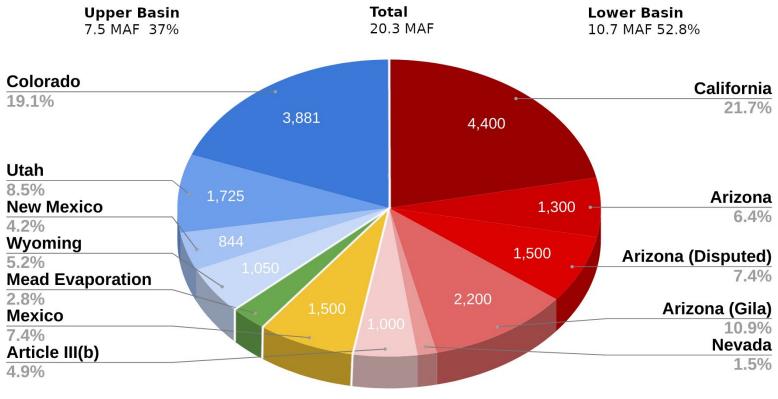


1945 Mexico Treaty (thousand acre-feet)



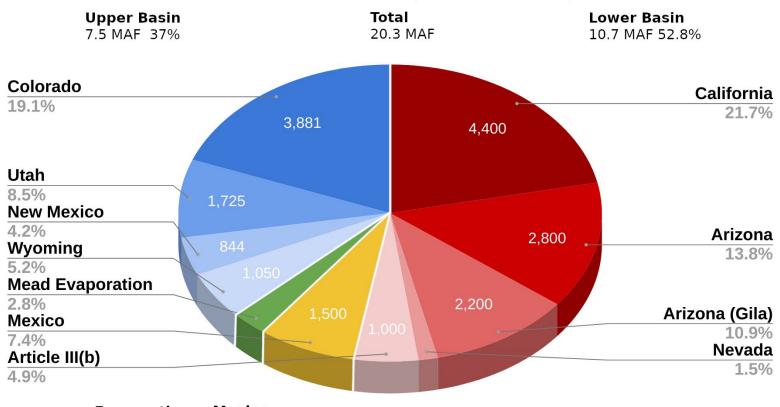
Mexico 1.5 MAF 7.6%

1948 Upper Colorado River Basin Compact (thousand acre-feet)



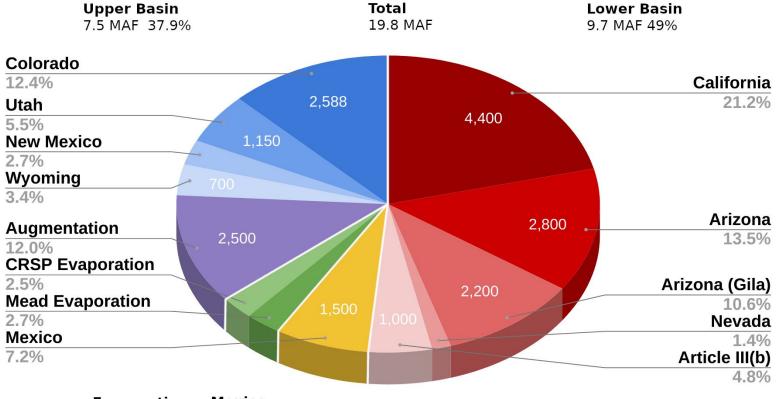
Evaporation Mexico 0.57 MAF 3% 1.5 MAF 7.4%

1963 Arizona v California (thousand acre-feet)



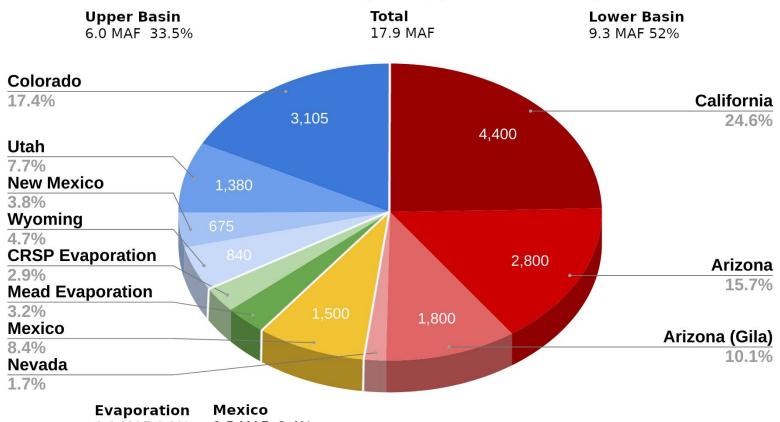
Evaporation Mexico 0.57 MAF 3% 1.5 MAF 7.4%

1968 Colorado River Basin Projects Act (thousand acre-feet)



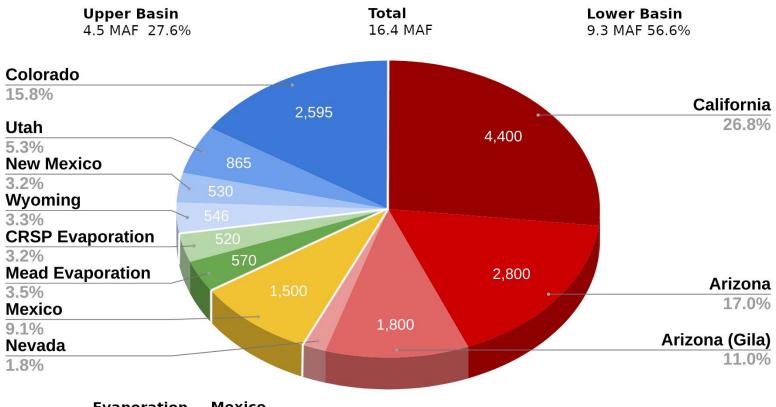
Evaporation Mexico1.1 MAF 5.5% 1.5 MAF 7.6%

2009 Reclamation Navajo Study (thousand acre-feet)



1.1 MAF 6.1% 1.5 MAF 8.4%

2016 Colorado River Actual (thousand acre-feet)



Evaporation Mexico 1.1 MAF 6.6% 1.5 MAF 9.1%

A Road Paved With Good Intentions

ze·ro-sum

1. a situation in which whatever is gained by one side is lost by the other

beggar-thy-neighbor

Decisions based on self interest leaving the region as a whole worse off

Path Forward: The IBCC's mission is to prevent this in Colorado

win-win

1. of or denoting a situation in which each party benefits in some way.

1922

Colorado Compact

Article I

The major purposes of this compact are to provide for the equitable division and apportionment of the use of the waters of the Colorado River System;

Article II

(a) The term "Colorado River System" means that portion of the Colorado River and its tributaries within the United States of America

Article III

(a) There is hereby apportioned from the Colorado river system in perpetuity to the upper basin and to the lower basin, respectively, the exclusive beneficial consumptive use of 7,500,000 acre-feet of water per annum, which shall include all water necessary for the supply of any rights which may now exist

Article III

(d) The States of the Upper Division will not cause the flow of the river at Lee Ferry to be depleted below an aggregate of 75,000,000 acre-feet for any period of ten consecutive years reckoned in continuing progressive series beginning with the first day of October next succeeding the ratification of this compact

"First and foremost, it must be ever kept in mind that the intent of the compact Is to be ascertained from a consideration of the entire instrument and that each clause must be considered in connection with other clauses."

Delph Carpenter, Compact Commissioner for the State of Colorado

Arizona's Commissioner Norviel was unhappy with the inclusion of the Gila and its tributaries in the Colorado River System.

California's senior water rights would take the majority of the Lower Basin's 7.5 million acre-feet entitlement shorting Arizona.

Norviel refused to propose a fix verbally or in writing.

The task fell to Scrugham from Nevada, Nevada often plays the role of peacemaker between the other states.

Nevada Commissioner Scrugham's Article III(b) Alternatives:

- 1. Each division gets 7.5 MAF (UB preferred)
- 2. Race to develop 8.5 MAF, loser then develops to 8.5 MAF (LB preferred)
- 3. Race to develop 8.5 MAF, loser has to claim surplus later (LB preferred)
- 4. 7.5 MAF to both UB and LB. Lower basin gets another 1 MAF. Another conference may be called by either party to allocate any unappropriated waters up to the limit required. No waters shall be withheld or diverted except for beneficial use". (LB preferred)

- #4 seems is the basis for Article III(b) and IV(b)
- It gave 1 MAF to the LB, but not to Arizona to cover the Gila and its tributaries

DEPARTMENT OF COMMERCE

OFFICE OF THE SECRETARY

WASHINGTON

Los Angeles, Calif., November 26, 1922.

Mr. W. S. NORVIEL, State Engineer, Phoeniz, Ariz.

MY DEAR NORVIEL: This is just by way of registering again my feelings of admiration for the best fighter on the commission. Arizona should erect a monument to you and entitle it "One million acre-feet."

I am sending you herewith a photograph which does not purport to be a likeness but it is a better-looking fellow than the one you have, and I send it as an excuse for writing this letter expressing my personal appreciation of this fine association which we have had.

Faithfully yours,

HERBERT HOOVER.

1928-1929

Boulder Canyon Project Act

1928 Boulder Canyon Project Act

- 3. that the State of Arizona shall have the exclusive beneficial consumptive use of the Gila River and its tributaries ...
- 4. that the waters of the Gila River and its tributaries, except return flow after the same enters the Colorado River, shall never be subject to any diminution whatever by any allowance of water which may be made by treaty or otherwise to the United States of Mexico ... the State of California shall and will mutually agree with the State of Arizona to supply, out of the main stream of the Colorado River, one-half of any deficiency which must be supplied to Mexico by the lower basin
- 6. that all of the provisions of said tri-State agreement shall be subject in all particulars to the provisions of the Colorado River compact, and ...

Lower Basin Tributaries

The Colorado River "A NATURAL MENACE BECOMES A NATIONAL RESOURCE" A Comprehensive Report on the Development of the Water Resources of the Colorado River Basin for Irrigation, Power Production, and Other Beneficial Uses in Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming By the united states department of the interior J. A. Krug, Secretary SPONSORED BY AND PREPARED UNDER THE GENERAL SUPERVISION OF THE BUREAU OF RECLAMATION. Michael W. Straus, Commissioner E. A. Movita, Director, Region 3; E. O. Lersoo, Director, Region 4 MARCH 1946

Stream	Location	A verage annual flow (acre-feet)
Green River Colorado River	At mouthAbove mouth of Green	5, 903, 000 7, 289, 000
Do	River. Lee Ferry in Arizona	16, 270, 000
Little Colorado River Virgin River Colorado River	Near the mouth Littlefield Boulder Dam	338, 000 310, 000 17, 330, 000
DoGila River		1 16, 450, 000
Colorado River	International boundary	1 17, 720, 000

Estimated Vincin flows in the Coloredo Piner

1,270,000 + 338,000 + 310,000 + 1,000,000 (Gila wasting) = 2,918,000 acre-feet

1 See appendix I, "Water supply, Colorado River."

"Bureau of Reclamation estimates that Lower Basin tributary flows, while poorly measured, average at least 2.5 MAF/year (and are perhaps as high as 4.5 MAF)." (Kenney, 2011)

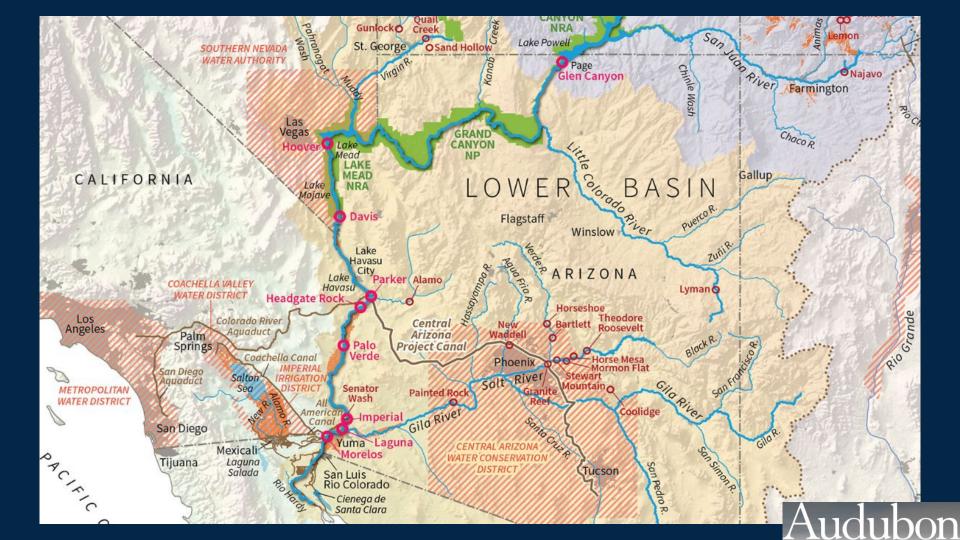
Quest for Certainty on a Diminishing River (Kuhn, 2007)

"The Gila River is a "wasting" river. In 1947, Reclamation estimated that the natural flow of the Gila River at its confluence with the Colorado River near Yuma was 1,272,000 af per year. Because the study period was 1897-1943, this is probably a high estimate. Other studies have suggested a natural flow more in the range of one million af per year. However, the estimated natural flow of the Gila River as it enters the Phoenix, Arizona area for that same 1897 to 1943 period is 2,280,000 af per year, over a million acre feet more that its flow at the mouth. Thus, as it flows from Phoenix to its mouth, it naturally loses or "wastes" over a million acre feet of water."

Path Forward: USBR and Lower Basin should accurately account for depletions, natural flows, carriage and evaporation losses in the Lower Basin

1922-Today

Equity

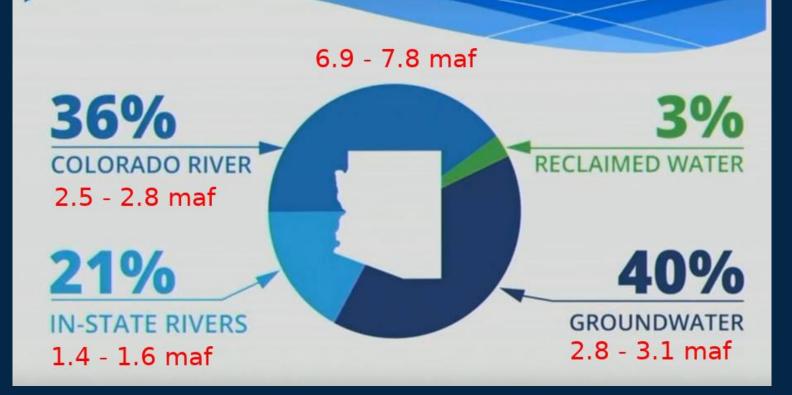


1960 Special Master Rifkind Findings

On Lower Basin evaporation and carriage losses:

"Reservoir evaporation, channel and other losses sustained prior to the diversion of water from the mainstream are not chargeable to the states but are to be treated as diminution of supply. Only after water is diverted from the mainstream are losses on it chargeable to a state as consumption."

Arizona Water Use By Source (2017)



1963-1972

Mexico Treaty and Salinity

Colorado Compact, Article III (c)

If, as a matter of international comity, the United States of America shall hereafter recognize in the United States of Mexico any right to the use of any waters of the Colorado river system, such waters shall be supplied first from the waters which are surplus over and above the aggregate of the quantities specified in Paragraphs (a) and (b); and if such surplus shall prove insufficient for this purpose, then, the burden of such deficiency shall be equally borne by the upper basin and the lower basin, and whenever necessary the states of the upper division shall deliver at Lee Ferry water to supply one half of the deficiency so recognized in addition to that provided in Paragraph (d).

Six States Supported the Mexico Treaty: Colorado, Arizona, Texas, Utah, Wyoming and New Mexico. California opposed, Nevada flip flopped.

Royce Tipton Memo to the Six States, December 1944:

- 7. It is estimated that under ultimate conditions of development in the United States only 375,000 acre-feet, to 500,000-acre-feet per annum will be required from water above Imperial Dam to make the scheduled deliveries to Mexico provided for by the treaty. The balance of the delivery, it is estimated, will be made from return flow and desilting water reaching the river below Imperial Dam.
- 8. The terms of the treaty will not adversely effect the use of the water apportioned to the Upper and Lower Basins in the United States by Article III (a) and (b) of the Colorado River Compact, namely, 16,000,000 acre-feet. In addition to the 16,000,000 acre-feet some water will remain for use in the United

1944 Mexico Treaty - Six States Support

Jean Breitenstein, CWCB lawyer, advocated for the Mexico treaty, there was a risk the dispute would got to international arbitration with uncertain outcome:

INTER-AMERICAN ARBITRATION Treaty and protocol signed at Washington January 5, 1929.

His 1944 paper and memo on the subject:

<u>The Pan American Arbitration Treaty and the Proposed Treaty between the United States and Mexico</u>

Memorandum: Concerning Proposed Treaty Between The United States and Mexico Over Use of the Waters of the Border Streams

1944 Mexico Treaty - California Opposition

"Without a treaty, the bogey of arbitration need not frighten us"

Herbert Hoover, Letter opposing Mexico Treaty

1944 Mexico Treaty - California Opposition

"...I'm sure none of the commissioners who negotiated the Compact had any idea that our Government would offer to guarantee Mexico any such amount as the 1,500,000 acre-feet stated in the proposed treaty. At the time Mexico was using about 500,000 to 600,000 acre-feet per year."

Herbert Hoover, Letter opposing Mexico Treaty

"Now by means of American works, we have controlled the flood water and silt, which is of tremendous value to Mexico... But had it been suggested that the United State was to be penalized in the future for having to furnish free to Mexico a volume of water, made available by works constructed in the United States, to supply land made possible of development only because of those works, I know it would have met with the opposition of the Compact framers. Moreover, had the Compact negotiators considered such a treaty possible as the present one, I am not sure agreement on a compact could have been reached."

Herbert Hoover, Letter opposing Mexico Treaty

1968 CRBPA Hearing on 1944 Mexico Treaty



Colorado)"

Mo Udall D-Arizona





Udall: "it seems to be no secret that Senator Connally of Texas was the chief proponent of a new treaty with Mexico relating to these rivers. (Rio Grande &

"... the Mexicans were only taking about 750,000 acre-feet out of the Colorado—but wanted more... So the "trade" was made by which the Mexican Government gave up a big part of its claim on the Rio Grande—in exchange for doubling Mexico's supply on the Colorado."

"...giving Mexico first call on the river for a net of 1,500,000 acre-feet"

1968 CRBPA Hearing on 1944 Mexico Treaty



Mo Udall D-Arizona



"At the treaty hearings numerous opposition witnesses warned that a shortage situation would ultimately come to pass—as it now seems clear will be the case."

"We think that the United States having undertaken this as a national obligation for a valid International reason, should not require the farmers, the water users, the cities of the Colorado River Basin to make good on this"

Path Forward: Interior should fulfill this national obligation

1951-1964

Arizona v California

1963 Arizona Turns To Litigation and the Supreme Court

- Arizona tried to kill the compact, filed in Supreme Court in '31, '34, '36
- Lower Basin disputes had to be settled before Congress would authorize CAP
- California tried to join Colorado and Wyoming to the case but failed
- Case ran from '51 to '63
- Special Master Rifkind finding in 1960 and two dissents are interesting



Supreme Court Justice William O. Douglas Arizona v California Dissenting Opinion

"With due respect, the majority achieves that result by misreading the Colorado River Compact, the Project Act, and by misreading the legislative history leading up to the California Limitation Act."

1963 Arizona v California



Larry MacDonnell, Getches Wilkinson, formerly University of Wyoming Arizona v California Revisited (2012)

"... Arizona v. California fostered unsustainable increases in consumption of basin water and created uncertainties in the meaning of the 1922 Compact that are now at issue."

"Arizona's attorneys and advisors ... recognized their position was weak under traditional principles of equitable apportionment law... developed a new strategy emphasizing decisions made by Congress and the Secretary that had already determined Arizona's rights as a matter of law."

"Arizona's uncompromising resistance ultimately yielded significant benefits for the state."

1963 Arizona v California - An Upper Basin Opinion



Larry MacDonnell, Getches Wilkinson, formerly University of Wyoming Arizona v California Revisited (2012)

"The Upper Division states remain equally committed to the position that:

- the Gila is part of the Colorado River basin,
- its water supply is subject to the provisions of the 1922 Compact
- its uses must be considered both in determining how much water the Lower Basin is consuming and in deciding who bears responsibility for meeting the Mexican Treaty delivery obligation."

"It is very possible we will need to have U.S. Supreme Court resolution of this matter"

Path Forward: Hope for the best, prepare for the worst!

1965-1968

Colorado River Basin Project Act

1965 Water Supplies of the Colorado River



Royce Tipton, P.E, Denver Water and UCRC Water Supplies of the Colorado River (1965)

"any increase in the use on the lower river must now be made from water apportioned to the Upper Basin, but now unused by it."

"...at present the aggregate demand on Lake Mead is close to 9 MAF per year."

This is without CAP, with 1.5 MAF losses and overuse, w/CAP it's 10.6 MAF

"...even present uses on the lower river are dependent upon significant amounts of water released from Lake Powell in excess of those required by the Colorado River Compact."

1965 The First Version of Section 603, The Forgotten Law of the River



Thomas Cahill, Wyoming P.E. Speech 1966



... the UCRC proposed amendments to H.R. 4671 which they felt would protect future development in the Upper Basin. On August 16, 1965, the Upper Basin states agreed before they could support the Central Arizona Project...

1. That all federal projects within the Lower Colorado River Basin be limited so as not to prejudice, impair, or preclude the future federal authorization of projects which will be required for the annual consumptive use by Upper Basin states of water that may be physically available after delivery of 75 million acre-feet at Lee's Ferry in any period of ten consecutive years;...

1965 Regional Compromise

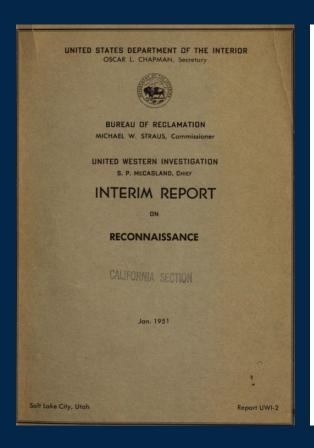
C Almanac

Congressional Quarterly Almanac (1968)

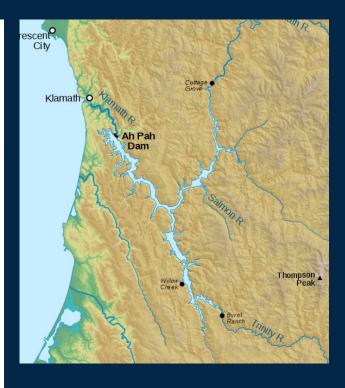
In 1965 and 1966, Aspinall had helped develop a regional compromise which, on July 5, 1966, gained the support of all the Governors in the Basin..

- 1. Interior Department... feasibility study of importing 2.5 maf of water into the Colorado
- 2. declaring the Mexican Water Treaty a national obligation;
- 3. specifying how the dams on the river were to be operated, thus protecting the Upper Basin against excessive draw-downs of its reservoirs...
- 4. authorizing construction of five water projects in Colorado.
- 5. ...authorize Hualapai and Marble Canyon Dams in Arizona so that their revenues would produce enough money to help pay for importation works.

Older Augmentation Studies

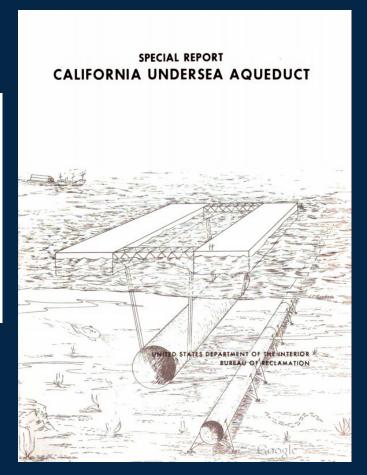




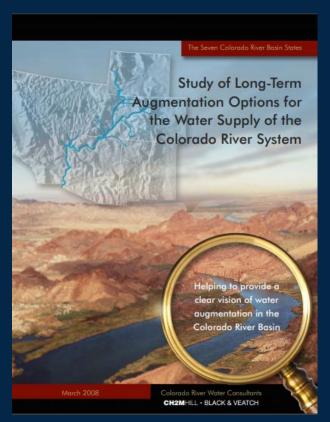


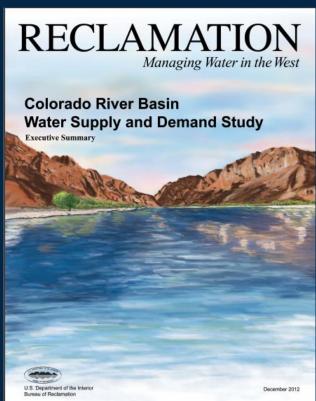
Older Augmentation Studies/Schemes

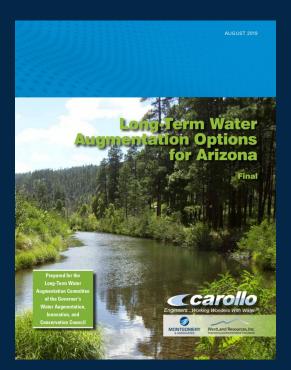
254. Clark, Chapin D. "Northwest-Southwest Water Diversion — Plans and Issues." Willamette Law Review 3 (Fall, 1965), 215-62. Clark first summarizes the political evolution of the Northwest-Southwest water diversion proposals, concluding with a statement of the problem as of 1965: (1) resistance of Northwest political leaders is high, (2) the conservationists are struggling vigorously to prevent additional dams on the Colorado and (3) the upper Colorado River Basin states are increasingly demanding water from the Northwest. He then details the particular problems in Arizona and California which are causing their demands for additional water. He goes on to summarize plans for diversion and concludes by examining the major economic and political issues underlying the overall diversion controversy.



Recent Augmentation Studies







1966 Sierra Club Kills Grand Canyon Dams

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

ARTH began four billion years ago and Man two million. The Age of Technology, on the other hand, is hardly a hundred million. 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:

 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, silting 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 commer-They will not provide anyone with water.

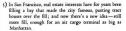
2) In Northern California, four lumber companies have nearly completed logging the private virgin redwood forests, an operation which to give you an idea of its size, has taken fifty years.

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 places on your face you missed while you were shaving.

3) And up the Hudson, there are plans for a power complex In MISTERIALS -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.



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 untrammelled 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 Brower, Executive Director Mills Tower, San Francisco

- Please send me more details on how I may help. Here is a donation of \$____
- 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." (\$25.00)
- Send me "The Last Redwoods" which tells the complet 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

City — The previous alls sugging that readers curreits as constitutional right of pertinent, usered damed Campon, produced in supprecedent ment only but the control to the





1968 Wyoming Demands Augmentation Not Studies



William Harrison R- Wyoming



"Wyoming is vitally concerned that passage of this bill should not interfere with our right to the use of water allocated to use under the terms of the Colorado River Compacts."

"Water supply studies on the Colorado River indicate that there will not be sufficient water in the natural drainage area of the Colorado River to permit fulfillment of all of the commitments under the various compacts now in effect."

"...there must be an importation of water into the basin if all states are to be permitted the use of waters to which they are rightfully entitled."

1968 The Forgotten Law of the River

SEC. 603 (a) Rights of the upper basin to the consumptive use of water available to that basin from the Colorado River system under the Colorado River Compact shall not be reduced or prejudiced by any use of such water in the lower basin.

My Translation:

The Lower Basin and CAP can use the Upper Basin's unused 2-3 MAF entitlement while it's surplus water, but... when the Upper Basin needs the water the Lower Basin cannot interfere with Upper Basin consumptive use and development of it's compact entitlement.

The question, is this happening or will it soon.....

1968 The Forgotten Law of the River

SEC. 603 (a) Rights of the upper basin to the consumptive use of water available to that basin from the Colorado River system under the Colorado River Compact shall not be reduced or prejudiced by any use of such water in the lower basin.

Similar to California's Section 301 but no enforcement or implementation

When is this triggered...my conjecture....IANAL:

- 2007 Interim Guidelines call. Yes?
- Article III(c) call. Interior didn't deliver the "national obligation". Yes?
- Preemptive curtailment, Lake Powell power head or target elevation. Yes?
- Overuse in Lower Basin, "Sweet Spot" (9 maf every year), aquifer hoarding, crashing Lake Powell, push us into a III(d) call. Maybe?
- We can't develop our entitlement because risk is so high. Maybe?
- Article III(d) call. No! We have to deliver this.

1968 CAP Shut Off if No Augmentation, Upper Basin Has Priority



Mo Udall D-Arizona



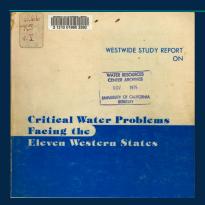
Aspinall D-CO



Mr. ASPINALL. "...when the upper basin begins to use its entitlement in the Colorado River compact area, you do not then wish to be placed in the position that the facilities for the Central Arizona Valley project could no longer be operated satisfactorily?"

Mr. UDALL. "Precisely."

1975 – DOI Augmentation Study, Kicking The Can Down The Road



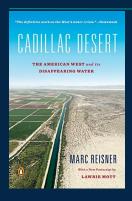
Westside Study Report on Critical Water Problems Facing the Eleven Western States 1975

"Since the passage of the act, new national priorities have emerged"

- Colorado River water supply will not meet all water demands about 1990
- Programs to augment river flows should be in operation by 1995-2000
- Reach 1.3 million acre-feet annually through weather modification
- Desalting of geothermal brines and seawater
- Other means of augmentation such as the importation of surface water

Path Forward: Study less, deliver more augmentation

1993 Cadillac Desert



Cadillac Desert
The American West and its Disappearing Water
1993

"The Bureau's own projection showed "firm" CAP water dwindling from 1.6 million acre-feet at the beginning to 300,000 acre-feet or less in fifty years; only during wet years, or if the upper-basin projects are never built, will there be more."

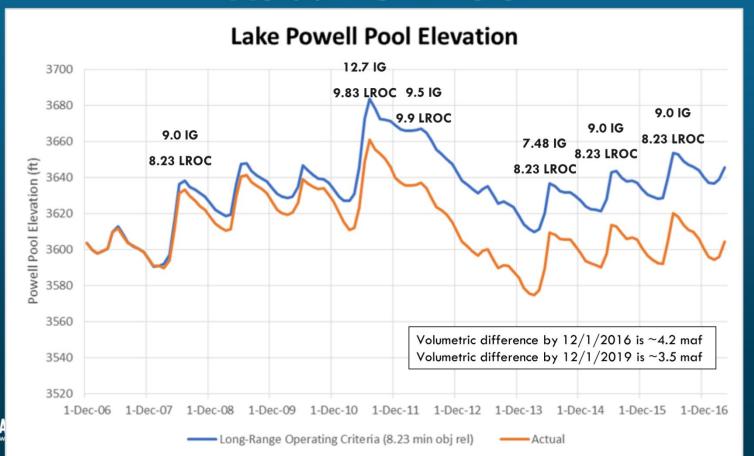
2000-2015

Drought and Interim Guidelines

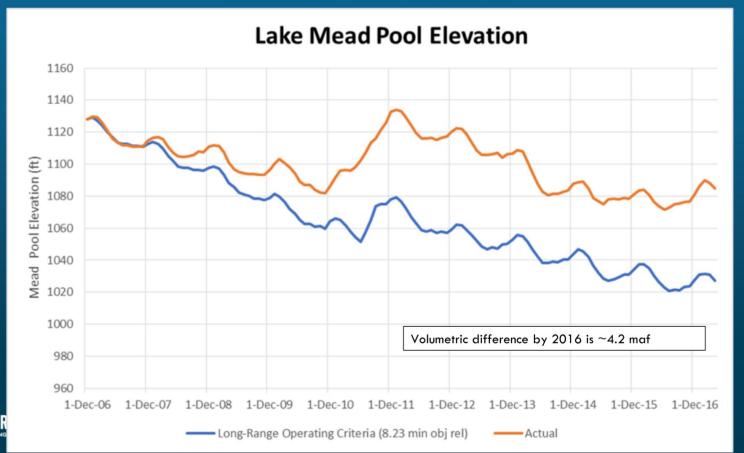
CWCB Staff Recommendation, January 2007:

"Compared to the Lower Basin, the Upper Basin is getting significantly less benefit and if for any reason things do not work as anticipated the states want to make sure the agreement and operations there under cease in full."

Expected Difference in Lake Powell Conditions: Actual vs. LROC



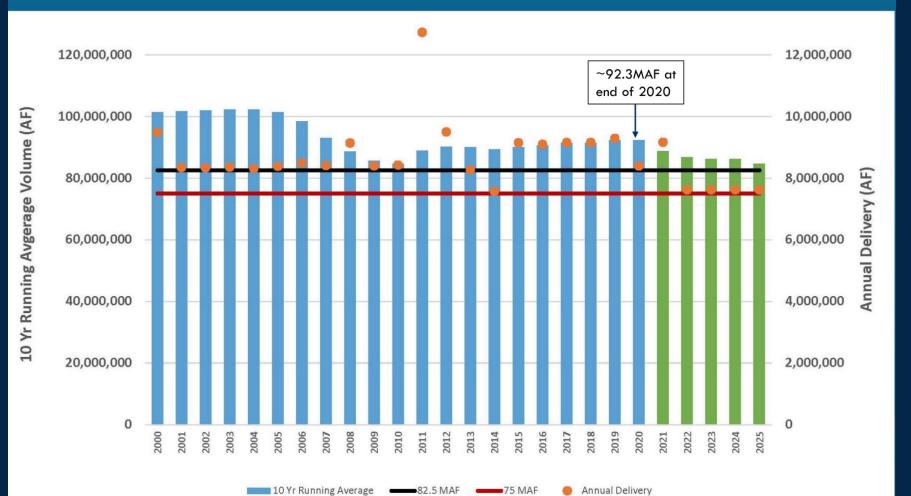
Expected Difference in Lake Mead Conditions: Actual vs. LROC



10 Yr. Running Delivery – LROC



10 Yr. Running Delivery – '07 IGs



2006 Arizona Strategy

Recommended Reading:

From a Colorado River Compact Challenge to the Next Era of Cooperation Among
The Seven Basin States

Patrick Schiffer, Herbert R. Guenther & Thomas G. Carr

Law Review paper on the strategy Arizona used against the Upper Basin in the 2007 Interim Guidelines Negotiations

2006 Arizona Strategy

Arizona threatens to sue if the Bureau continues to use Section 602 and LROC or the Bureau reverts to them with the 2007 Interim Guidelines expire:

"This will relieve Arizona of the need to challenge the legality of Reclamation's use of the 602(a) Storage algorithm that protects power generation and recreation uses in the Upper Division States.72 However, Arizona reserves the right to challenge future use of the 602(a) Storage algorithm after expiration of the interim period, if it reappears."

"If the system supply is greater than the aggregate of the Upper and Lower Division allocations in Articles III(a) and III(b) of the Compact, 16 MAF, the system supply surplus over 16 MAF is first applied to satisfy the Mexican Treaty obligation." 7.5 + 7.5 + 1.0 = 16 MAF

Problem #1 - Upper Basin isn't using 2 MAF of entitlement, 1 MAF is CRSP evap: 7.5 + 5.5 + 1.0 = 14 MAF

Problem #2 - Article III(b) is Arizona tributaries, not included in mainstem calc: 7.5 + 4.5 = 13 MAF

"...releases of 8.23 MAF are insufficient to satisfy the 9 MAF mainstream water allocations of the Lower Division States and Mexico, plus the associated evaporation and other losses"

"First, the States agreed that Colorado River management strategies for operation of the reservoirs should be designed to delay the onset and minimize the extent and duration of shortages in the Lower Basin."

"Second, they agreed that the management strategies should maximize the protection afforded to the Upper Division States by Lake Powell against calls upon the Upper Division to curtail uses."

2006 Arizona Strategy

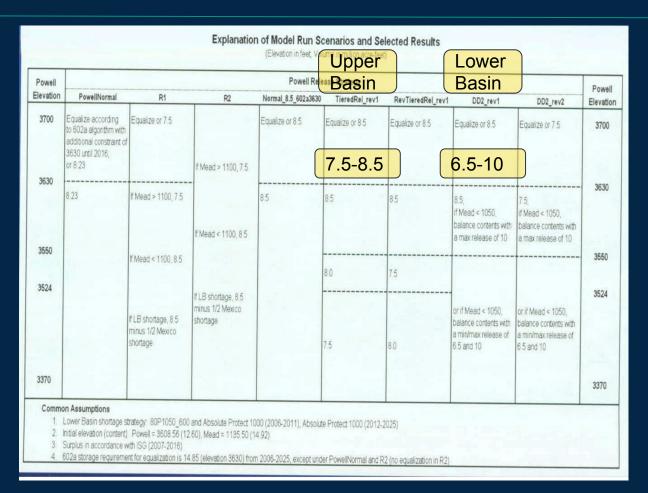
"... vary releases from Lake Powell between 7.0 MAF and 9.0 MAF, treating the two reservoirs more like one."

"The proposed interim reservoir balancing method would seek to keep more water in Lake Powell than in Lake Mead during high reservoir conditions, which is a benefit to the Upper Division States"

"...but would send more than 8.23 MAF to Lake Mead during low reservoir conditions when water levels approach critical shortage trigger levels in the Lower Basin."

That last part favors Lower Basin because of the structural deficit in Mead

2007 Interim Guidelines



"The Lower Division States currently consumptively use the entire Lower Division States' allocation and have sufficient irrigation and domestic demand to use additional flow from the Upper Division States under Article III(e)."

"Protection of these lower priority power generation and recreation uses at the expense of higher priority irrigation and domestic uses in the Lower Division would violate the use priorities in Article IV(b) of the Compact,"

Colorado Compact 1922

Article III

(e) The States of the Upper Division shall not withhold water, and the States of the Lower Division shall not require the delivery of water, which cannot reasonably be applied to domestic and agricultural uses.

Colorado Compact 1922

Article IV

(b) Subject to the provisions of this compact, water of the Colorado River System may be impounded and used for the generation of electrical power, but such impounding and use shall be subservient to the use and consumption of such water for agricultural and domestic purposes and shall not interfere with or prevent use for such dominant purposes.

Article VIII

Present perfected rights to the beneficial use of waters of the Colorado River System are unimpaired by this compact. Whenever storage capacity of 5,000,000 acre-feet shall have been provided on the main Colorado River within or for the benefit of the Lower Basin, then claims of such rights, if any, by appropriators or users of water in the Lower Basin against appropriators or users of water in the Upper Basin shall attach to and be satisfied from water that may be stored not in conflict with Article III.

All other rights to beneficial use of waters of the Colorado River System shall be satisfied solely from the water apportioned to that Basin in which they are situate.

"Some have argued that there is no obligation on the upper division to deliver the 75,000,000 acre-feet at Lee Ferry in a ten-year period so long as water is available in the Lower Basin reservoirs for domestic and agricultural uses."

Royce Tipton, 1944 confidential memo to the Six States

Tipton is hinting that Article III(e)and IV(b) cut both ways, they apply as much to the Lower Basin and Lake Mead as they do to the Upper Basin and Lake Powell.

One catch, Lower Basin can use Lake Mead for Ag and Domestic water, Upper Basin can't use water in Lake Powell.

"Funk walked Seaholm through the process of calculating how much water remained available for development. Based on what might be termed a constructionist reading of the Colorado River Compact, that number works out to roughly 1.5 million acre-feet."

"Colorado actually had only 474,000 acre-feet of water left to develop. More importantly, it showed that once existing and approved projects were built and operating at full capacity -- which, according to the document, will be next year -- only 159,000 acre-feet of water will be left."

2018-2020

Drought Contingency Plan

2018 Arizona Joint Briefing



Brenda Burman, USBR Commissioner https://www.youtube.com/watch?v=jdM01DtMX4Y&t=3630s

"Waiting for this or a future secretary to somehow ignore the law of the river and the junior status of Arizona is not how Arizona wants to deal with this risk on the system. Some say that even if Lake Mead declines to critically low elevations the hard landing of the 1968 act is unenforceable in a modern world."

"In the absence of drought plan I predict enormous pressure from the rest of the Basin on the Secretary to limit Arizona's diversions from the River and to use only Arizona's internal resources to fix Arizona's problems. I see near the certain likelihood of litigation and I see the absence of those multistate partnerships that we've come to rely on, that have kept us out of shortage to date."

Litigation and Equity

- We don't want to litigate these complex issues
- Litigation would be expensive, time consuming, difficult, divisive and the outcome would be unpredictable
- My "Path Forward" presentation seeks to reduce the need to litigate!!
- But... significant inequities have developed in the Law of the River over time
- The Lower Basin is overusing the river at the expense of the Upper Basin
- The Lower Basin has used Federal intervention and litigation to achieve this contrary to the spirit of the Colorado River Compact and the Compact Clause
- This overuse isn't a problem until "rights of the upper basin to the consumptive use of water available to that basin from the Colorado River system under the Colorado River Compact" are "reduced or prejudiced"
- We seem to be rapidly approaching this point. As a water rights holder I care!
- We ask the UCRC and Colorado to be prepared and willing to litigate these matters if that is the only way to resolve these disputes and restore equity

The End