

Law of the River Apportionment Scheme Short Summary of Laws

A product of the Colorado River Governance Initiative¹ of the Western Water Policy Program
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Summary: This short summary provides succinct descriptions of the laws addressed in detail in the compilation of laws document. These laws embody many of the seminal provisions that shape the Law of the River’s apportionment scheme (see list in compilation). As noted in the compilation, however, these provisions – all of which are specific to the Colorado River Basin – make-up only part of the vast scope of federal and state laws that comprise the apportionment scheme. Omitted from the compilation are federal laws of general applicability (*e.g.*, Reclamation Act, federal reserved rights doctrine, Endangered Species Act) and state laws of general applicability (*e.g.*, prior appropriation doctrine, irrigation district laws). After summarizing the basin-specific laws in section I, sections II and III below include brief descriptions of some of the relevant laws in these latter two categories.

I. Federal Laws Specific to the Colorado River Basin

Colorado River Compact (1922)

- Divides basin into sub-basins, Art. I.
- Defines scope of resources and basin, Art. II.
- Defines and allocates sub-basin entitlements, Art. III(a), (b).
- Provides for future Mexican entitlement and establishes allocation rules for sub-basins to satisfy entitlement from their own entitlements when surplus is not available, Art. III(c).
- Imposes Upper Basin delivery obligation, Art. III(d).
- Prohibits Upper Basin withholding water, and Lower Basin demanding water, that cannot reasonably be put to beneficial consumptive use, Art. III(e).
- Provides for future “equitable” apportionment of beneficial uses of water beyond those apportioned in Art. III(a)-(c), Art. III(f), (g).
- Imposes hierarchy of water uses, Art. IV(a), (b), but provides hierarchy does not apply to intrastate allocation via state water rights systems, Art. IV(c).
- Establishes dispute resolution procedures applicable to apportionment issues, Art. VI.
- Provides compact does not affect federal obligations to Indian tribes, Art. VII.
- Exempts PPRs from coverage of Compact, Art. VIII.

Boulder Canyon Project Act (1928)

- Authorizes construction of Hoover Dam and All American Canal, § 1.
- Limits California’s entitlement (4.4 maf; half surplus) as condition of Act’s passage. § 4(a).
- Authorizes Lower Basin states to enter into (unformed) compact establishing apportionment scheme for their sub-basin entitlement. § 4(a).

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- Establishes Secretary's exclusive contract authority for deliveries in Lower Basin, § 5, and provides contracts are for "permanent service."
- Imposes water use hierarchy applicable to Hoover Dam and All American Canal, § 6.
- Provides entitlements (*e.g.*, water delivery contracts) are subject to and controlled by Compact, §§ 8(a), 13(b), (c).
- Calls for non-interference with state water right systems on intrastate level (subject to provisions of Compact or other interstate agreement), § 18.
- Authorizes formation of supplemental compacts by basin states, § 19.

Limitation Act (1929)

- Limits California's entitlement (4.4 maf; half surplus) to enable passage of BCPA, § 1.

Seven Party Agreement (1931)

- Establishes apportionment scheme for California's entitlement, including (1) setting forth entitlements of major water users with contracts with Reclamation (*e.g.*, IID, MWD) and (2) outlining order of priority for these entitlements, Art. I, §§ 1-7.
- Note: Modified, in part, by Quantification Settlement Agreement (see below).

Treaty with Mexico (1944)

- Establishes International Boundary and Water Commission (IBWC), Art. 2.
- Outlines water use hierarchy applicable to "matters in which the Commission may be called upon to make provision for the joint use of international waters," Art. 3.
- Sets forth Mexico's entitlement (1.5 maf) and also (1) provides for use of surplus water by Mexico up to 1.7 maf and (2) allows for annual deliveries of less than entitlement amount due to extraordinary drought or serious accident so long as reduced deliveries are proportionate to reductions in U.S. consumption, Art. 10.
- Identifies sources from which Mexico's entitlement will be delivered, Art. 11.
- Call for construction of Davis Dam for delivery of Mexico's entitlement, Art. 12.
- Authorizes IBWC and sections thereof to engage in measurement, Art. 12.
- Establishes delivery schedules for Mexico's entitlement, Art. 15.
- Provides for dispute resolution processes for treaty issues, Arts. 24, 25.

Upper Colorado River Basin Compact (1948)

- Subjects provisions of Upper Basin Compact to Colorado River Compact, Art. I(b).
- Incorporates provisions defining geographic (jurisdictional) scope of Colorado River Compact's apportionment scheme ("Colorado River System," "Colorado River Basin") and also defines its own scope ("Upper Colorado River System"), Art. II.
- Establishes percentage-based entitlements of Upper Basin states (and quantity-based entitlement for Arizona), Art. III(a).
- Bases Upper Basin states' entitlements on beneficial use (*i.e.*, provides "Beneficial use is the basis, the measure and the limit of the right to use"), Art. III(b).
- Disclaims notion that apportionment scheme applies to future apportionment of consumptive uses under Art. III(f) and (g) of Colorado River Compact, Art. III(b), (c).
- Provides Upper Basin states' entitlements include water to satisfy existing rights, Art. III(b).

- Authorizes Upper Basin Commission to engage in curtailments if necessary, Art. IV(a), and establishes curtailment process involving initial overdraft-based curtailments and subsequent proportion-based curtailments, Art. IV(b), (c).
- Addresses process for charging reservoir losses vs Upper Basin states' entitlements, Art. V.
- Establishes measurement method applicable to Upper Basin states' entitlements (inflow-outflow method), Art. VI.
- Sets forth rule that uses by federal government are to be charged against the Upper Basin state in which the uses are made, Art. VII.
- Establishes Upper Basin Commission and defines its composition and authority (*e.g.*, use and curtailment findings), Art. VIII.
- Imposes water use hierarchy applicable to impoundment and use of water from Upper Colorado River System (note – hierarchy is subject to Colorado River Compact), Art. XV(a).
- Makes Compact n/a to intrastate water allocation via state water rights systems, Art. XV(b).
- Provides non-use of water apportioned to Upper Basin state does not constitute relinquishment of the entitlement, Art. XVI.
- Provides Upper Basin Compact does not affect U.S. obligations to Indian tribes (Indian reserved rights); Mexico's entitlement; or federal reserved rights, Art. XIX.

Colorado River Storage Project Act (1956)

- Authorizes construction of units comprising Colorado River Storage Project, § 1.
- Subjects all projects to entitlements in Compact, Upper Basin Compact, and Treaty, § 4.
- Imposes water use hierarchy applicable to use and impoundment of water at Colorado River Storage Project units (note – hierarchy is subject to Colorado River Compact), § 7.
- Subjects storage and release of water from facilities throughout basin to Compact, Upper Basin Compact, Boulder Canyon Project Act, and Treaty with Mexico, § 14.

Arizona v. California Decree (2006) (implements Arizona v. California (1963))

- Addresses tributary groundwater to mainstream within apportionment scheme, Art. I(C).
- Sets forth rule that water use for federal reservations is credited against entitlement(s) of surrounding state(s), Art. I.
- Defines “present perfected rights,” Art. I.
- Imposes water use hierarchy, Art. II(A).
- Outlines apportionment scheme for mainstream water in Lower Basin, including (1) Lower Basin states' entitlements in normal and surplus conditions and (2) order of priority for water allocation in shortage conditions (*e.g.*, prioritization of PPRs), Art. II(B)(1)-(3).
- Provides any mainstream water consumptively used within a Lower Basin state will be charged against the state's entitlement regardless of purpose of release, Art. II(B)(4).
- Sets forth (reiterates from BCPA § 5) Secretary's exclusive contracting authority for releases and deliveries of mainstream water in Lower Basin, Art. II(B)(5).
- Authorizes release of apportioned but unused water but disclaims creation of entitlements associated with such releases, Art. II(B)(6).
- Sets forth entitlements, priority dates, and order of priority for reserved rights of nine federal reservations (five Indian, four non-Indian), Art. II(D).
- Requires U.S. to keep records for Lower Basin of releases, consumptive use, treaty deliveries, return flows, Art. V.

- Sets forth and incorporates list of PPRs in Lower Basin, Appx, Art. VI.
- Provides decree does not impact relative rights of state water rights holders under state systems except as expressly provided, Art. VIII(A).
- Exempts Lower Basin tributaries (except Gila) from coverage of decree, Art. VIII(B).
- Provides decree does not impact interpretation of Colorado River Compact (*e.g.*, accounting for tributaries within Lower Basin apportionment scheme), Art. VIII(D).
- Hinges use of PPRs listed in appendix on beneficial use, Appx., § 4.
- Establishes order of priority for PPRs vis-à-vis Lower Basin mainstem water, Appx., § 5.
- Provides for non-agricultural use of PIA-based Indian reserved rights, Appx., § 5.

Colorado River Basin Project Act (1968)

- Authorizes Central Arizona Project, § 301(a).
- Subordinates CAP entitlement to full satisfaction of California's 4.4 maf entitlement during shortage conditions as defined in Art. II(B)(3) of *AZ v. CA* decree, § 301(b).
- Authorizes formation of contracts between Secretary and users of CAP water, including contracts for industrial and municipal water (*i.e.*, not exclusively irrigation water), § 304(b).
- Subordinates CAP water contracts to pre-existing contracts in Arizona, § 304(c).
- Imposes provisions restricting groundwater pumping on all CAP water contracts, § 304(c).
- Provides for inclusion of provisions in CAP water contracts requiring contract holders to accept mainstream water in exchange for water from other sources, § 304(d).
- Calls for Act's conformity with other provisions of Law of the River, § 601(a).
- Requires annual use and losses reports from Secretary for Colorado River System, § 601(b).
- Requires Secretary to condition all contracts for water delivery in Colorado River System upon availability of water under the Compact, § 601(b).
- Requires Secretary to prepare Long Range Operating Criteria (LROC) and imposes order of priority applicable to LROC addressing storage of water in Colorado River storage project and releases of water from Lake Powell, § 602(a).
- Authorizes Secretary to modify LROC subsequent to consultation, § 602(b).
- Provides Upper Basin's entitlement under Compact will not be reduced due to use of water associated with that entitlement in the Lower Basin, § 603(a).

Long Range Operating Criteria (1970)

- Criteria to be administered in conformity with other parts of Law of the River, preamble.
- Require Secretary to submit annual report for operations during past and current year, Art. I.
- Establish release schedules from Lake Powell for minimum releases (8.23 maf) and beyond minimum releases depending upon storage conditions, Art. II(1)-(3).
- Establish order of priority applicable to releases from Lake Mead, Art. III(1).
- Set forth conditions under which Secretary will determine existence of normal, surplus, and shortage conditions relevant to entitlements and order of priority applicable to mainstream in Lower Basin set forth in Art. II of *Arizona v. California* decree, Art. III(3).

Minute 242 (1973)

- Imposes salinity standards for water afforded by Mexico's entitlement, para. 1.
- Calls for U.S. and Mexico to extend bypass drain to deal with salinity issue, paras. 3, 4.

Colorado River Basin Salinity Control Act (1974)

- Authorizes Secretary to engage in various measures (e.g., desalination plant, bypass drain) to satisfy salinity standards adopted in Minute 242, §§ 101, 102, 201, 202.
- Establishes Colorado River Basin Salinity Control Advisory Council, § 204.
- Requires Secretary to submit biannual reports for the salinity control program, § 206.

Grand Canyon Protection Act (1992)

- Calls for operation of Glen Canyon Dam in manner so as to protect, minimize adverse impacts to, and enhance values for which Grand Canyon National Park and Glen Canyon National Recreation Area were established, § 1802(a).
- Provides § 1802 mandate must be fulfilled in manner consistent with other provisions of Law of the River, § 1802(b).
- Requires Secretary to adopt criteria and operating plans for Glen Canyon Dam beyond those required in CRBPA § 602(b) and to submit associated annual reports, § 1804(c).
- Mandates consultation by Secretary when preparing criteria and operating plans for CRBPA § 602(b) and GCPA § 1804(c) with basin states and general public, including academics, scientists, environmentalists, recreation industry, and power contractors, § 1804(c).
- Calls for monitoring program to ensure Glen Canyon Dam is operated consistently with § 1802 and mandates consultation as part of the monitoring program with Secretary of Energy, basin states, Indian tribes, and general public, including academics, scientists, environmentalists, recreation industry, and power contractors, § 1805(a), (c).
- Expressly disclaims having any impact on basin states' entitlements under Compact or other laws or on ESA, § 1806.

Operating Criteria for Glen Canyon Dam (1996)

- Adopts modified Low Fluctuating Flow Alternative as preferred alternative for operating criteria for Glen Canyon Dam. This alternative entails (*inter alia*) beach/habitat-building flows (releases) and limits on upramp rates and maximum releases. Note: It does not prevent the Upper Basin from releasing 8.23 maf/yr to satisfy delivery obligations. The alternative also entails establishment of an adaptive management working group.

Lower Basin Water Bank Regulations (43 C.F.R. pt. 414) (2007) (promulgated 1999)

- Expressly disclaims altering Law of the River and existing entitlements, pt. 414.1(b).
- Authorizes storage and interstate release agreements applicable to unused portions of Lower Basin states' basic or surplus entitlements (*AZ v. CA* decree, Art. II(B)(6)), § 414.3(a).
- Requires Secretary to provide for public input on proposed storage and interstate release agreements; specifies criteria Secretary must use in deciding whether to execute an agreement (impacts on entitlements holders, tribes, environment); only permits agreements if water is first offered to entitlement holders within storing state, pt. 414.3(a)(2), (c).
- Requires contracts with Secretary (pursuant to BCPA § 5) for storage, diversion, or release of water associated with storage and interstate release agreements, § 414.3(e).
- Requires Secretary to consult with Mexico via IBWC prior to executing storage and interstate release agreements, § 414.3(g).
- Establishes accounting methods to be used by Secretary for water stored, diverted, or released in conjunction with storage and interstate release agreements, § 414.4(b).

- Provides storage and interstate release agreements must abide by NEPA and ESA and requires Secretary to engage in environmental compliance review, § 414.6(a).

Minute 306 (2000)

- Establishes framework for cooperation between U.S. and Mexico with regard to ecological conditions in the Delta and environmental flows relevant thereto. Calls for study of flow needs of Delta via binational task force supported by IBWC.

Interim Surplus Guidelines (2001)

- Superseded by 2007 Interim Guidelines (see below).

Quantification Settlement Agreement (2003)

- Applies to entitlements and priorities set forth in Seven Party Agreement for Imperial Irrigation District (IID); Coachella Valley Water District (CVWD); Metropolitan Water District of Southern California (MWD); and San Diego County Water Authority (SDCWA).
- Establishes (clarifies) entitlements of IID and CVWD with regard to priority 3(a) and of MWD, IID, and CVWD with regard to priority 6(a), §§ 2, 3.
- Imposes order of priority for entitlements of MWD, IID, and CVWD in priority 6(a), § 3.
- Provides for transfers of portions of IID's and CVWD's entitlements under priority 3(a) to a host of transferees (*e.g.*, MWD, SDCWA; see exhibits A and B), Transfers, § 4(a), (b).
- Addresses adjustments in MWD's entitlement in priority 3(a) based upon water use levels of entitlement holders under priorities 1, 2, and 3(b), § 4(d).
- Recognizes (incorporates) shortage sharing agreements reached by IID, CVWD, MWD, and SDCWA that apply where less than 3.85 maf is available for priorities 1, 2, and 3, § 5(b).
- Notes annual beneficial use reviews pursuant to 43 C.F.R. Pt. 417 and addresses their continuation (as applied to IID and other parties) during interim period depending upon whether California's agricultural water use levels meet benchmarks, §§ 8(b)(2), (c)(4).
- Provides agreement does not alter other applicable federal laws, § 10(e), and states agreement is subject to and controlled by the Compact, § 10(i).

Interim Guidelines for Lower Basin Shortages and the Coordinated Operations for Lake Powell and Lake Mead (2007)

- Implement the LROC (required by CRBPA § 602) during interim period (until 2026), § X.
- Provides for forbearance agreements between parties with entitlements to surplus water in the Lower Basin (per *AZ v. CA Decree*, Art. II(B)(2)), § XI.A.
- Expressly disclaims altering other parts of the Law of the River and associated entitlements, § XI.E.
- Establishes order of priority for allocation of water from Lower Basin states' unused basic apportionments pursuant to Art. II(B)(6) of *AZ v. CA Decree*, § XI.G.1(b).
- Defines conditions (elevations) under which Secretary will declare normal, surplus, and shortage conditions within meaning of Art. II(B)(1)-(3) of *AZ v. CA Decree* relevant to operation of (releases from) Lake Mead; also identifies Lower Basin states' (and other parties) entitlements during surplus and shortage conditions, § XI.G.2(A), (B), (D).
- Implements system for creation of Intentionally Created Surplus (ICS) by contractors, delivery of it by Secretary in ICS Surplus Conditions, and accounting and verification procedures of Secretary for creation and delivery of ICS, § XI.G.3(A)-(D).

- Implements system for creation of Developed Shortage Supply (DSS) by contractors, delivery of it by Secretary in shortage conditions, and accounting and verification procedures to be followed by Secretary, § XI.G.4(A)-(C).
- Prescribes annual releases from Lake Powell based upon elevation-based operational tiers and allows for releases of less than 7.5 maf/yr in bottom two tiers, § XI.G.6.
- Calls for consultation between Secretary and Basin States on various matters related to the Guidelines during the interim period, § XI.G.7.

II. Federal Laws of General Applicability

Reclamation Laws

- Reclamation Act (1902)
 - Established U.S. Reclamation Service (later renamed Bureau of Reclamation) and authorized construction of federal water projects, including those in Basin.
 - Establishes acreage limitation and residency (later abolished) requirements applicable to water deliveries from reclamation projects to contractors.
 - Provides beneficial use “shall be the basis, the measure, and the limit” of any right to the use of water acquired under the provisions of the Act, § 8.
 - Makes water rights acquired under Act appurtenant to the land irrigated, § 8, which potentially poses an obstacle for transfers of project water rights.
- Omnibus Adjustment Act of 1926
 - Designated irrigation districts as the sole parties with whom Reclamation would enter into water delivery contracts. (Built on 1922 amendment in this regard.) Exclusivity of this relationship was repealed in Reclamation Project Act of 1939.
- Reclamation Project Act of 1939
 - Contains irrigation preference clause (§ 9c) prohibiting contracts for non-irrigation uses (e.g., muni/industrial) if such uses would impair use of projects for irrigation. This provision poses a potential obstacle for transfers of project water rights.
- *California v. United States*, 438 U.S. 645 (1978)
 - Holds that states are authorized under § 8 of Reclamation Act to impose conditions on water rights issued for reclamation projects pursuant to state law so long as such conditions are not inconsistent with clear congressional directives to the contrary. Rule: “Section 8 means that state law applies to the ‘control, appropriation, use, or distribution’ of water unless inconsistent with a specific federal directive.”
 - Allows for application of state law-based definitions of “beneficial use” to project water rights pursuant to § 8 unless a contrary federal provision exists. (Note – state law-based definition of “beneficial use” already seems to apply to appropriative rights held by reclamation projects themselves.) Narrow definitions of “beneficial use” in some western states’ laws may pose an obstacle for transfers of project water rights for certain purposes (e.g., instream flows).
 - Calls for application of state transfers laws to transfers of project water rights unless contrary federal provisions exist.
- Reclamation Reform Act of 1982
 - Abolished residency requirement and enlarged original acreage limitation (note – some water projects are statutorily exempted from this limitation).

Indian Reserved Water Rights Doctrine

- *Winters v. United States*, 207 U.S. 564 (1908) (establishing existence of Indian reserved rights)
- *Arizona v. California*, 373 U.S. 546 (1963) (affirming Indian reserved rights of several tribes in Lower Basin in mainstem water; establishing quantification method (PIA) for these rights)
- *United States v. District Court for Eagle County*, 401 U.S. 520 (1971) (recognizing concurrent jurisdiction of state courts to determine existence and scope of Indian reserved rights in general stream adjudications pursuant to McCarran Amendment).

Federal Reserved Water Rights Doctrine

- *Arizona v. California*, 373 U.S. 546 (1963) (establishing existence of reserved rights for federal reservations beyond Indian reservations – specifically, two national wildlife refuges and one national recreation area)
- *United States v. District Court for Eagle County*, 401 U.S. 520 (1971) (recognizing concurrent jurisdiction of state courts to determine existence and scope of federal reserved rights in general stream adjudications pursuant to McCarran Amendment).
- *Cappaert v. United States*, 426 U.S. 128 (1976) (extended federal reserved rights to national monuments, including to groundwater pumping on adjacent land).
- *New Mexico v. United States*, 438 U.S. 696 (1978) (recognizing federal reserved rights for national forests subject to primary/secondary purposes distinction)

Federal Regulatory Water Rights Doctrine

- Endangered Species Act (1973) (consultation requirement and jeopardy/adverse modification of habitat prohibition apply to water diversions from reclamation projects; take prohibition applies to water diversions by all types of water users; these provisions also apply to FERC licensing (and relicensing) procedures)
- Clean Water Act (1972) (NPDES permits may include minimum streamflows as conditions)

III. State Laws of General Applicability

Prior Appropriation Doctrine

- Establishes appropriative rights as dominant (almost exclusive) form of state-based water rights in surface water sources throughout basin. “Beneficial use” (sometimes narrowly construed) is positioned as the basis, measure, and limit of these rights. Appropriative rights are held by Reclamation (generally) for reclamation projects; water organizations (irrigation districts, municipalities); and individual water users.
- Utilizes temporal priority as allocation rule for water afforded by appropriative rights.
- Implements public interest review procedures for transfers and new appropriations.

Irrigation District Laws

- Authorize formation of irrigation districts for purposes of water distribution.
- Designate composition and scope of powers of districts.
- Districts set variable allocation rules – shortage rules, transfers (internal and external). (Note: external transfers are subject to state transfer laws.)