# Law of the River Apportionment Scheme Categorization of Laws 

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Summary. This document categorizes provisions taken from the select group of 20 laws addressed in the compilation of laws based on the functions these provisions serve within the Law of the River's apportionment scheme. The purpose of this categorization essentially is to break down the apportionment scheme into its component parts - i.e., to create a typology accounting for particular procedural and substantive provisions that exist in common forms at multiple levels of the apportionment scheme (international level; basinwide (U.S.) level; subbasin level; state level). The categories and subcategories used for this purpose are as follows:

- The first category consists of provisions addressing Jurisdiction. These provisions are organized into three subcategories: (1) those that define the geographic and hydrologic scope of the apportionment scheme; (2) those that designate the political divisions and sovereigns associated with the apportionment scheme; and (3) those that identify the jurisdictional relationships that exist between sovereigns and substantive provisions encompassed within the apportionment scheme. The third subcategory is the least straightforward: It sheds light on how the Law of the River's apportionment scheme is an integrated system wherein substantive provisions related to entitlements, etc. (and the associated relationships between federal, state, and tribal sovereigns) are "nested" together from the international level (e.g., Treaty with Mexico) to the basinwide (U.S.) level (e.g., Colorado River Compact) to the subbasin level (e.g., Upper Colorado River Compact, $A Z v . C A$ Decree) to the state level (e.g., Seven Party Agreement, BCPA § 5 storage and delivery contracts).
- The second category consists of provisions associated with the various Entitlements (i.e., water rights) set forth in the apportionment scheme. Two subcategories are relevant in this realm: (1) provisions that establish (allocate) and define the terms of entitlements and (2) provisions that provide for the establishment of future entitlements. The provisions within the first subcategory undoubtedly can be parsed out more finely than is represented here. Among other distinctions, these provisions could be further segregated based upon (1) the level at which they exist within the apportionment scheme (e.g., international level versus state level); (2) the types of parties who hold the entitlements (e.g., sovereigns versus private contractors); and (3) the terms of the entitlements (e.g., quantity- versus percentage-based rights). For sake of efficiency, these distinctions are not pursued in this draft.
- The third category consists of provisions dealing with the relative Allocation Priorities of the entitlements within the apportionment scheme. The subcategories for these provisions are twofold: (1) provisions that establish general hierarchies governing water storage and use and (2) provisions that establish specific orders of priorities (relative priorities) applicable to

[^0]storage and delivery of water required to satisfy entitlements. This latter subcategory covers a lot of ground. Like above, finer distinctions could be made among its provisions based upon (inter alia) the nature and location of the orders of priorities within the apportionment scheme.

- The fourth category consists of provisions authorizing Transfers of entitlements. These provisions fall into two subcategories: (1) those that authorize the transfer of entitlements between the sub-basins and (2) those that authorize the transfer of entitlements within the Lower Basin. The transfers contemplated in both subcategories are temporary in nature (and often due to non-use). The latter subcategory has seen considerable action in recent years.
- The fifth category consists of provisions that address Governance of the apportionment scheme. A wide swath of provisions is dissected into three subcategories: (1) provisions that impose procedural requirements relevant to the apportionment scheme (e.g., mandatory consultation, public participation, decisionmaking criteria); (2) provisions that prescribe implementation measures relevant to the apportionment scheme (e.g., accounting, reporting, monitoring, measurement processes); and (3) provisions that establish dispute resolution procedures applicable to controversies involving the apportionment scheme.

Having outlined the structure of this document, two points related to its content should be noted.
First, as alluded to above, it seems more accurate to conceive of the Law of the River's apportionment scheme as an integrated system of nested apportionment schemes that exist at the international, basinwide (U.S.), sub-basin, and state levels. The use of "apportionment scheme" in the category titles (and elsewhere) does not necessarily reflect this understanding.

Second, the scope of this categorization is limited in the same manner as is the compilation of laws: It focuses exclusively on apportionment scheme-related provisions common to federal laws specific to the Colorado River Basin. Relevant provisions also exist, however, in federal laws of general applicability (e.g., federal reserved rights doctrine, Endangered Species Act, Reclamation Act) and state laws of general applicability (e.g., prior appropriation, irrigation district laws). Among other terms, the entitlements, allocation priorities, and transfer rules set forth in these laws are integral parts of the apportionment scheme and cannot be overlooked in any thorough typology of its legal architecture. The laws covered in this categorization are:

- Colorado River Compact (1922)
- Boulder Canyon Project Act (1928)
- Limitation Act (1929)
- Seven Party Agreement (1931)
- Treaty with Mexico (1944)
- Upper Colorado River Basin Compact (1948)
- Colorado River Storage Project Act (1956)
- Arizona v. California, 373 U.S. 546 (1963); Arizona v. California, 547 U.S. 150 (2006) (consolidated decree)
- Colorado River Basin Project Act (1968)
- Long Range Operating Criteria (1970)
- Minute 242 (1973)
- Colorado River Basin Salinity Control Act (1974)
- Grand Canyon Protection Act (1992)
- Operating Criteria for Glen Canyon Dam (1996)
- Lower Basin Water Banking Regulations (1999)
- Minute 306 (2000)
- Interim Surplus Guidelines (2001)
- Quantification Settlement Agreement (2003)
- Interim Guidelines for Lower Basin Shortages and the Coordinated Operations for Lake Powell and Lake Mead (2007)

Textual excerpts and parenthetical summaries of the relevant provisions within these laws appear below. The laws are organized chronologically within each subcategory.

## I. Jurisdiction

A. Provisions that define the geographic and hydrologic scope of the apportionment scheme.

## Colorado River Compact

- Article I (identifying "Colorado River System" as water resources apportioned by Compact)
- "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) (defining scope of "Colorado River System")
- "The term 'Colorado River System' means that portion of the Colorado River and its tributaries within the United States of America."
- Article $I I(b)$ (defining scope of "Colorado River Basin")
- "The term 'Colorado River Basin' means all of the drainage area of the Colorado River System and all other territory within the United States of America to which the waters of the Colorado River System shall be beneficially applied."
- See also Article II(f), (g) (defining "Upper Basin" and "Lower Basin" similarly).


## Treaty with Mexico

- Preamble (identifying "the waters of the Colorado and Tijuana Rivers, and of the Rio Grande (Rio Bravo)" as water resources governed by Treaty generally)
- Article 10 (identifying "waters of the Colorado River, from any and all sources" as water resources apportioned by the Treaty relevant to Colorado River)


## Upper Colorado River Basin Compact

- Preamble (identifying "uses and deliveries of the water of the Upper Basin of the Colorado River" as water resources apportioned by Upper Basin Compact)
- Article I (identifying "waters of the Colorado River System" within Upper Basin as water resources apportioned by Upper Basin Compact)
- "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, the use of which was apportioned in perpetuity to the Upper Basin by the Colorado River

Compact; to establish the obligations of each State of the Upper Division with respect to the deliveries of water required to be made at Lee Ferry by the Colorado River Compact $\qquad$

- Article II(a) (defining scope of "Colorado River System") (same definition as Compact)
- Article II(b) (defining scope of "Colorado River Basin") (same definition as Compact)
- See also Article II(f), (g) (defining "Upper Basin" and "Lower Basin").
- Article II( $i$ ) (defining scope of "Upper Colorado River System"",
- "The term 'Upper Colorado River System' means that portion of the Colorado River System above Lee Ferry."

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- Article $I(B)$ (defining 'mainstream' in relation to scope of Decree's apportionment scheme)
- "'Mainstream' means the mainstream of the Colorado River downstream from Lee Ferry within the United States, including the reservoirs thereon."
- Article $I(C)$ (encompassing groundwater within Decree's apportionment scheme)
- "Consumptive use from the mainstream within a State shall include all consumptive uses of water of the mainstream, including water drawn from the mainstream by underground pumping."
- Article $I(E)$ (identifying "[w]ater controlled by the United States" as water resources to which Decree's apportionment scheme applies)
- "'Water controlled by the United States' refers to the water in Lake Mead, Lake Mohave, Lake Havasu and all other water in the mainstream below Lee Ferry and within the United States."
- Article $\operatorname{VIII}(B)$ (excluding Lower Basin tributaries from Decree's apportionment scheme)
- "This decree shall not affect: The rights or priorities to water in any of the Lower Basin tributaries of the Colorado River in the States of Arizona, California, Nevada, New Mexico and Utah except the Gila River System." Note - The reference to the Gila River system does not bring it within the Decree's apportionment scheme.
B. Provisions that designate the political divisions and sovereigns associated with the apportionment scheme.


## Colorado River Compact

- Preamble (identifying state sovereigns associated with Compact's apportionment scheme)
- "The States of Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming, having resolved to enter into a compact . . . have agreed upon the following articles."
- Article I (prescribing sub-basin political division of Compact's apportionment scheme)
- "[T]he Colorado River Basin is divided into two Basins, and an apportionment of the use of part of the water of the Colorado River System is made to each of them with the provision that further equitable apportionments may be made."
- Article II(c) (designating states of "Upper Division")
- "The term 'States of the Upper Division' means the States of Colorado, New Mexico, Utah, and Wyoming."
- See also Article II(f) (defining "Upper Basin").
- Article II(d) (designating states of "Lower Division")
- "The term 'States of the Lower Division' means the States of Arizona, California, and Nevada."
- See also Article II(g) (defining "Lower Basin").
- Article III(c) (anticipating establishment of Mexico's entitlement via treaty).
- "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 . . . ."
- Article VII (providing Compact does not affect U.S. obligations to tribal sovereigns)
- "Nothing in this compact shall be construed as affecting the obligations of the United States of America to Indian tribes."


## Treaty with Mexico

- Preamble (identifying United States and Mexico as nation-state sovereigns associated with Treaty's apportionment scheme)
- "[A] treaty between the United States of America and the United Mexican States relating to the utilization of the waters of the Colorado and Tijuana Rivers, and of the Rio Grande (Rio Bravo) . . . ."
- See also Article I(a), (b) (defining "United States" and "Mexico")
- Article 10 (defining Mexico's entitlement and U.S. obligations relevant thereto)
- Article 11 (designating points of delivery for Mexico's entitlement and U.S. obligations relevant thereto)
- Article 15 (prescribing delivery schedules for Mexico's entitlement and U.S. obligations relevant thereto)


## Upper Colorado River Basin Compact

- Preamble (identifying state sovereigns associated with Upper Basin Compact's apportionment scheme)
- "The State of Arizona, the State of Colorado, the State of New Mexico, the State of Utah and the State of Wyoming . . . have agreed, subject to the provisions of the Colorado River Compact, to determine the rights and obligations of each signatory State respecting the uses and deliveries of the water of the Upper Basin of the Colorado River, as follows:"
- Article II(c) (defining "States of the Upper Division") (same definition as Compact)
- Article II(d) (defining "States of the Lower Division") (same definition as Compact)
- Article III( a) (allocating entitlements to state sovereigns associated with Upper Basin Compact's apportionment scheme)
- "Subject to the provisions and limitations contained in the Colorado River Compact and in this Compact, there is hereby apportioned from the Upper Colorado River System in perpetuity to the States of Arizona, Colorado, New Mexico, Utah and Wyoming, respectively, the consumptive use of water . . . ."

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- Article II (identifying state sovereigns associated the Decree's apportionment scheme)
- "The United States, its officers, attorneys, agents and employees be and they are hereby severally enjoined: . . . (B) From releasing water controlled by the United States for irrigation and domestic use in the States of Arizona, California and Nevada,
except as follows . . . . (D) From releasing water controlled by the United States for use in the States of Arizona, California, and Nevada for the benefit of any federal establishment named in this subdivision (D) except in accordance with the allocations made herein [reserved rights of five Indian reservations, one National Recreation Area, and two National Wildlife Refuges."


## C. Provisions that identify the jurisdictional relationships that exist between sovereigns and substantive provisions encompassed within the apportionment scheme.

## Colorado River Compact

- Article $I V(c)$ (providing water use hierarchy is inapplicable to intrastate water allocation)
- "The provisions of this article [water use hierarchy] shall not apply to or interfere with the regulation and control by any State within its boundaries of the appropriation, use, and distribution of water."
- Article VII (providing Compact does not affect U.S. obligations to tribal sovereigns)
- "Nothing in this compact shall be construed as affecting the obligations of the United States of America to Indian tribes."
- Article VIII (leaving present perfected rights unimpaired by Compact)
- "Present perfected rights to the beneficial use of waters of the Colorado River System are unimpaired by this compact."


## Boulder Canyon Project Act

- $\quad \S 8(a)$ (providing United States and all users of water stored and distributed pursuant to Act are "subject to and controlled by" Colorado River Compact; requiring "all permits, licenses, and contracts [to] so provide")
- §13(c) (providing all patents, grants, contracts, leases, permits, and licenses issued by United States for use of water from Colorado River or its tributaries are "subject to and controlled by" Colorado River Compact)
- § 18 (preserving state authority over intrastate water allocation subject to modification by Colorado River Compact or other interstate agreement)
- "Nothing herein shall be construed as interfering with such rights as the States now have either to the waters within their borders or to adopt such policies and enact such laws as they may deem necessary with respect to the appropriation, control, and use of waters within their borders, except as modified by the Colorado River compact or other interstate agreement."


## Upper Colorado River Basin Compact

- Article III( a) (providing apportionment scheme set forth is Upper Colorado River Basin Compact is subject to "provisions and limitations" of Colorado River Compact)
- Article III(b)(4) (providing state entitlements set forth in Upper Colorado River Basin Compact include "all water necessary for the supply of any rights which now exist")
- Article VII (charging water use by United States or "any of its agencies, instrumentalities or wards" against entitlement of state in which use is made)
- "The consumptive use of water by the United States of America or any of its agencies, instrumentalities or wards shall be charged as a use by the State in which the use is made; provided, that such consumptive use incident to the diversion,
impounding, or conveyance of water in one State for use in another shall be charged to such latter State."
- Article $X V(b)$ (preserving state jurisdiction over intrastate allocation of compact entitlements)
- "The provisions of this Compact shall not apply to or interfere with the right or power of any signatory State to regulate within its boundaries the appropriation, use and control of water, the consumptive use of which is apportioned and available to such State by this Compact."
- Article XIX (disclaiming any effect of Upper Colorado River Basin Compact on U.S. obligations to tribal sovereigns and Mexico or on capacity of United States to acquire rights to use of waters of Upper Colorado River System)
- "Nothing in this Compact shall be construed as: (a) Affecting the obligations of the United States of America to Indian tribes; (b) Affecting the obligations of the United States of America under the Treaty with the United Mexican States . . . ; (c) Affecting any rights or powers of the United States of America, its agencies or instrumentalities, in or to the waters of the Upper Colorado River System, or its capacity to acquire rights in and to the use of said waters."


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- Article $I(C)$ (providing consumptive uses of mainstem water in Lower Basin states include uses associated with reserved rights of Indian and other federal reservations)
- "Consumptive use from the mainstream within a State shall include . . . consumptive uses made . . . by the United States for the benefit of Indian reservations and other federal establishments within the State."
- Article VIII (limiting jurisdictional effect of Decree on intrastate water allocation; Lower Basin tributaries and Indian and other federal reservations; and interpretive issues arising under Colorado River Compact)
- "This decree shall not affect: (A) The relative rights inter sese of water users within any one of the States, except as otherwise specifically provided herein; (B) The rights or priorities to water in any of the Lower Basin tributaries of the Colorado River in the States of Arizona, California, Nevada, New Mexico and Utah except the Gila River System; (C) The rights or priorities, except as specific provision is made herein, of any Indian Reservation, National Forest, Park, Recreation Area, Monument or Memorial, or other lands of the United States; (D) Any issue of interpretation of the Colorado River Compact."


## Grand Canyon Protection Act

- § 1806 (disclaiming any effect of Act on entitlements established elsewhere in Law of the River or on federal environmental laws)
- "Nothing in this title is intended to affect in any way - (1) the allocations of water secured to the Colorado Basin States by any compact, law, or decree; or (2) any Federal environmental law, including the [ESA]."

Lower Basin Water Banking Regulations

- $\quad$ 414.1(b) (identifying limited jurisdictional scope of regulations vis-à-vis entitlements set forth in Law of the River and state water rights systems)
- "This part does not: (1) Affect any Colorado River water entitlement holder's right to use its full water entitlement; (2) Address or preclude independent actions by the Secretary regarding Tribal storage and water transfer activities; (3) Change or expand existing authorities under the body of law known as the 'Law of the River'; (4) Change the apportionments made for use within individual States; (5) Address intrastate storage or intrastate distribution of water; (6) Preclude a Storing State from storing some of its unused apportionment in another Lower Division State if consistent with applicable State law . . . ."
- $\S 414.6(a)$ (subjecting storage and interstate release agreements authorized by regulations to Endangered Species Act and National Environmental Policy Act)
- "The Secretary will complete environmental compliance documentation, compliance with the National Environmental Policy Act of 1969, as amended, and the Endangered Species Act of 1973, as amended; and will integrate the requirements of other statutes, laws, and other executive orders as required for Federal actions to be taken under this part."


## Quantification Settlement Agreement

- $\quad \$ 5(a)$ (disclaiming any effect of Agreement on Secretary of the Interior's authority under Article II(B)(3) of the Arizona v. California Decree)
- $\S 10(e)$ (disclaiming any effect of Agreement on interstate water allocation, state entitlements under Law of the River, and applicable federal laws)
- "This Agreement does not . . . (ii) change or expand existing authorities under applicable federal law, except as specifically provided herein with respect to the Districts, (iii) address interstate distribution of water, (iv) change the apportionments made for use within individual States, (v) affect any right under the California Limitation Act . . . , or any other provision of applicable federal law."
- $\S 10(i)$ (providing Agreement is "subject to and controlled by" Colorado River Compact)


## 2007 Interim Guidelines

- Section XI.E (disclaiming any effect of Guidelines on intrastate water storage and allocation, sub-basin and state entitlements set forth in Law of the River, present perfected rights, and reserved rights)
- "[These Guidelines] do not . . . (3) address intrastate storage or intrastate distribution of water . . . (4) change the apportionments made for use within individual states, or in any way impair or impede the right of the Upper Basin to consumptively use water available to that Basin under the Colorado River Compact . . . . (5) affect any obligation of any Upper Division state under the Colorado River Compact . . . (7) affect the rights of any holder of present perfected rights or reserved rights $\qquad$


## II. Entitlements

A. Provisions that establish and define the terms of entitlements.

Colorado River Compact

- Article III( $a$ ) (establishing Upper Basin and Lower Basin entitlements to 7.5 maf per year)
- "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(b) (establishing additional entitlement of Lower Basin to 1.0 maf per year)
- "In addition to the apportionment in paragraph (a), the Lower Basin is hereby given the right to increase its beneficial consumptive use of such waters by one million acre-feet per annum."
- Article VIII (recognizing present perfected rights as entitlements unimpaired by Compact)
- "Present perfected rights to the beneficial use of waters of the Colorado River System are unimpaired by this compact."


## Boulder Canyon Project Act

- $\quad$ 4(a) (limiting California's basic and surplus entitlements as condition of Act's passage)
- "[T]he State of California, by act of its legislature, shall agree irrevocably and unconditionally with the United States and for the benefit of the States of Arizona, Colorado, Nevada, New Mexico, Utah, and Wyoming, as an express covenant and in consideration of the passage of this Act, that the aggregate annual consumptive use (diversions less returns to the river) of water of and from the Colorado River for use in the State of California, including all uses under contracts made under the provisions of this Act and all water necessary for the supply of any rights which may now exist, shall not exceed four million four hundred thousand acre-feet of the waters apportioned to the lower basin States by paragraph (a) of Article III of the Colorado River compact, plus not more than one-half of any excess or surplus waters unapportioned by said compact, such uses always to be subject to the terms of said compact."
- $\$ 5$ (establishing secretarial contracts as exclusive form of entitlements by which parties can arrange for storage and delivery of mainstem water in Lower Basin)
- "[T]he Secretary of the Interior is hereby authorized . . . to contract for the storage of water in said reservoir and for the delivery thereof at such points on the river and on said canal as may be agreed upon, for irrigation and domestic uses . . . Contracts respecting water for irrigation and domestic uses shall be for permanent service and shall conform to paragraph (a) of section 4 of this Act. No person shall have or be entitled to have the use for any purpose of the water stored as aforesaid except by contract made as herein stated."


## Seven Party Agreement

- Article I (establishing entitlements of major water users in California to water afforded by state's basic and surplus entitlements)
- "The waters of the Colorado River available for use within the State of California under the Colorado River Compact and Boulder Canyon Project Act shall be apportioned to the respective interests below named and in the amounts and with priorities therein named and set forth, as follows . . ." Sections 1 to 7 set forth entitlements and relative priorities. Entitlements are based on "beneficial use"/"beneficial consumptive use." Many (but not all) of them are quantified.
- Note: QSA clarifies and modifies the amounts of the entitlements (see below).


## Treaty with Mexico

- Article 10 (establishing Mexico's entitlement to 1.5 maf per year)
- "Of the waters of the Colorado River, from any and all sources, there are allotted to Mexico: (a) A guaranteed annual quantity of 1,500,000 acre-feet . . . to be delivered in accordance with the provisions of Article 15[.]" Although Mexico's entitlement is limited to $1.5 \mathrm{maf} / \mathrm{yr}$., up to $1.7 \mathrm{maf} / \mathrm{yr}$. may be delivered in surplus conditions. In the event of extraordinary drought or serious accident to the U.S. irrigation system making it difficult to deliver 1.5 maf in a year, Mexico's entitlement "will be reduced in the same proportion as consumptive uses in the United States are reduced."
- Article 11 (designating points of delivery for Mexico's entitlement)
- Article 15 (establishing delivery schedule for Mexico's entitlement)
- "The water allotted in subparagraph (a) of Article 10 of this Treaty shall be delivered to Mexico at the points of delivery specified in Article 11, in accordance with the following two annual schedules of deliveries by months . . . ."


## Upper Colorado River Basin Compact

- Article III( $a$ ) (establishing entitlements of Upper Basin states, including percentage-based entitlements of Colorado, New Mexico, Utah, and Wyoming, and quantity-based entitlement of Arizona)
- "Subject to the provisions and limitations contained in the Colorado River Compact and in this Compact, there is hereby apportioned from the Upper Colorado River System in perpetuity to the States of Arizona, Colorado, New Mexico, Utah and Wyoming, respectively, the consumptive use of water as follows: (1) To the State of Arizona the consumptive use of 50,000 acre-feet of water per annum. (2) To the States of Colorado, New Mexico, Utah and Wyoming, respectively, the consumptive use per annum of the quantities resulting from the application of the following percentages to the total quantity of consumptive use per annum apportioned in perpetuity to and available for use each year by Upper Basin under the Colorado River Compact and remaining after the deduction of the use, not to exceed 50,000 acre-feet per annum, made in the State of Arizona. State of Colorado, 51.75 per cent; State of New Mexico, 11.25 per cent; State of Utah, 23.00 per cent; State of Wyoming, 14.00 per cent."
- Article III(b) (providing entitlements of Upper Basin states must conform with principle that "[b]eneficial use is the basis, the measure and the limit of the right to use")
- Article V (accounting for reservoir losses relevant to entitlements of Upper Basin states)
- Article XVI (providing non-use of water afforded by entitlements of Upper Basin states does not constitute forfeiture or abandonment of entitlements)
- "The failure of any State to use the water, or any part thereof, the use of which is apportioned to it under the terms of this Compact, shall not constitute a relinquishment of the right to such use to the Lower Basin or to any other State, nor shall it constitute a forfeiture or abandonment of the right to such use."

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- Article $I(H)$ (defining "present perfected rights" relevant to Decree's apportionment scheme for mainstem water in Lower Basin)
- "Present perfected rights" means perfected rights, as here defined, existing as of June 25, 1929, the effective date of the Boulder Canyon Project Act"
- See also Article $I(G)$ : "'Perfected right' means a water right acquired in accordance with state law, which right has been exercised by the actual diversion of a specific quantity of water that has been applied to a defined area of land or to definite municipal or industrial works, and in addition shall include water rights created by the reservation of mainstream water for the use of federal establishments under federal law whether or not the water has been applied to beneficial use."
- Article $I I(B)(1)$ (establishing basic entitlements of Lower Basin states applicable under normal conditions (i.e., where sufficient mainstem water is available to satisfy 7.5 maf of annual consumptive use in Lower Basin))
- "If sufficient mainstream water is available for release, as determined by the Secretary of the Interior, to satisfy $7,500,000$ acre-feet of annual consumptive use in the aforesaid three States, then of such 7,500,000 acre-feet of consumptive use, there shall be apportioned 2,800,000 acre-feet for use in Arizona, 4,400,000 acre-feet for use in California, and 300,000 acre-feet for use in Nevada."
- Article $I I(B)(2)$ (establishing surplus entitlements of Lower Basin states applicable under surplus conditions (i.e., where sufficient mainstem water is available to satisfy 7.5 maf of annual consumptive use in Lower Basin))
- "If sufficient mainstream water is available for release, as determined by the Secretary of the Interior, to satisfy annual consumptive use in the aforesaid States in excess of 7,500,000 acre-feet, such excess consumptive use is surplus, and $50 \%$ thereof shall be apportioned for use in Arizona and $50 \%$ for use in California; provided, however, that if the United States so contracts with Nevada, then $46 \%$ of such surplus shall be apportioned for use in Arizona and $4 \%$ for use in Nevada."
- Article $I I(B)(3)$ (limiting California's entitlement to 4.4 maf per year during shortage conditions (i.e., where insufficient water is available to satisfy 7.5 maf or annual consumptive use in Lower Basin))
- Article $\operatorname{II}(B)(5)$ (reiterating (from Boulder Canyon Project Act, § 5) secretarial contracts as exclusive form of entitlements by which parties can arrange for release and delivery of mainstem water in Lower Basin)
- "[M]ainstream water shall be released or delivered to water users (including but not limited to public and municipal corporations and other public agencies) in Arizona, California, and Nevada only pursuant to valid contracts therefor made with such users by the Secretary of the Interior, pursuant to Section 5 of the Boulder Canyon Project Act or any other applicable federal statute."
- Article $I I(D)$ (establishing quantity-based entitlements and priority dates of reserved rights of nine federal reservations (Indian and non-Indian) to mainstem water in Lower Basin)
- "The United States, its officers, attorneys, agents and employees be and they are hereby severally enjoined: . . . [f]rom releasing water controlled by the United States for use in the States of Arizona, California, and Nevada for the benefit of any federal establishment named in this subdivision (D) except in accordance with the allocations made herein . . . ."
- Appendix (listing present perfected rights (quantity-based entitlements and priority dates) to mainstem water in Lower Basin states)
- Appendix, para. 4 (providing present perfected rights to mainstem water in Lower Basin states "may be exercised only for beneficial uses")
- Appendix, para. 5 (providing Indian reserved rights set forth in Decree are to be quantified by practicably irrigable acreage (PIA) standard but are not restricted to irrigation use)
- "The quantities of diversions are to be computed by determining net practicably irrigable acres within each additional area using the methods set forth by the Special Master in this case . . . . The foregoing reference to a quantity of water necessary to supply consumptive use required for irrigation, and as that provision is included within paragraphs (1) through (5) of Art. II(D) of this decree, shall constitute the means of determining quantity of adjudicated water rights but shall not constitute a restriction of the usage of them to irrigation or other agricultural application."


## Colorado River Basin Project Act

- §304(b)(1) (authorizing water supply contracts to be formed between Secretary of Interior and users of CAP water in Arizona, including contracts for industrial and municipal water (i.e., not exclusively irrigation water))
- "Irrigation and municipal and industrial water supply under the Central Arizona Project within the State of Arizona may, in the event the Secretary determines that it is necessary to effect repayment, be pursuant to master contracts with organizations which have power to levy assessments against all taxable real property within their boundaries."
- $\S 304(c)$ (subjecting water supply contracts for CAP water to restrictions addressing irrigation expansion, canal lining, and groundwater pumping)
- "Each contract under which water is provided under the Central Arizona Project shall require that (1) there be in effect measures, adequate in the judgment of the Secretary, to control expansion of irrigation from aquifers affected by irrigation in the contract service area; (2) the canals and distribution systems through which water is conveyed after its delivery by the United States to the contractors shall be provided and maintained with linings adequate in his judgment to prevent excessive conveyance losses; and (3) neither the contractor nor the Secretary shall pump or permit others to pump ground water from within the exterior boundaries of the service area of a contractor receiving water from the Central Arizona Project for any use outside said contractor's service area unless the Secretary and such contractor shall agree, or shall have previously agreed that a surplus of ground water exists and that drainage is or was required."
- §304(d) (subjecting water supply contracts for CAP water to condition that contract holders accept mainstem water in exchange for water from other sources)
- "The Secretary may require in any contract under which water is provided from the Central Arizona Project that the contractor agree to accept main stream water in exchange for or in replacement of existing supplies from sources other than the main stream. The Secretary shall so require in the case of users in Arizona who also use water from the Gila River system to the extent necessary to make available to users of water from the Gila River system in New Mexico additional quantities of water as provided in and under the conditions specified in subsection (f) of this section)."
- § 601(b)(2) (conditioning all delivery contracts for water from Colorado River System upon availability of such water under Colorado River Compact)
- "The Secretary is directed to . . . condition all contracts for the delivery of water originating in the drainage basin of the Colorado River system upon the availability of water under the Colorado River Compact."
- §603(a) (protecting entitlement of Upper Basin under Colorado River Compact from reduction due to use of water afforded by that entitlement in Lower Basin)
- "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."

Minute 242

- Para. (1) (establishing salinity standards applicable U.S. deliveries of Mexico's entitlement)
- "Referring to the annual volume of Colorado River waters guaranteed to Mexico under the Treaty of 1944, of $1,500,000$ acre-feet . . . (a) The United States shall adopt measures to assure that not earlier than January 1, 1974, and no later than July 1,1974 , the approximately $1,360,000$ acre-feet . . . delivered to Mexico upstream of Morelos Dam, have an annual average salinity of no more than 115 p.p.m. $+/-30$ p.p.m. U.S. count (121 p.p.m. $+/-30$ p.p.m. Mexican count) over the annual average salinity of Colorado River waters which arrive at Imperial Dam, with the understanding that any waters that may be delivered to Mexico under the Treaty of 1944 by means of the All American Canal shall be considered as having been delivered upstream of Morelos Dam for the purpose of computing this salinity. (b) The United States will continue to deliver to Mexico on the land boundary at San Luis and in the limitrophe section of the Colorado River downstream from Morelos Dam approximately 140,000 acre-feet annually with a salinity substantially the same as that of the waters customarily delivered there."


## Lower Basin Water Banking Regulations

- $\$ 414.3(e)$ (providing for (requiring) secretarial contracts in conjunction with Storage and Interstate Release Agreements applicable to main stem water in Lower Basin)
- "Release or diversion of Colorado River water for storage under this part must be supported by a water delivery contract with the Secretary in accordance with Section 5 of the BCPA. The only exception to this requirement is storage of Article II(D) (of the Decree) water by Federal or tribal entitlement holders. The release or diversion of Colorado River water that has been developed or will be developed as [Intentionally Created Unused Apportionment (ICUA)] under this part also must be supported by a Section 5 water delivery contract."


## Quantification Settlement Agreement

- § 2 (quantifying entitlements of Imperial Irrigation District (IID) and Coachella Valley Water District (CVWD) under priority 3(a) of Seven Party Agreement)
- "(a) the Secretary shall deliver Priority 3(a) Colorado River water to IID in an amount up to but not more than a consumptive use amount of 3.1 million acre-feet per year less that amount of water equal to that to be delivered by the Secretary for the benefit of CVWD, MWD, SDCWA, SLR, and Indian and miscellaneous PPRs as set forth in Exhibits A and B hereto. . . . (b) the Secretary shall deliver Priority 3(a) Colorado River water to CVWD in an amount up to but not more than a consumptive use
amount of 330,000 AFY less the amount of water equal to that to be delivered by the Secretary for the benefit of IID, MWD, SDCWA, SLR, and Indian and miscellaneous PPRs as set forth in Exhibits A and B hereto."
- $\quad 3$ (quantifying entitlements of Metropolitan Water District of California (MWD); Imperial Irrigation District (IID); and Coachella Valley Water District (CVWD) under priority 6(a) of Seven Party Agreement)
- "Subject to any rights that [Palo Verde Irrigation District] may have, and except as provided under the Interim Surplus Guidelines, or under the agreements contemplated by those guidelines, the Secretary shall deliver Priority 6(a) water to MWD, IID and CVWD in the following order and consumptive use volumes: (i) 38,000 AFY to MWD; (ii) 63,000 AFY to IID; and (iii) 119,000 AFY to CVWD, or as those parties may agree to occasionally forbear."
- $\quad \S 4(d)$ (entitling Metropolitan Water District of California (MWD) to remainder of water if less than 420,000 af per year is used by parties with entitlements under priorities 1,2 , and 3(b) of Seven Party Agreement)
- "To the extent that the amount of water used in accordance with Priorities 1, 2, and 3(b) is less than 420,000 AFY, the Secretary shall deliver to MWD the difference."


## 2007 Interim Guidelines

- Section XI.G.2.B. 2 (establishing entitlements of MWD, SNWA, and Arizona to deliveries of mainstem water in Lower Basin during a "Domestic Surplus Condition")
- "The amount of such surplus shall equal - (a) From the effective date of these Guidelines through December 31, 2015: (1) For Direct Delivery Domestic Use by MWD, 1.250 maf reduced by the amount of basic apportionment available to MWD. (2) For use by SNWA, the Direct Delivery Domestic Use within the SNWA service area in excess of the State of Nevada's basic apportionment. (3) For use in Arizona, the Direct Delivery Domestic Use in excess of Arizona's basic apportionment. (b) From January 1, 2016 . . . through December 31, 2025 . . (1) For use by MWD, 250,000 af per Year in addition to the amount of California's basic apportionment available to MWD. (2) For use by SNWA, 100,000 af per Year in addition to the amount of Nevada's basic apportionment available to SNWA. (3) For use in Arizona, 100,000 af per Year in addition to the amount of Arizona's basic apportionment available to Arizona Contractors."
- Section XI.G.2.D (establishing entitlements of Lower Basin states to deliveries of mainstem water during a "Shortage Condition")
- "(1) Deliveries to the Lower Division States during Shortage Condition Years shall be implemented in the following manner:
- (a) In years when Lake Mead content is projected to be at or below elevation 1,075 feet and at or above 1,050 feet on January 1, a quantity of 7.167 maf shall be apportioned for consumptive use in the Lower Division States of which 2.48 maf shall be apportioned for use in Arizona and 287,000 af shall be apportioned for use in Nevada in accordance with the Arizona-Nevada Shortage Sharing Agreement dated February 9, 2007, and 4.4 maf shall be apportioned for use in California.
- (b) In years when Lake Mead content is projected to be below elevation 1,050 feet and at or above 1,025 feet on January 1, a quantity of 7.083 maf shall be apportioned for consumptive use in the Lower Division States of which 2.4 maf shall be
apportioned for use in Arizona and 283,000 af shall be apportioned for use in Nevada in accordance with the Arizona-Nevada Shortage Sharing Agreement dated February 9,2007 , and 4.4 maf shall be apportioned for use in California.
- (c) In years when Lake Mead content is projected to be below elevation 1,025 feet on January 1, a quantity of 7.0 maf shall be apportioned for consumptive use in the Lower Division States of which 2.32 maf shall be apportioned for use in Arizona and 280,000 af shall be apportioned for use in Nevada in accordance with the ArizonaNevada Shortage Sharing Agreement dated February 9, 2007, and 4.4 maf shall be apportioned for use in California."
- Section XI.G. 3 (prescribing process by which contractors in Lower Basin can establish entitlements to four types of intentionally created surplus (ICS) - extraordinary conservation ICS; tributary conservation ICS; system efficiency ICS; and imported ICS)
- Section XI.G. 4 (prescribing process by which contractors in Lower Basin can establish entitlements to two types of developed surplus supply (DSS) - tributary conservation DSS and imported DSS)


## B. Provisions that provide for the establishment of future entitlements.

## Colorado River Compact

- Article $\operatorname{III}(f)$ (authorizing "further equitable apportionment of beneficial uses of Colorado River System" beyond those apportioned in subsections (a)-(c) of Compact)
- "Further equitable apportionment of the beneficial uses of the Colorado River System unapportioned by paragraphs (a), (b), and (c) may be made in the manner provided in paragraph (g) at any time after October first, 1963, if an when either Basin shall have reached its total beneficial consumptive use as set out in paragraphs (a) and (b)."
- See also Article $\operatorname{III}(g)$ (prescribing process for further equitable apportionment identified in Article III(f) of Compact)


## Boulder Canyon Project Act

- §4(a) (authorizing formation of compact by Lower Basin states (not formed) and establishment of apportionment scheme for Lower Basin entitlement)
- $\S 8(b)$ (authorizing formation of compact by Lower Basin states (not formed) with different terms (including apportionment scheme) than those included in § 4(a))
- § 19 (authorizing formation of compacts by basin states supplemental to and in conformity with Colorado River Compact and consistent with Act)


## Upper Colorado River Basin Compact

- Article III(c) (disclaiming any effect of Upper Colorado River Basin Compact on entitlement of Upper Basin to unapportioned beneficial uses of water identified in Articles III(f) and (g) of Colorado River Compact)


## AZ v. CA Decree

- Article $I I(D)$ (acknowledging potential for additional federal reserved rights in Lower Basin)
- " $[\mathrm{N}]$ othing herein shall prohibit the United States from making future additional reservations of mainstream water for use in any of such States as may be authorized by law...."


## III. Allocation Priorities

A. Provisions that establish general hierarchies governing water storage and use.

## Colorado River Compact

- Article IV (establishing hierarchy for storage and use of water from Colorado River System)
- "(a) Inasmuch as the Colorado River has ceased to be navigable for commerce and the reservation of its waters for navigation would seriously limit the development of its Basin, the use of its waters for purposes of navigation shall be subservient to the uses of such waters for domestic, agricultural, and power purposes. If the Congress shall not consent to this paragraph, the other provisions of this compact shall nevertheless remain binding."
- "(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."
- See also Article II(h) (defining "domestic use")


## Boulder Canyon Project Act

- § 6 (establishing hierarchy for storage and use of water from Hoover Dam and Lake Mead)
- "That the dam and reservoir provided for by section 1 hereof shall be used: First, for river regulation, improvement of navigation, and flood control; second, for irrigation and domestic uses and satisfaction of presented perfected rights in pursuance of Article VIII of said Colorado River Compact; and third, for power."


## Treaty with Mexico

- Article 3 (establishing hierarchy applicable to "joint use of international waters")
- "In matters in which the Commission may be called upon to make provision for the joint use of international waters, the following order of preference shall serve as a guide: 1. Domestic and municipal uses. 2. Agriculture and stockraising. 3. Electric power. 4. Other industrial uses. 5. Navigation. 6. Fishing and hunting. 7. Any other beneficial uses which may be determined by the Commission."


## Upper Colorado River Basin Compact

- Article XV(a) (establishing hierarchy for storage and use of water of Upper Colorado River System)
- "Subject to the provisions of the Colorado River Compact and of this Compact, water of the Upper 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."
- See also Article II(m) (defining "domestic use")


## Colorado River Storage Project Act

- $\quad 7$ (establishing hierarchy for storage and use of water from Colorado River Storage Project units)
- "Subject to the provisions of the Colorado River Compact, neither the impounding nor the use of water for the generation of power and energy at the plants of the Colorado River storage project shall preclude or impair the appropriation of water for domestic or agricultural purposes pursuant to applicable state law."


## AZ v. CA Decree

- Article II(A) (establishing hierarchy for releases of "water controlled by the United States" in the Lower Basin) (note - hierarchy mirrors hierarchy in § 6 of BCPA)
- "The United States, its officers, attorneys, agents and employees be and they are hereby severally enjoined: (A) From operating regulatory structures controlled by the United States and from releasing water controlled by the United States other than in accordance with the following order of priority: (1) For river regulation, improvement of navigation, and flood control; (2) For irrigation and domestic uses, including the satisfaction of present perfected rights; and (3) For power; Provided, however, that the United States may release water in satisfaction of its obligations to the United States of Mexico under the Treaty dated February 3, 1944, without regard to the priorities specified in this subdivision (A)."
- See also Article $I(E)$ (defining "water controlled by the United States")
B. Provisions that establish specific orders of priorities (relative priorities) applicable to storage and delivery of water required to satisfy entitlements.


## Colorado River Compact

- Article III(c) (establishing order of priority applicable to Mexico's entitlement vis-à-vis entitlements of Upper Basin and Lower Basin)
- "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 . . . ."
- Article $\operatorname{III}(d)$ (establishing order of priority applicable to Upper Basin's entitlement vis-à-vis Lower Basin's entitlement)
- "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 . . . ."


## Seven Party Agreement (CA)

- Article I (establishing order of priority applicable to entitlements of major water users in California to water afforded by state's basic and surplus entitlements)


## Upper Colorado River Basin Compact

- Article IV (establishing curtailment process applicable to entitlements of Upper Basin states involving initial overdraft-based curtailments and subsequent proportion-based curtailments)
- Subsection (b) - Overdraft. "If any State or States of the Upper Division, in the ten years immediately preceding the water year in which curtailment is necessary, shall have consumptively used more water than it was or they were . . . entitled to use under the apportionment made by Article III of this Compact, such State or States shall be required to supply at Lee Ferry a quantity of water equal to its, or the aggregate of their, overdraft of the proportionate part of such overdraft, as may be necessary to assure compliance with Article III of the Colorado River Compact, before demand is made on any other State of the Upper Division."
- Subsection (c) - Proportion-Based Curtailments. "Except as provided in subparagraph (b) of this Article, the extent of curtailment by each State of the Upper Division of the consumptive use of water apportioned to it by Article III of this Compact shall be such as to result in the delivery at Lee Ferry of a quantity of water which bears the same relation to the total required curtailment of use by the States of the Upper Division as the consumptive use of Upper Colorado River System water which was made by each such State during the water year immediately preceding the year in which the curtailment becomes necessary bears to the total consumptive use of such water in the States of the Upper Division during the same water year; provided, that in determining such relation the uses of water under rights perfected prior to November 24, 1922, shall be excluded."


## AZ v. CA Decree

- Article $I I(B)(3)$ (addressing order of priority for entitlements of Lower Basin states during shortage conditions (i.e., less than 7.5 maf available), including mandating initial satisfaction of present perfected rights in order of their priority dates without regard to state lines)
- "The Secretary of the Interior, after providing for satisfaction of present perfected rights in the order of their priority dates without regard to state lines and after consultation with the parties to major water delivery contracts and such representatives as the respective States may designate, may apportion the amount remaining available for consumptive use in such manner as is consistent with the Boulder Canyon Project Act as interpreted by the opinion of this Court herein, and with other applicable federal statutes . . . ."
- Appendix, $\S 5$ (establishing order of priority applicable to present perfected rights to water from mainstem in Lower Basin when not all such rights can be satisfied)
- "[T]he Secretary of the Interior shall, before providing for the satisfaction of any of the other present perfected rights except for those listed herein as 'MISCELLANEOUS PRESENT PERFECTED RIGHTS' (rights numbered 7-21 and 29-80 below) in the order of their priority dates without regard to State lines, first provide for the satisfaction in full of all rights of the [five Indian reservations] set forth in $\operatorname{Art} . \operatorname{II}(\mathrm{D})(1)-(5)$ of this decree."
- Note - Order of Priority: (1) misc. PPRs; (2) five Indian reservations; (3) other PPRs.


## Colorado River Basin Project Act

- §301(b) (subordinating water deliveries afforded by entitlement of Central Arizona Project to full satisfaction of California's 4.4 maf entitlement during shortage conditions as defined in Article II(B)(3) of Arizona v. California Decree)
- "Article II (B)(3) of the decree of the Supreme Court of the United States in Arizona against California ( 376 U.S. 340) shall be so administered that in any year in which, as determined by the Secretary, there is insufficient main stream Colorado River water available for release to satisfy annual consumptive use of seven million five hundred thousand acre-feet in Arizona, California, and Nevada, diversions from the main stream for the Central Arizona Project shall be so limited as to assure the availability of water in quantities sufficient to provide for the aggregate annual consumptive use by holders of present perfected rights, by other users in the State of California served under existing contracts with the United States by diversion works heretofore constructed, and by other existing Federal reservations in that State, of four million four hundred thousand acre-feet of mainstream water, and by users of the same character in Arizona and Nevada."
- $\S 304(c)$ (subordinating Central Arizona Project water contracts to pre-existing contracts between Secretary and water users formed pursuant to Boulder Canyon Project Act)
- "Such contracts shall be subordinate at all times to the satisfaction of all existing contracts between the Secretary and users in Arizona heretofore made pursuant to the Boulder Canyon Project Act."
- §602(a) (establishing order of priority applicable to storage of water in Colorado River Storage Project units and to releases of water from Lake Powell)
- "To effect in part the purposes expressed in this paragraph, the [Long Range Operating Criteria] shall make provision for the storage of water in storage units of the Colorado River storage project and release of water from Lake Powell in the following listed order of priority: (1) releases to supply one-half the deficiency described in article III(c) of the Colorado River Compact, if any such deficiency exists and is chargeable to the States of the Upper Division . . . (2) releases to comply with article III(d) of the Colorado River Compact . . . (3) storage of water not required for the releases specified in clauses (1) and (2) of this subsection to the extent that the Secretary . . . shall find this to be reasonably necessary to assure deliveries under clauses (1) and (2) without impairment of annual consumptive uses in the upper basin pursuant to the Colorado River Compact; Provided, That water not so required to be stored shall be released from Lake Powell: (i) to the extent it can be reasonably applied in the States of the Lower Division to the uses specified in Article III(e) of the Colorado River Compact, but no such releases shall be made when the active storage in Lake Powell is less than the active storage in Lake Mead, (ii) to maintain, as nearly as practicable, active storage in Lake Mead equal to the active storage in Lake Powell, and (iii) to avoid anticipated spills from Lake Powell."


## Long Range Operating Criteria

- Article II (establishing annual release amounts from Lake Powell based upon storage conditions)
- "(2) If in the plan of operation, either: (a) the Upper Basin Storage Reservoirs active storage forecast for September 30 of the current year is less than the quantity of

602(a) Storage determined by the Secretary under Article II (1) hereof, for that date; or (b) the Lake Powell active storage forecast for that date is less than the Lake Mead active storage forecast for that date: the objective shall be to maintain a minimum release of water from Lake Powell of 8.23 million acre-feet for that year. . . ."

- "(3) If, in the plan of operation, the Upper Basin Storage Reservoirs active storage forecast for September 30 of the current water year is greater than the quantity of 602(a) Storage determination for that date, water shall be released annually from Lake Powell at a rate greater than 8.23 million acre-feet per year to the extent necessary to accomplish any or all of the following objectives: (a) to the extent it can be reasonably applied in the States of the Lower Division to the uses specified in Article III(e) of the Colorado River Compact, but no such releases shall be made when the active storage in Lake Powell is less than the active storage in Lake Mead, (b) to maintain, as nearly as practicable, active storage in Lake Mead equal to the active storage in Lake Powell, and (c) to avoid anticipated spills from Lake Powell."
- Article III(1) (prescribing order of priority for deliveries of water from Lake Mead)
- "Water released from Lake Powell, plus the tributary inflows between Lake Powell and Lake Mead, shall be regulated in Lake Mead and either pumped from Lake Mead or released to the Colorado River to meet requirements as follows: (a) Mexican Treaty obligations; (b) Reasonable consumptive use requirements of mainstream users in the Lower Basin; (c) Net river losses; (d) Net reservoir losses; (e) Regulatory wastes."
- See also Article III(3) (identifying normal, surplus, and shortage conditions based upon which " $[r]$ easonable consumptive use requirements of mainstream users in the Lower Basin" noted in Article III(1)(b) will be satisfied)


## Grand Canyon Protection Act

- § 1802(a) (requiring Secretary of Interior to operate Glen Canyon Dam so as "to protect, mitigate adverse impacts to, and improve the values for which Grand Canyon National Park and Glen Canyon National Recreation Area were established.")
- See also § 1804(c)(1) (reiterating mandate)
- § 1802(b) (providing § 1802(a) mandate must be fulfilled in manner consistent with other provisions of Law of the River (e.g., sub-basin entitlements and allocation priorities))
- "The Secretary shall implement this section in a manner fully consistent with and subject to the Colorado River Compact, the Upper Colorado River Basin Compact, the Water Treaty of 1944 with Mexico, the decree of the Supreme Court in Arizona v. California, and the provisions of the Colorado River Storage Project Act of 1956 and the Colorado River Basin Project Act of 1968 that govern allocation, appropriation, development, and exportation of the waters of the Colorado River basin."


## Quantification Settlement Agreement

- $\S 3$ (imposing order of priority applicable to entitlements of IID, MWD, and CVWD set forth in priority 6(a) of Seven Party Agreement)
- "(a) Subject to any rights that [Palo Verde Irrigation District] may have . . . the Secretary shall deliver Priority 6(a) water to MWD, IID and CVWD in the following order and consumptive use volumes: (i) 38,000 AFY to MWD; (ii) 63,000 AFY to IID; and (iii) 119,000 AFY to CVWD, or as those parties may agree to occasionally
forbear. (b) Any water not used by MWD, IID or CVWD as set forth above will be available to satisfy the next listed amount in Section 3.a. above."
- $\quad$ 4(d) (establishing two priority-related rules applicable to MWD's entitlement in priority 3(a) of the Seven Party Agreement (as modified by the QSA))
- "If in any given calendar year that the use of Colorado River water in accordance with Priorities 1 and 2, together with the use of Colorado River water on PVID Mesa lands in accordance with Priority 3(b), exceeds the consumptive use amount of 420,000 AFY, the Secretary will reduce the amount of water otherwise available to MWD in Priorities 4, 5, or 6(a) by the amount that such use exceeds 420,000 AFY. To the extent that the amount of water used in accordance with Priorities 1, 2 and 3(b) is less than 420,000 AFY, the Secretary shall deliver to MWD the difference."
- $\S 5(b)$ (incorporating shortage sharing agreements between IID, CVWD, MWD, and SDCWA into order of priority applicable to entitlements of IID and CVWD in priority 3(a) of Seven Party Agreement (as modified by the QSA))
- "If for any reason there is less than 3.85 million AFY available under Priorities 1,2 and 3 during the term of this Agreement, any water which is made available by the Secretary to IID and CVWD shall be delivered to IID, CVWD, MWD, and SDCWA in accordance with the shortage sharing provisions agreed upon prior to or concurrent with the execution of this Agreement by IID, CVWD, MWD, and SDCWA."


## 2007 Interim Guidelines

- Section XI.G.l(b) (establishing order of priority applicable to reallocation of unused portions of Lower Basin states' basic entitlements to mainstem water pursuant to Art. $\operatorname{II}(B)(6)$ of Arizona v. California decree)
- "Before making a determination of a Surplus Condition under these Guidelines, the Secretary will determine the quantity of apportioned but unused water excluding ICS created in that Year from the basic apportionments under Article II(B)(6), and will allocate such water in the following order of priority: [(1) MWD, SNWA domestic use requirements; (2) MWD, SNWA off-stream banking requirements; (3) CA water users' requirements per Seven Party Agreement as modified by QSA].
- Section XI.G. 2 (establishing order of priority applicable to allocation of mainstem water in Lower Basin during a "Quantified Surplus Condition" pursuant to Art. II(B)(2) of Arizona v. California decree)
- "In years when the Secretary determines that water should be delivered for beneficial consumptive use to reduce the risk of potential reservoir spills based on the 70R Strategy the Secretary shall determine a Quantified Surplus Condition and allocate a Quantified Surplus sequentially as follows: . . .
- (b) 50 percent to California, 46 percent to Arizona, and 4 percent to Nevada, subject to (c) through (e) that follow.
- (c) Distribute California's share first to meet basic apportionment demands and MWD's demands, and then to California Priorities 6 and 7 and other surplus contracts. Distribute Nevada's share first to meet basic apportionment demands and then to the remaining demands. Distribute Arizona's share to surplus demands in Arizona including Off-stream Banking and interstate banking demands. Nevada shall receive first priority for interstate banking in Arizona.
- (d) Distribute any unused share of the Quantified Surplus in accordance with Section [XI.G.1].
- (e) Determine whether MWD, SNWA and Arizona have received the amount of water they would have received under Section [XI.G.2.B.2] if a Quantified Surplus Condition had not been determined. If they have not, then determine and meet all demands provided for in Section [XI.G.2.B.2]."
- Section XI.G.6.A-D (identifying four elevation-based operational tiers for Lake Powell and annual releases associated with these tiers)


## IV. Transfers

A. Provisions that authorize the transfer of entitlements between the sub-basins.

## Colorado River Compact

- Article III(e) (providing for reallocation of water afforded by Upper Basin's entitlement under Compact to Lower Basin due to non-use)
- "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."


## B. Provisions that authorize the transfer of entitlements within the Lower Basin.

## AZ v. CA Decree

- Article $I I(B)(6)$ (authorizing reallocation of water afforded by a Lower Basin state's entitlement under Decree to different Lower Basin state for one year due to non-use)
- " $[\mathrm{N}]$ othing in this decree shall be construed as prohibiting the Secretary of the Interior from releasing such apportioned but unused water during such year for consumptive use in the other States. No rights to the recurrent use of such water shall accrue by reason of the use thereof."


## Lower Basin Water Banking Regulations

- §414.3(a) (authorizing storage and interstate release agreements allowing for reallocation of water afforded by a Lower Basin state's unused basic or surplus entitlement (pursuant to Art. $\mathrm{II}(\mathrm{B})(6)$ of the $A Z v . C A$ Decree) for use within different Lower Basin state)


## Quantification Settlement Agreement

- $\quad 2$ (authorizing reallocation of water afforded by entitlements of IID and CVWD under priority 3(a) of Seven Party Agreement)
- "(a) the Secretary shall deliver Priority 3(a) Colorado River water to IID in an amount up to but not more than a consumptive use amount of 3.1 million acre-feet per year less that amount of water equal to that to be delivered by the Secretary for the benefit of CVWD, MWD, SDCWA, SLR, and Indian and miscellaneous PPRs as set forth in Exhibits A and B hereto. . . . (b) the Secretary shall deliver Priority 3(a) Colorado River water to CVWD in an amount up to but not more than a consumptive use amount of 330,000 AFY less the amount of water equal to that to be delivered by the

Secretary for the benefit of IID, MWD, SDCWA, SLR, and Indian and miscellaneous PPRs as set forth in Exhibits A and B hereto."

- See also § 4(a), (b) (identifying transfers of portions of IID's and CVWD's entitlements under priority 3(a) of Seven Party Agreement)
- $\S 3$ (authorizing reallocation of water afforded by entitlements of MWD, IID, and CVWD under priority 6(a) of Seven Party Agreement)
- "(a) Subject to any rights that [Palo Verde Irrigation District] may have, and except as provided under the Interim Surplus Guidelines, or under the agreements contemplated by those guidelines, the Secretary shall deliver Priority 6(a) water to MWD, IID and CVWD in the following order and consumptive use volumes: (i) 38,000 AFY to MWD; (ii) 63,000 AFY to IID; and (iii) 119,000 AFY to CVWD, or as those parties may agree to occasionally forbear. (b) Any water not used by MWD, IID or CVWD as set forth above will be available to satisfy the next listed amount in Section 3.a. above."
- Note - Reallocations implemented by QSA are temporary due to limited term of Agreement. $\S 6$ (providing for termination of QSA on three alternative dates - 2037, 2047, or 2077)


## 2007 Interim Guidelines

- Section XI.G.1(b) (authorizing reallocation of water from unused portions of Lower Basin states' basic (non-surplus) entitlements to mainstem water)
- "Before making a determination of a Surplus Condition under these Guidelines, the Secretary will determine the quantity of apportioned but unused water excluding ICS created in that Year from the basic apportionments under Article II(B)(6), and will allocate such water in the following order of priority: [(1) MWD, SNWA domestic use requirements; (2) MWD, SNWA off-stream banking requirements; (3) CA water users' requirements per Seven Party Agreement as modified by QSA]."


## V. Governance

A. Provisions that impose procedural requirements relevant to the apportionment scheme (e.g., mandatory consultation, public participation, decisionmaking criteria)

## Colorado River Basin Project Act

- $\S 601(b)(1)$ (requiring Secretary of Interior to consult with Upper Colorado River Commission and Lower Basin states while preparing five-year reports accounting for annual consumptive uses and losses on mainstem and major tributaries of Colorado River System)
- "The Secretary is directed to . . . make reports as to the annual consumptive uses and losses of water from the Colorado River system after each successive five year period, beginning with the five-year period starting on October 1, 1970. . . . Such reports shall be prepared in consultation with the States of the lower basin individually and with the Upper Colorado River Commission, and shall be transmitted to the President, the Congress, and to the Governors of each State signatory to the Colorado River Compact."
- § 602(b) (requiring consultation between Secretary of Interior and representatives of basin states in relation to modification of long-range operating criteria)
- "As a result of actual operating experience or unforeseen circumstances, the Secretary may thereafter modify the criteria to better achieve the purposes specified in subsection (a) of this section, but only after correspondence with the Governors of the seven Colorado River Basin States and appropriate consultation with such State representatives as each Governor may designate."
- See also Long Range Operating Criteria, Preamble: "The Secretary of the Interior . . . may modify the Operating Criteria from time to time in accordance with [§ 601(b)]. The Secretary will sponsor a formal review of the Operating Criteria at least every 5 years, with participation by State representatives as each Governor may designate and such other parties and agencies as the Secretary may deem appropriate."


## Colorado River Basin Salinity Control Act

- § 204 (establishing Colorado River Basin Salinity Control Advisory Council and prescribing consultative duties involving review of program progress and recommended measures)
- "(a) There is hereby created the Colorado River Basin Salinity Control Advisory Council composed of no more than three members from each State appointed by the Governor of each of the Colorado River Basin States."
- "(b) The 'Council shall be advisory only and shall: (1) act as liaison between both the Secretaries of Interior and Agriculture and the Administrator of the Environmental Protection Agency and the States in accomplishing the purposes of this title; (2) receive reports from the Secretary on the progress of the salinity control program and review and comment on said reports; and (3) recommend to both the Secretary and the Administrator of the Environmental Protection Agency appropriate studies of further projects, techniques, or methods for accomplishing the purposes of this title."


## Grand Canyon Protection Act

- § 1804(c) (requiring consultation between Secretary of Interior, Governors of basin states, and various parties within general public during preparation of operating criteria and plans set forth in this section and § 602(b) of Colorado River Basin Project Act)
- "In preparing the criteria and operating plans described in section 602(b) of the Colorado River Basin Project Act of 1968 and in this subsection, the Secretary shall consult with the Governors of the Colorado River Basin States and with the general public, including - representatives of academic and scientific communities; environmental organizations; the recreation industry; and contractors for the purchase of Federal power produced at Glen Canyon Dam."
- $\S 1805(c)$ (requiring consultation between Secretary of Interior, Secretary of Energy, Governors of basin states, Indian tribes, and various parties within general public in relation to monitoring programs aimed at ensuring compliance with § 1802(a) mandate)
- "The monitoring programs and activities conducted under subsection (a) shall be established and implemented in consultation with - (1) the Secretary of Energy; (2) the Governors of the States of Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming; (3) Indian tribes; and (4) the general public, including representatives of academic and scientific communities, environmental organizations, the recreation industry, and contractors for the purchase of Federal power produced at Glen Canyon Dam."
- See also Record of Decision - Operation of Glen Canyon Dam Final EIS, Appx. G-10: Describes establishment of Adaptive Management Workgroup under Federal Advisory Committee Act. (See also final EIS, pp. 33-43.)


## Lower Basin Water Banking Regulations

- $\S 414.3(18)(c)$ (requiring Secretary of Interior to provide means for public input on proposed storage and interstate release agreements and prescribing criteria for Secretary of Interior's review of these agreements)
- [Public Participation:] "The Secretary will notify the public of his/her intent to participate in negotiations to develop a Storage and Interstate Release Agreement and provide a means for public input."
- [Review Criteria:] "In considering whether the execute a Storage and Interstate Release Agreement, . . [t]he Secretary will also consider: applicable law and executive orders; applicable contracts; potential effects on trust resources; potential effects on entitlement holders, including Indian tribes; potential impacts on the Upper Division States; potential effects on third parties; potential environmental impacts and potential effects on threatened and endangered species; comments from interested parties, particularly parties who may be affected by the proposed action; comments from the State agencies responsible for consulting with the Secretary on matters related to the Colorado River; and other relevant factors, including the direct or indirect consequences of the proposed Storage and Interstate Release Agreement on the financial interests of the United States. Based on the consideration of the factors in this section, the Secretary may execute or decide not to execute a Storage and Interstate Release Agreement."
- $\S 414.3(18)(g)$ (requiring Secretary of Interior to consult with IBWC "prior to executing any specific Storage and Interstate Release Agreements")


## 2007 Interim Guidelines

- Section XI.G. 7 (providing for consultation between Secretary of Interior and basin states on wide range of matters during interim period, including modification of Guidelines, claims or controversies stemming from Guidelines, potential courses of action if elevation of Lake Mead falls below 1,000 feet, and administration of intentionally created surplus)
B. Provisions that prescribe implementation measures relevant to the apportionment scheme (e.g., accounting, reporting, monitoring, measurement processes).


## Treaty with Mexico

- Article 12(d) (authorizing IBWC and sections thereof to engage in measurement of flows and water deliveries to ensure treaty compliance)
- "The Commission shall construct, operate and maintain in the limitrophe section of the Colorado River, and each Section shall construct, operate and maintain in the territory of its own country on the Colorado River below Imperial Dam and on all other carrying facilities used for the delivery of water to Mexico, all necessary gaging stations and other measuring devices for the purpose of keeping a complete record of the waters delivered to Mexico and of the flows of the river. All data obtained as to
such deliveries and flows shall be periodically compiled and exchanged between the two Sections."
- See also Article 24(f) (reiterating IBWC measurement activities)
- Article $24(g)$ (requiring IBWC to submit annual (and other) reports regarding treaty matters)
- "The International Boundary and Water Commission shall have, in addition to the powers and duties otherwise specifically provided in this Treaty, the following powers and duties: . . . (g) The Commission shall submit annually a joint report to the two Governments on the matters in its charge. The Commission shall also submit to the two Governments joint reports on general or any particular matters at such other times as it may deem necessary as may be requested by the two Governments."


## Upper Basin Colorado River Compact

- Article VIII(d) (authorizing Upper Colorado River Commission to engage in water gauging; to collect data on flows, storage, diversions, and use; to make findings on use, reservoir losses, deliveries, necessary curtailments; and to issue annual reports of activities)
- "The Commission . . . shall have the power to: . . . (2) Locate, establish, construct, abandon, operate and maintain water gaging stations; (3) Make estimates to forecast water run-off on the Colorado River and any of its tributaries; (4) Engage in cooperative studies of water supplies of the Colorado River and its tributaries; (5) Collect, analyze, correlate, preserve and report on data as to the stream flows, storage, diversions and use of the waters of the Colorado River, and any of its tributaries; (6) Make findings as to the quantity of water of the Upper Colorado River System used each year in the Upper Colorado River Basin and in each State thereof; (7) Make findings as to the quantity of water deliveries at Lee Ferry during each water year; (8) Make findings as to the necessity for and the extent of the curtailment of use, required, if any, pursuant to Article IV hereof; (9) Make findings to the quantity of reservoir losses and as to the share thereof chargeable under Article V hereof to each of the States; (10) Make findings of fact in the event of the occurrence of extraordinary drought or serious accident to the irrigation system in the Upper Basin, whereby deliveries by the Upper Basin of water which it may be required to deliver in order to aid in fulfilling obligations of the [Treaty of 1944] become difficult, and report such findings . . (13) Make and transmit annually to the Governors of the signatory States and the President of the United States of America, with the estimated budget, a report covering the activities of the Commission for the preceding water year."
- Article VI (adopting inflow-outflow method to measure consumptive use relevant to entitlements of Upper Basin states)


## AZ v. CA Decree

- Article $V$ (requiring United States to prepare and make available records of various matters related to use of mainstem water in Lower Basin, including releases from federal facilities, mainstream diversions, return flows, consumptive use levels, and deliveries to Mexico)
- "The United States shall prepare and maintain, or provide for the preparation and maintenance of, and shall make available, annually and at such shorter intervals as the Secretary of the Interior shall deem necessary or advisable, for inspection by interested persons at all reasonable times and at a reasonable place or places, com-
plete, detailed and accurate records of: (A) Releases of water through regulatory structures controlled by the United States; (B) Diversions of water from the mainstream, return flow of such water to the stream as is available for consumptive use in the United States or in satisfaction of the Mexican Treaty obligation, and consumptive use of such water. These quantities shall be stated separately as to each diverter from the mainstream, each point of diversion, and each of the States of Arizona, California and Nevada; (C) Releases of mainstream water pursuant to orders therefor but not diverted by the party ordering the same, and the quantity of such water delivered to Mexico in satisfaction of the Mexican Treaty or diverted by others in satisfaction of rights decreed herein. These quantities shall be stated separately as to each diverter from the mainstream, each point of diversion, and each of the States of Arizona, California and Nevada; (D) Deliveries to Mexico of water in satisfaction of the obligations of Part III of the Treaty of February 3, 1944, and, separately stated, water passing to Mexico in excess of treaty requirements; (E) Diversions of water from the mainstream of the Gila and San Francisco Rivers and the consumptive use of such water, for the benefit of the Gila National Forest."


## Colorado River Basin Project Act

- $\S 601(b)(1)$ (requiring Secretary of Interior to prepare five-year reports accounting for annual consumptive uses and losses on mainstem and major tributaries of Colorado River System)
- "The Secretary is directed to . . . make reports as to the annual consumptive uses and losses of water from the Colorado River system after each successive five year period, beginning with the five-year period starting on October 1, 1970. Such reports shall include a detailed breakdown of the beneficial consumptive use of water on a State-by-State basis. Specific figures on quantities consumptively used from the major tributary streams flowing into the Colorado River shall also be included on a State-by-State basis. . . ."


## Long Range Operating Criteria

- Article I (requiring Secretary of Interior to submit annual report accounting for actual operations under criteria during preceding year and projected operations for current year)
- "On January 1, 1972, and on January 1 of each year thereafter, the Secretary shall transmit to the Congress and to the Governors of the Colorado River Basin States a report describing the actual operation under the adopted criteria for the preceding compact water year and the projected plan of operation for the current year."


## Grand Canyon Protection Act

- § 1804(c)(2) (requiring Secretary of Interior to submit annual report addressing actual and projected operations during preceding and upcoming years pursuant to Act)
- "[T]he Secretary shall transmit to the Congress and to the Governors of the Colorado River Basin States a report, separate from and in addition to the report specified in section 602(b) of the Colorado River Basin Project Act of 1968 on the preceding year and the projected year operations undertaken pursuant to this Act."
- § 1804(d) (requiring Secretary of Interior to submit report addressing long-term operations and mitigation measures taken to fulfill mandate in § 1802)
- "Upon implementation of long-term operations under subsection (c), the Secretary shall submit to the Congress the environmental impact statement described in subsection (a) and a report describing the long-term operations and other reasonable mitigation measures taken to protect, mitigate adverse impacts to, and improve the condition of the natural recreational, and cultural resources of the Colorado River downstream of Glen Canyon Dam."
- $\S 1805(a)$ (requiring Secretary of Interior to implement monitoring programs to ensure operation of Glen Canyon Dam fulfills mandate in § 1802)
- "The Secretary shall establish and implement long-term monitoring programs and activities that will ensure that Glen Canyon Dam is operated in a manner consistent with that of section 1802."
- See also § 1805(b) (requiring long-term monitoring program to include research into impacts of Glen Canyon Dam on natural, recreational, and cultural resources of Grand Canyon National Park and Glen Canyon National Recreation Area)


## Lower Basin Water Banking Regulations

- $\S 414.4(b)$ (establishing accounting methods to be used by Secretary for water stored, diverted, or released in conjunction with storage and interstate release agreements)
- § 414.6(a) (requiring Secretary of Interior to engage in environmental compliance review and documentation in relation to storage and interstate release agreements)
- "The Secretary will complete environmental compliance documentation, compliance with the National Environmental Policy Act of 1969 . . . , and the Endangered Species Act of $1973 \ldots$; and will integrate the requirements of other statutes, laws, and other executive orders as required for Federal actions to be taken under this part."


## Quantification Settlement Agreement

- $\quad \S \S 8(b)(2),(c)(4)$ (addressing Secretary of Interior's engagement in "reasonable and beneficial use reviews" in relation to entitlements of California irrigation districts set forth in Seven Party Agreement as modified by QSA)


## 2007 Interim Guidelines

- XI.G.3.D (outlining Secretary of Interior's procedures for accounting for and verifying the creation and delivery of Intentionally Created Surplus on annual basis)
- XI.G.4.C (establishing Secretary of Interior's accounting and verification mechanisms for Developed Shortage Supply)
C. Provisions that establish dispute resolution procedures relevant to the apportionment scheme.


## Colorado River Compact

- Article VI (authorizing appointment of commissioners from basin states to address apportionment issues involving two or more states)
- "Should any claim or controversy arise between any two or more of the signatory States: (a) with respect to the waters of the Colorado River System not covered by the terms of this compact; (b) over the meaning or performance of any of the terms of this compact; (c) as to the allocation of the burdens incident to the performance of any
article of this compact or the delivery of waters as herein provided; (d) as to the construction or operation of works within the Colorado River Basin to be situated in two or more States, or to be constructed in one State for the benefit of another State; or (e) as to the diversion of water in one State for the benefit of another State; the Governors of the States affected, upon the request of one of them, shall forthwith appoint Commissioners with power to consider and adjust such claim or controversy, subject to ratification by the Legislatures of the States so affected."


## Treaty with Mexico

- Article 24(d) (vesting IBWC with authority to handle disputes involving treaty interpretation or application (subject to approval of U.S. and Mexican governments))
- "The International Boundary and Water Commission shall have, in addition to the powers and duties otherwise specifically provided in this Treaty, the following powers and duties: . . (d) To settle all differences that may arise between the two Governments with respect to the interpretation or application of this Treaty, subject to the approval of the two Governments."


## Upper Colorado River Basin Compact

- Note - Compact does not directly address dispute resolution mechanisms, but see Article $\operatorname{VIII}(d)(12)$ (empowering Upper Colorado River Commission to "[p]erform all functions required of it by this Compact and do all things necessary, proper or convenient in the performance of its duties hereunder, either independently or in cooperation with any state or federal agency")


## AZ v. CA Decree

- Article IX (permitting parties to seek modification of decree and providing Court retains ongoing jurisdiction of case for this purpose)
- "Any of the parties may apply at the foot of this decree for its amendment or for further relief. The Court retains jurisdiction of this suit for the purpose of any order, direction, or modification of the decree, or any supplementary decree, that may at any time be deemed proper in relation to the subject matter in controversy."


[^0]:    ${ }^{1}$ Prepared by Jason Robison, CRGI Visiting Fellow.

