

The Law of the Delta



Karrigan Börk, JD, PhD

ksbork@ucdavis.edu

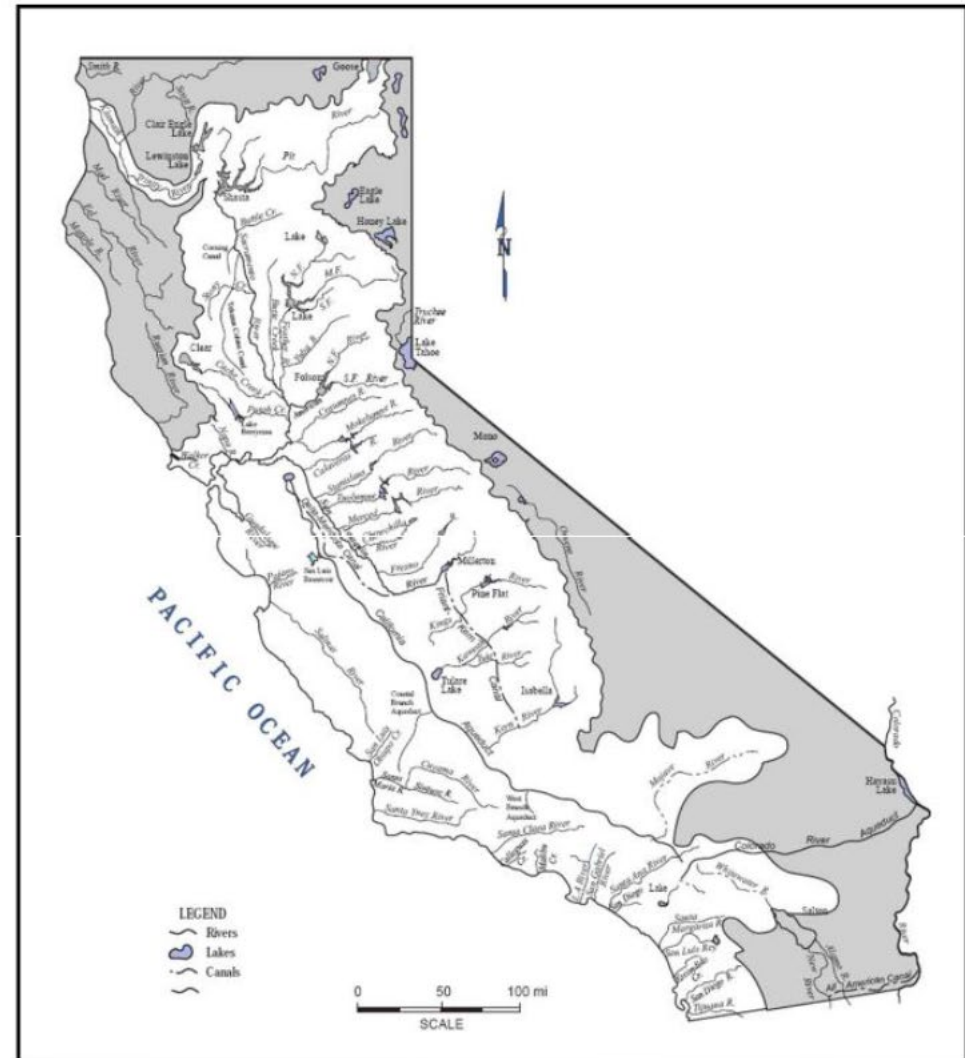
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Overview

- California Water Rights 101
- Restrictions on Water Use
 - State Laws & Doctrines
 - Federal Laws
- Bureau of Reclamation & the CVP
 - Reclamation Act
 - Central Valley Project Improvement Act (CVPIA)
 - WIIN Act
- Water Rights in the Delta
 - D1485, D1641



Area of Potential Environmental Effects
*shaded area not included

Water Rights = State Law

- **Riparian**
- **Appropriative**
- **Contractual water entitlements**
- **Area of origin protections**
- **Groundwater Rights**
- **Prescriptive water rights**
- **Federal reserved water rights**
 - Tribal water rights
- **Pueblo water rights**

Riparian Water Rights

- Riparian right = right to use water adjoining property
- Gained by property ownership
 - Not gained by use, nor lost by disuse
- Use must be reported to the SWRCB
 - “Statement of Diversion and Use”
 - Some issues (compliance, double reporting)
- Each riparian may use as much water as is necessary for a reasonable use of the land, as limited by other riparian uses

Riparian Water Right – Limitations

- Land limits
- Generally not transferrable
- No storage for more than 30 days
- Limited to natural flow
 - Can't use imported water
 - Can't use stored water post-release or post-use
 - Generally defined as unimpaired flow, i.e. flow in rivers and streams that would have occurred absent water storage/diversion projects

Appropriative Water Rights

- Obtain via diversion and beneficial use
- Prior to 1914: divert and use water
 - Right to amount used
- After 1914: apply for water right permit, then license
 - State Water Resources Control Board
 - State authority was “ministerial,” has changed
 - Right to amount in permit
- First in time, first in right (mostly)

Appropriative Right - Strengths

- Land ownership not required
- Storage allowed
- May be used outside of watershed
- Quantities are more knowable
- Transfers allowed
 - No injury rule

Appropriative Right - Limitations

- Lose to riparian rights in times of shortage
- Fixed place, time, purpose of use
- Forfeiture for non-use – all or a part may be lost if appropriated water is not put to a beneficial use for 5 years (rare)

SWP Contractors

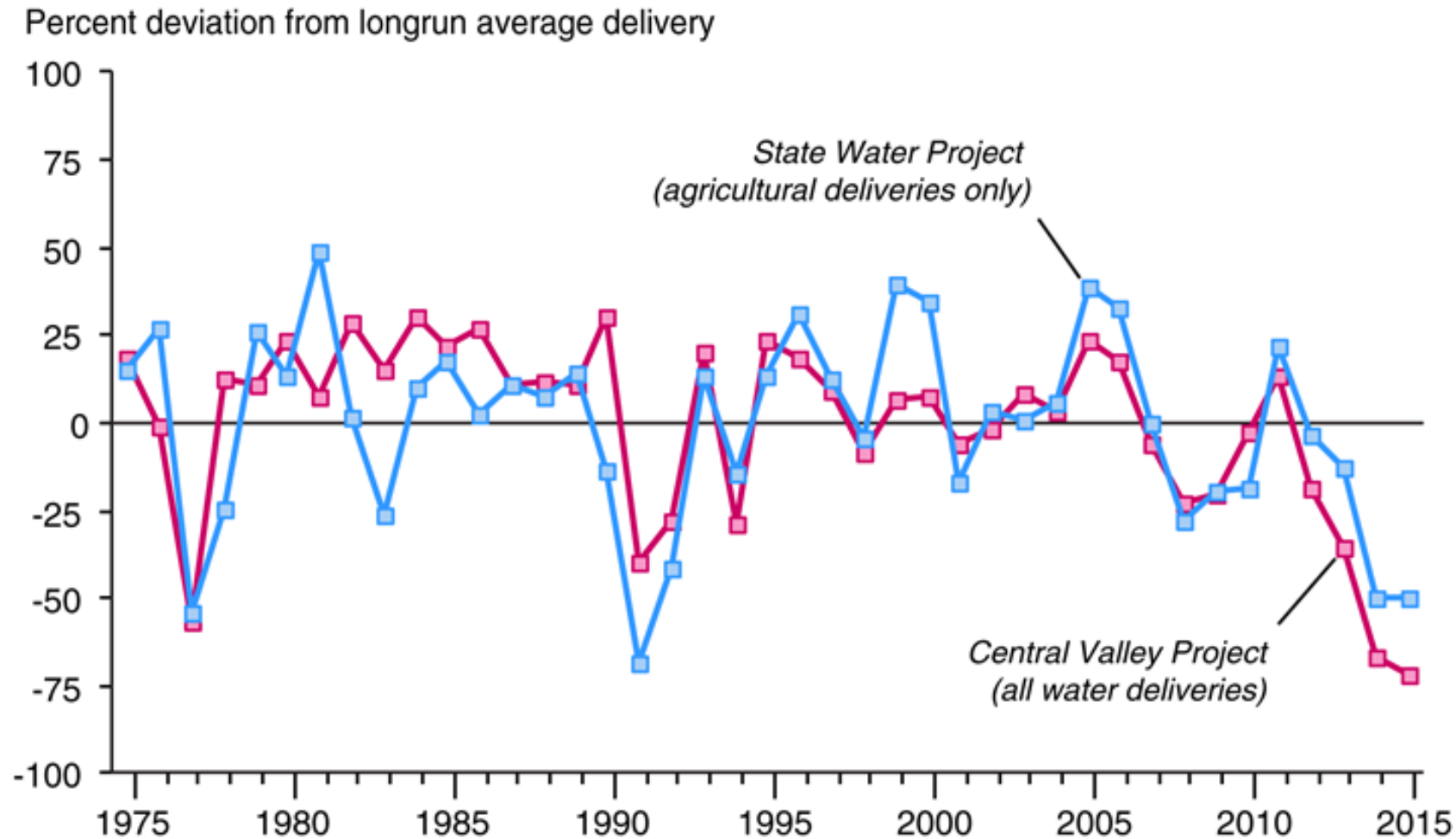
- 4.17 MAF Max, but generally ~2.4 MAF
- 29 local water agencies
- Contracts from the 1960s, amended since, recently re-upped to 2085

Table 2. California State Water Project Allocations by Water Year, 2013-2023
(percentage of maximum contract allocation)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
State Water Project	35%	5%	20%	60%	85%	35%	75%	20%	5%	5%	100%

Source: California Department of Water Resources, “Notices to State Water Project Contractors,” at <https://water.ca.gov/Programs/State-Water-Project/Management/SWP-Water-Contractors>.

Surface-water deliveries for major California water projects



Source: USDA, Economic Research Service using Central Valley Project (CVP) and State Water Project (SWP) data for California. On average, 70% of annual SWP supplies go to urban users and 30% to agricultural users; CVP allocates about 70% of annual delivered water to agriculture. Only specific projects with available data over the full period are considered. Annual deliveries are compared to a longrun average (1975-2015).

CVP Contractors

- 9.5 MAF maximum, 7 MAF on average
- ~ 270 water contracts or agreements for the delivery of CVP or water rights water
 - Ag water & Municipal and Industrial Water
- Water right holders from before the CVP:
 - Sacramento River Settlement Contractors
 - San Joaquin River Exchange Contractors
- <https://www.usbr.gov/mp/cvp-water/water-contractors.html>

Table I. Central Valley Project Contractor Water Allocations by Water Year, 2013-2023

(percentage of maximum contract allocation made available)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
North-of-Delta Users											
Agricultural	75%	0%	0%	100%	100%	100%	100%	50%	5%	0%	100%
M&I	100%	50%	25%	100%	100%	100%	100%	75%	25%	5%	100%
Settlement Contractors	100%	75%	75%	100%	100%	100%	100%	100%	75%	18%	100%
Refuges (Level 2)	100%	75%	75%	100%	100%	100%	100%	100%	75%	18%	100%
American River M&I	75%	50%	25%	100%	100%	100%	100%	75%	55%	15%	100%
In Delta- Contra Costa (M&I)	75%	50%	25%	100%	100%	100%	100%	75%	55%	33%	100%
South-of-Delta Users											
Agricultural	20%	0%	0%	5%	100%	50%	75%	20%	0%	0%	100%
M&I	70%	50%	25%	55%	100%	75%	100%	70%	25%	33%	100%
Exchange Contractors	100%	65%	75%	100%	100%	100%	100%	100%	75%	75%	100%
Refuges (Level 2)	100%	65%	75%	100%	100%	100%	100%	100%	75%	75%	100%
Eastside Division	100%	55%	0%	0%	100%	100%	100%	100%	100%	0%	100%
Friant Class I	62%	0%	0%	65%	100%	88%	100%	65%	40%	30%	100%
Friant Class 2	0%	0%	0%	13%	100%	9%	a	0%	0%	0%	70%

Sources: U.S. Bureau of Reclamation, CVP Historical Water Supply Allocations.**Notes:** CVP = Central Valley Project. M&I = municipal and industrial water contractors. Water years refer to the period from October 1 to September 30. In times of shortage, M&I contractor allocations typically reference a percentage in terms of historic use (or public health and safety needs, whichever is greater).

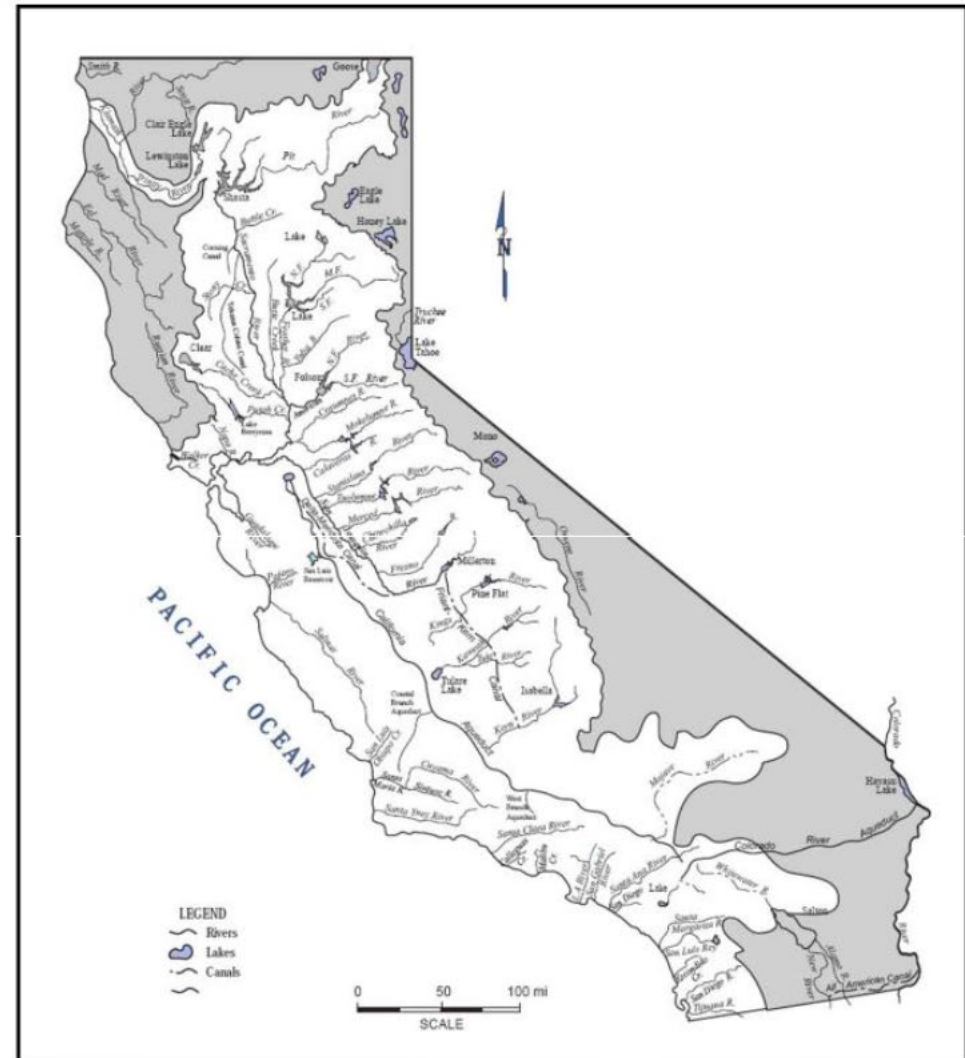
a. "Uncontrolled" Class 2 releases for Friant Contractors were available through June 30, 2019.

Area of Origin Protections

- Priority/other protections for later water rights in origin watersheds for big projects
- Delta Protection Act
 - Limits water available for export to protect in-Delta use and reduce salinity
 - “it is for the Board to decide, in the exercise of its judgment, what level of salinity control should be provided and what is an adequate supply of water for users in the Delta.”

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Restrictions on Water Use?

- CA Constitution – Reasonable Use
- Public Trust Doctrine
- State Statutory Law
- Federal Law



CA Constitution – Art. 10, Sec. 2

- SEC. 2. . . . The right to water or to the use or flow of water in or from any natural stream or water course in this State is and shall be limited to such water as shall be reasonably required for the beneficial use to be served, and **such right does not and shall not extend to the waste or unreasonable use or unreasonable method of use or unreasonable method of diversion of water.**

Determining Reasonable Use

- “What is a beneficial use at one time may, because of changed conditions, become a waste of water at a later time.”
- “Reasonable use . . . inquiry cannot be resolved in vacuo isolated from statewide considerations of transcendent importance. Paramount among these we see the ever increasing need for the conservation of water in this state, an inescapable reality of life.”



Public Trust Doctrine

- Ancient doctrine requiring government to hold some property as a trustee for the people
- Covers tidelands, navigable lakes/streams, and nonnavigable/groundwaters to protect these waters
- Protects commerce, navigation, fisheries, and recreational and ecological values



National Audubon Society v. The Superior Court, 33 Cal. 3d 419 (1983)

- “The state must have the power to grant nonvested usufructuary rights to appropriate water even if diversions harm public trust uses.”

BUT

- “[B]efore state courts and agencies approve water diversions they should consider the effect of such diversions upon interests protected by the public trust, and attempt, **so far as feasible**, to avoid or minimize any harm to those interests.”

Water Rights and the Public Trust

- (1) an independent source of authority for the state
 - agencies, legislature
- (2) an independent limit on what the state and others can do with water
 - basis for suits against state or trust asset users
 - in California, requires consideration, and a hard limit in rare cases
- (3) a protection against takings claims if a state does regulate or reduce *existing* water rights

CA Statutory Law – Permitting

- Water Code 1255—reject application if not in public interest
- Water Code 1243—fish and wildlife and recreation are beneficial uses
- Water Code 1243.5—Board to take into account amount needed to remain instream, per CDFW
- Water Code 1253—Board can put conditions in permits (e.g. minimum instream or bypass flows)
- Calif. Pub. Res. Code 10000-10005—minimum flows for priority streams



Other Requirements?

- FGC 1602, streambed modification
- FGC 5937, minimum flows below dams
- Various fish passage and barrier removal statutes
- CESA
- CEQA
- Water quality laws
- California Wild and Scenic Rivers Act

1969 Porter-Cologne Water Quality Control Act

- SWRCB “to attain the highest water quality which is reasonable, . . . [considering] the total values involved, beneficial and detrimental, economic and social, tangible and intangible.”
- Water Quality Control Plan:
 - Beneficial uses
 - Water quality objectives – for reasonable protection of beneficial uses
 - Program of Implementation - achieve water quality objectives



Example – WR Order 90-5

- Enforces water quality objectives in Sacramento River
- **Beneficial Uses:** Cold Freshwater Habitat (COLD), Migration of Aquatic Organisms (MIGR), Spawning, Reproduction, and/or Early Development (SPWN) (among others)
- **Water Quality Objectives:** location-based temperature requirements
- **Enforcement:** WR Order 90-5 (temperature control device and downstream temperature controls)

State Level Summary

- Public Trust and Reasonable Use hovering over all
- New Rights – DFG Recommendations and Board consideration of instream flow needs
- Existing Rights – Board has continuing power to limit, applies public trust, constitutional (waste and unreasonable use), and water quality requirements
- Additional laws in special cases – 5937 for dams, FGC 1602, streambed modification, California Wild and Scenic Rivers Act, etc.

Federal Laws

- ESA for waters with listed species
- NEPA
- FERC for nonfederal hydropower
- Tribal fishing rights



ESA Protections

- Section 3 provides definitions
- Section 4 governs listing, critical habitat designation, and recovery plans for listed species
- Section 7 prevents federal agencies from either jeopardizing listed species or degrading their habitat
- Section 9 prohibits take - both direct harm and indirect harm via habitat modification
- Section 10 authorizes take
- Section 11 allows citizen suits to enforce the protections offered by the Act

Listed Species (examples)

- Central Valley spring-run Chinook
- Sacramento River winter-run Chinook
- California Central Valley steelhead
- sDPS green sturgeon
- Delta smelt
- Longfin smelt – state only



Section 7

- All federal agencies considering an action must **consult** with the F&WS or NMFS to ensure that proposed activity is not likely to jeopardize the continued existence of any listed species and will not result in destruction or adverse modification of its critical habitat

Section 7 - Consultations

- Is a listed species likely to be affected by a federal action?
 - If yes, expert agency (FWS or NMFS) completes a “biological opinion” → **formal consultation**
 - If no, and expert agency confirms the “not likely to adversely impact” finding, then may proceed



Biological Opinion

- Expert agency (FWS or NMFS) determines whether proposed action would place species in jeopardy
- Jeopardy: if the action “reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild....”

Section 7 - Consultations

- Two outcomes for the biological opinion.
 - If “not likely to jeopardize,” project can proceed, with **incidental take statement**.
 - If “jeopardy,” expert agency must, to degree possible, suggest reasonable and prudent alternatives to avoid jeopardy. Action agency may then (1) apply alternatives, (2) cancel the project, or (3) ask the Endangered Species Committee (aka God Squad) for an exception.

Section 10 Permits

- 10(a)(1)(A) - scientific purposes/enhancement
- 10(a)(1)(B) – Incidental take **permit**
 - Only given with Habitat Conservation Plan (HCP)
 - Permits incidental (not purposeful) take
 - Nonfederal version of an ITS under section 7
- Experimental population designation (10j)



NEPA

- National Environmental **Policy** Act (NEPA), 1970
- EIS required for **major, federal, actions which could significantly affect the human environment.**
 - An action is federal if a federal agency carries it out, approves it, or funds it but retains control
- Short form: Decide if you need an EIS, if so, prepare a draft, publish it for review, and then address the comments. Publish a final EIS, make a decision, and then proceed (or not).



FERC

- Federal Energy Regulatory Commission licenses private, municipal, and state hydroelectric projects
- FERC has primary authority to set instream flows below these hydroelectric projects
- State law defers to FERC requirements
- But see CWA 401 - a bit messy here

Tribal Fishing Rights

- Some tribes have treaty fishing rights
 - E.g. Yurok and Hoopa Valley Tribes have a right to harvest salmon in the Klamath Basin
- Federal government serves as trustee for these rights
 - E.g. increased flows from Lewiston/Trinity Dams to help prevent re-occurrence of Ich parasite



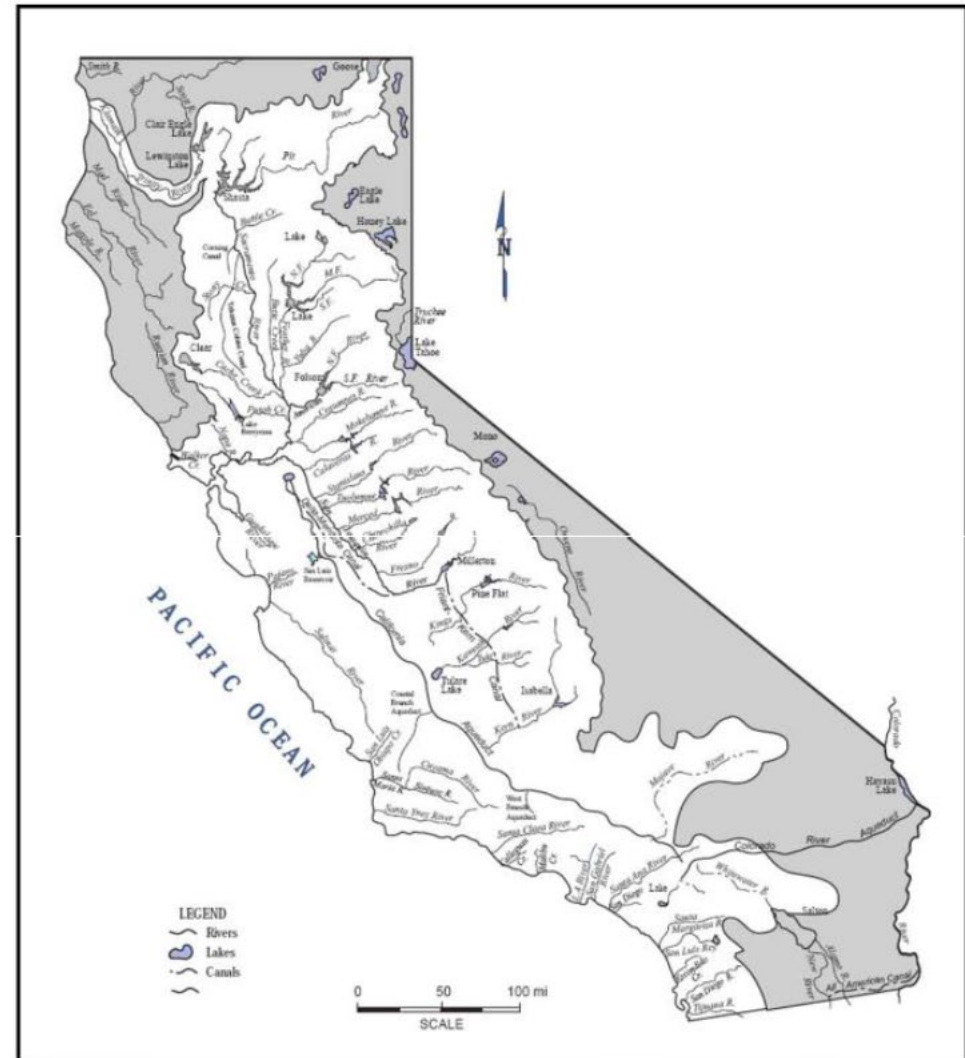
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Bureau of Reclamation



CVP Authorized Purposes

- Costs allocated for repayment among purposes
- Water supply, power, flood control, water quality, recreation, navigation, fish and wildlife enhancement, and fish and wildlife mitigation
- Historically 90% of water for irrigation, but now closer to 75% (depending on counting/year)
- Compare SWP – 30% irrigation, 70% M&I



Section 8 – Savings Clause

- Nothing in this act shall be construed as affecting or intended to affect or to in any way interfere with the laws of any State or Territory relating to the control, appropriation, use, or distribution of water used in irrigation.... [T]he Secretary of the Interior, in carrying out the provisions of this act, shall proceed in conformity with such laws.

CA v. US, 438 U.S. 645 (1978)

- “consistent thread of purposeful and continued deference to state water law by Congress.”
- Standard: “a State may impose any condition on the ‘control, appropriation, use, or distribution of water’ through a federal reclamation project that is not inconsistent with clear congressional directives respecting the project.”

Central Valley Project Improvement Act (CVPIA) - 1992

- Double anadromous fish populations by 2002
- Allocates water (“(b)(2) water”) to fish and wildlife purposes
- Allocates water for wildlife refuges
- Create Central Valley Project Restoration Fund (CVPRF) for habitat restoration and land/water acquisitions



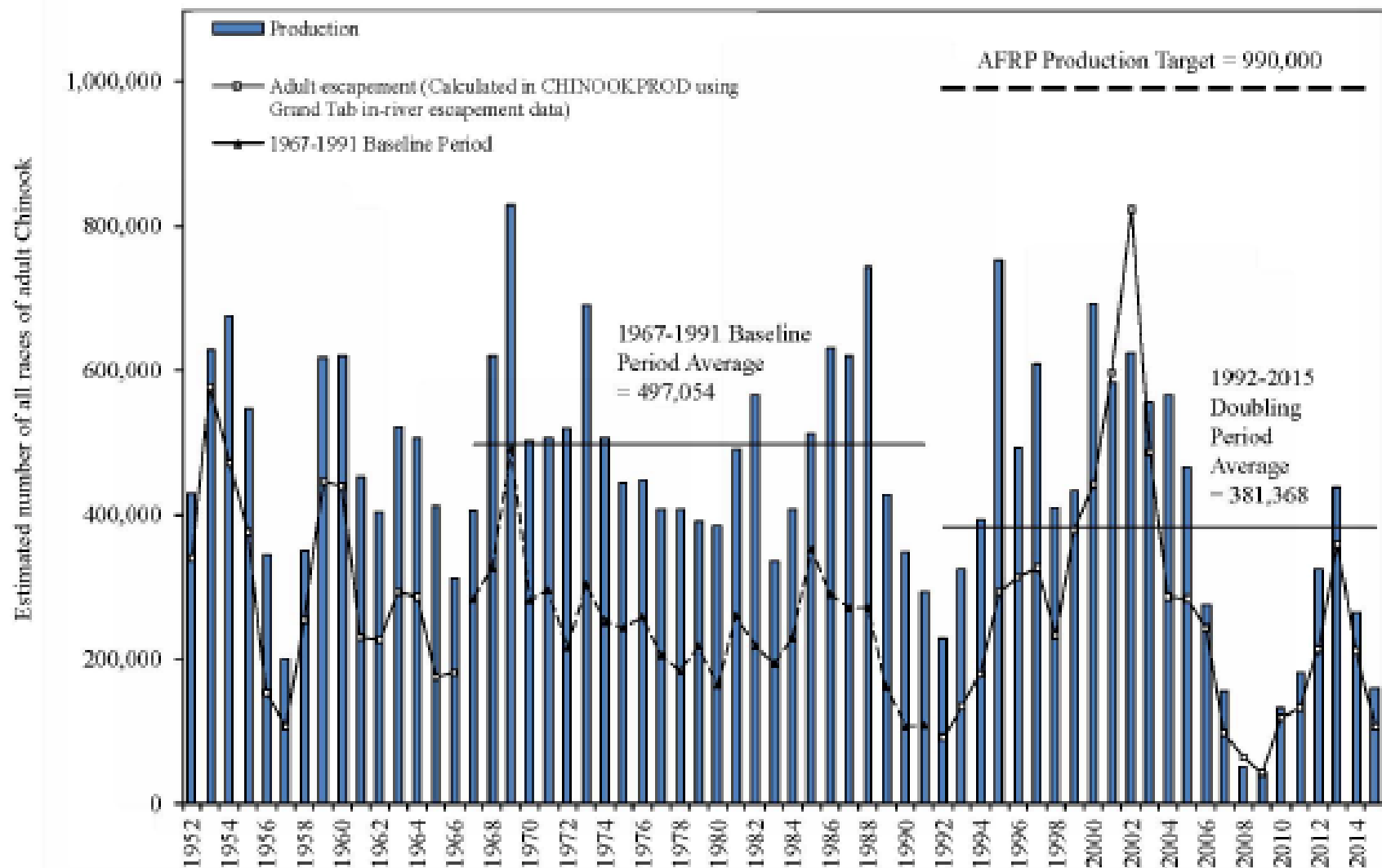


Figure 1. Estimated Yearly Natural Production and In-River Escapement of all Races of Adult Chinook Salmon in the Central Valley Rivers and Streams

Water Infrastructure Improvements for the Nation (WIIN) Act - 2016

- Aimed at short term flexibility to address drought (then drought ended...)
 - Communications, transfers, and pumping and other operational changes
- Savings clauses for state law, ESA, etc.
- Most provisions expired in Dec. 2021 (but impacted new Coordinated Operating Agreement)
- Some funding for storage projects

Other federal programs...

- Trinity River Restoration Program (TRRP)
- San Joaquin River Restoration Program (SJRRP) – Friant settlement
- California Bay-Delta Restoration Program



Putting it Together

- Three tranches of water rights
 - First Tranche - Pre-1914 Rights
 - Were essentially unregulated
 - Second Tranche - 1914-1983ish Rights
 - Issued ministerially, no meaningful environmental review
 - Third Tranche – Post 1983 Rights
 - Modern water rights
- Big challenge: bringing first and second tranche rights in line with modern priorities

Water Rights and Takings

- Takings – 5th Amendment, government cannot physically take private property or go “too far” in its regulation.
- UNLESS action implements conditions that “inhere in the title itself, in the restrictions that background principles of the State's law of property.”
 - Lucas v. S.C. Coastal Council, 505 U.S. 1003 (1992).



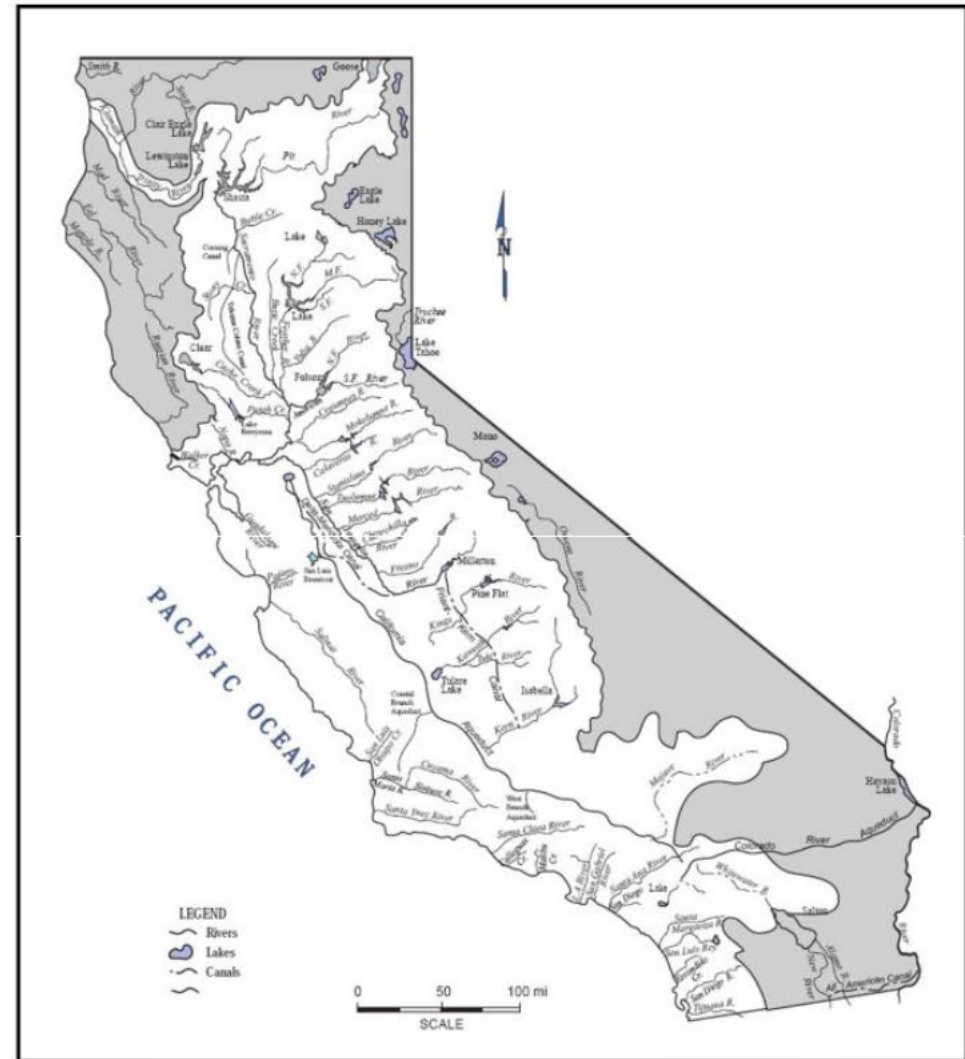
Background Principles

- Reasonable/Beneficial Use
- Public Trust
- Prior state interests (Public Interest, State Ownership, Public Use Rights)
- Permits (not really a principle, but...)
- Some outlier Federal Claims and Federal Circuit cases



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Series of Water Right Decisions...

- D990, D1275, D1291, D1379...
- SWRCB reserved jurisdiction over permits

Water Right Decision 1485

- Water quality (salinity) standards
 - For in-Delta use and other water intakes
 - For striped bass and salmon
- Outflow standards (but subject to reservoir levels)
- Limits on pumping to protect striped bass young
- Closure of Delta Cross Channel gates to aid fish migration
- Responsibility on CVP/SWP to meet standards, through releases or reduced pumping

Water Right Decision 1485

- “The present proceeding is a consolidated hearing pursuant to both water quality control and water right authority of the Board. As a result of the proceeding, the Board not only is amending terms and conditions for the subject permits of the Department and Bureau, but also is adopting a water quality control plan (Delta Plan) containing water quality standards for the protection of beneficial uses of the waters of the Sacramento-San Joaquin Delta and Suisun Marsh.”

United States v. State Water Resources Control Board (1986) (*Racanelli*)

- D1485 unlawful
 - over reliance on protection of riparian rights as proxy for Delta beneficial uses
 - “The Board's obligation is to attain the highest reasonable water quality considering all demands being made and to be made on those waters and the total values involved, beneficial and detrimental, economic and social, tangible and intangible.”

Racanelli Decision

BUT!

- “Board's power to prevent unreasonable methods of use should be broadly interpreted to enable the Board to strike the proper balance between the interests in water quality and project activities in order to objectively determine whether a reasonable method of use is manifested.”
- “the Board has the power and duty to provide water quality protection to the fish and wildlife that make up the delicate ecosystem within the Delta.”

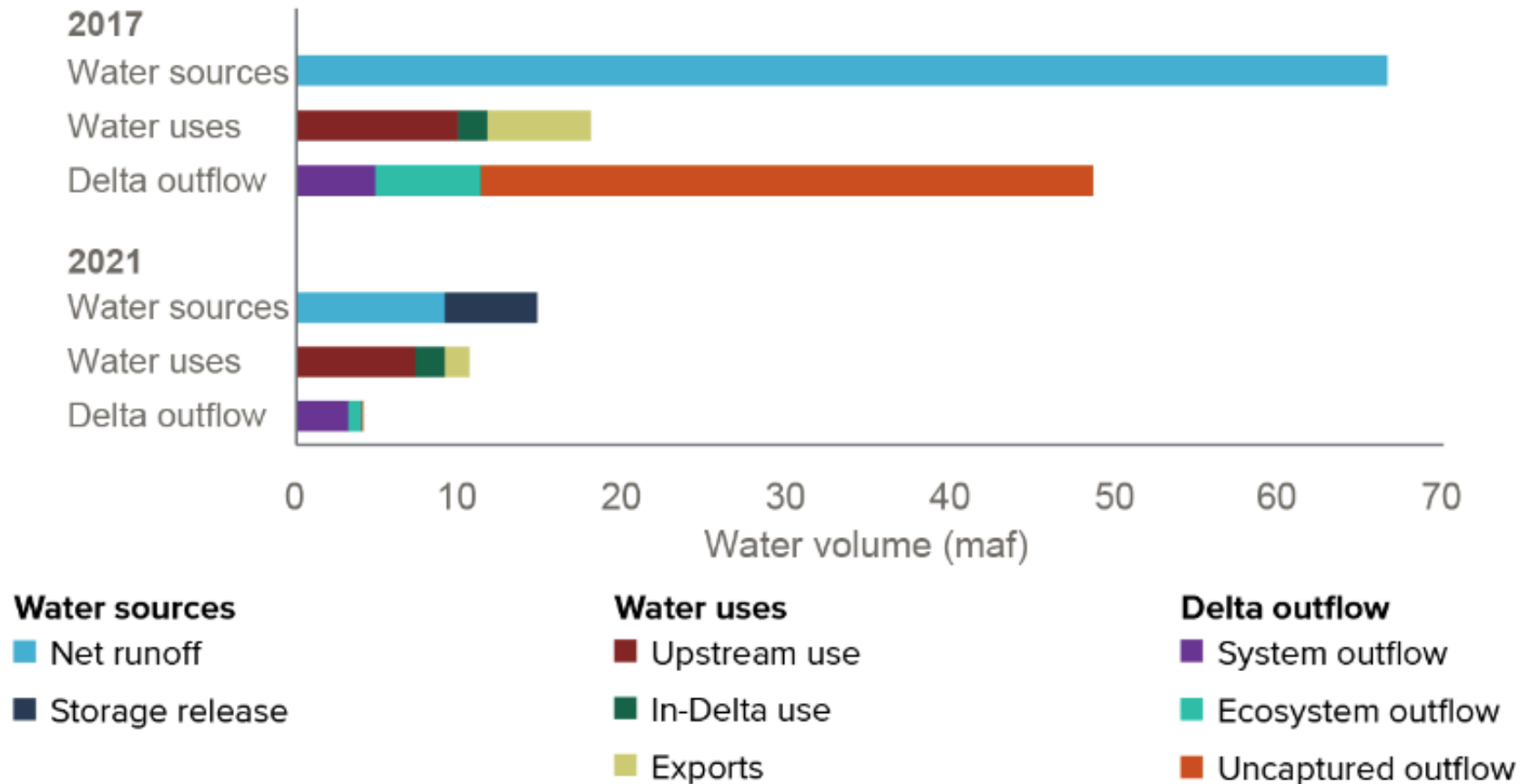
Water Right Decision 1641

- 1994 Bay-Delta Accord leads to the Bay-Delta Water Quality Control Plan of 1995
- Flow/salinity (X2)/pumping/operational protections for fish and wildlife
 - Delta smelt and striped bass
- Other salinity protections

A lot happening

- At the same time...
 - BiOps for Coordinated Operating Agreements
 - CVPIA begins – water dedicated to fish and wildlife, can be water used to meet D1641 or BiOp requirements
- 2000 Vernalis Adaptive Management Plan (VAMP) – SJR pulse flows
- Later (2008) court order to revise BiOps

Where water goes in the Delta watershed



SOURCE: Technical Appendix to this policy brief and *PPIC Delta Water Accounting* spreadsheets.

For more information, see PPIC's Technical Appendices to their 2017 report, "A New Approach to Accounting for Environmental Water, Insights from the Sacramento–San Joaquin Delta"

Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta (Bay-Delta Plan)

- December 2018, SWRCB adopts Bay-Delta Plan for flows in Lower San Joaquin River and Stanislaus, Tuolumne, and Merced Rivers
 - Includes salinity objective for southern Delta
 - 40% of unimpaired flow
 - Working on implementing regulations
- Considering updates for Sacramento River/tributaries, Calaveras, Cosumnes, and Mokelumne Rivers, Delta flows
- Proposed voluntary agreements

ESA Issues

- Reinitiated Consultations in 2016 for the Coordinated Operating Agreement
- New BiOps issued in 2019
 - No jeopardy opinions
 - Increased exports
- Lawsuit filed, preliminary injunction, then change in administration
- Interim Operations Plan (IOP) in place until new biops issued (expected law 2024)

Emerging Issues

- SWRCB Civil Rights Act Title VI Complaint
- Tribal Beneficial Use Designations
 - Tribal Tradition and Culture (CUL), Tribal Subsistence Fishing (T-SUB), Subsistence Fishing (SUB)
- Tunnel project (additional lawsuits)
- SGMA + Climate Change
- Water Rights + Climate Change
- CESA vs ESA
- Sites Reservoir
- 5937 Lawsuits
- New listings



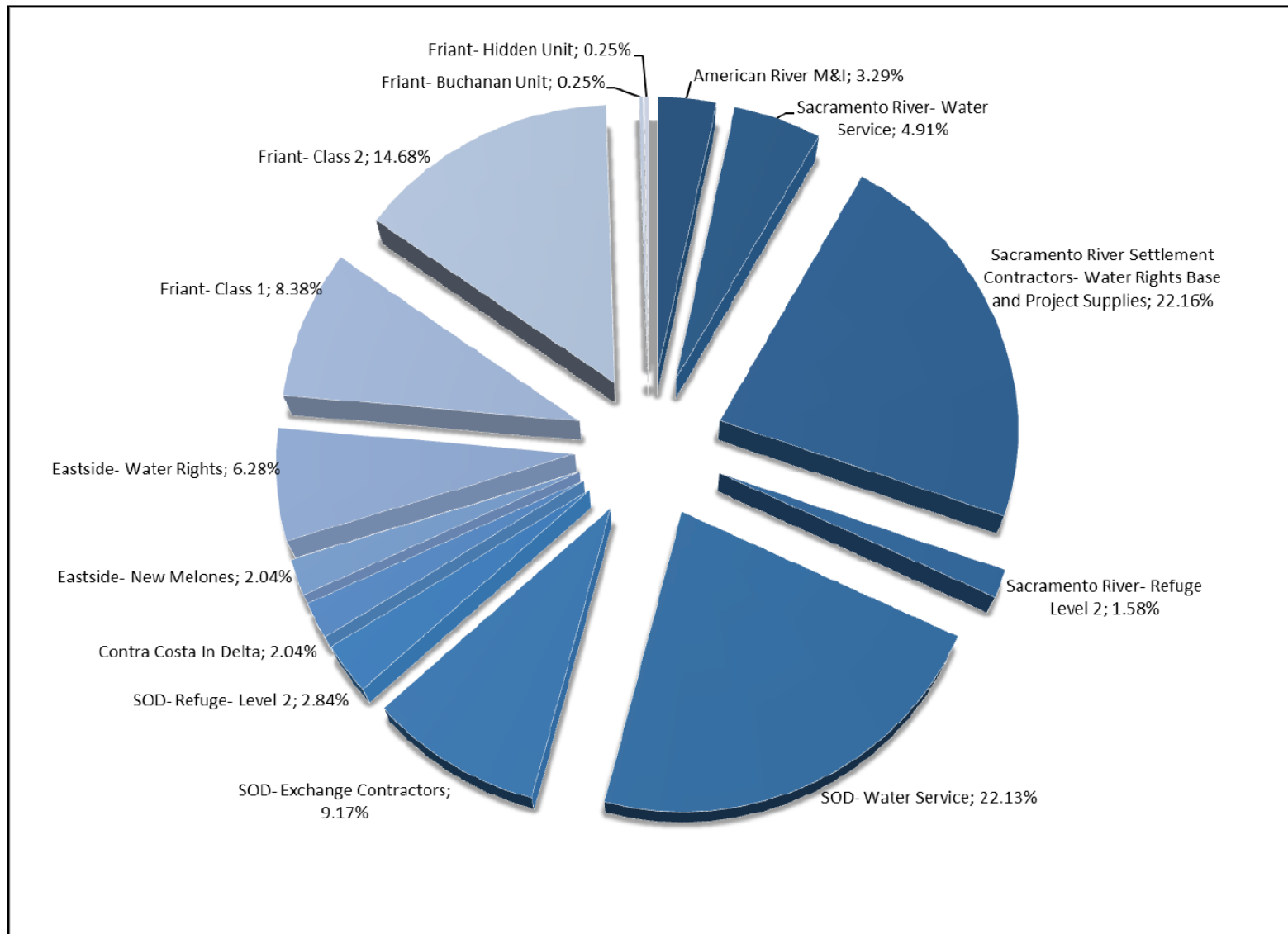
Questions?





Extra Slides

Figure 3. Central Valley Project: Maximum Contract Amounts
(relative share of total maximum contracted CVP supplies)



Source: CRS, using Bureau of Reclamation contractor data as of 2018.



