



BOTIN FOUNDATION

MADRID, SPAIN

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NEW CURRENT WATER AND LAND, LLC

CALIFORNIA HYDROLOGY



- Mediterranean climate dry summers, mild winters
- In average year, 82 million acre-feet of water used for agriculture, environment and cities
- More precipitation in north than south, reverse of population location

Average Annual Precipitation in California (With Water and Shaded Relief) **Precipitation in Inches** 180.1 - 200.0 140.1 - 180.0 120.1 - 140.0 100.1 - 120.0 80.1 - 100.0 70.1 - 80.0 60.1 - 70.0 50.1 - 60.0 40.1 - 50.0 35.1 - 40.0 30.1 - 35.0 25.1 - 30.0 20.1 - 25.0 15.1 - 20.0 10.1 - 15.0 5.1 - 10.0 <5.0 100 miles Modified from the National Atlas

CALIFORNIA HYDROLOGY

WET IN NORTH DRY IN SOUTH

GREATEST
POPULATION IN
SOUTH

MAJOR WATER PROJECTS

- ▶ Federal Central Valley Project (CVP)
- Local Many smaller projects throughout state



RIPARIAN RIGHTS

- Property owners adjacent to streams have a right to divert natural flow.
- A Riparian rights take priority over other claims.



APPROPRIATIVE RIGHTS

- Beginning with Gold Rush, water moved away from original source to area of use
- Such appropriative rights based on seniority first in time, first in right
- 1914 Water Commission Act
- Dams and aqueducts allow movement





AREA OF ORIGIN LAWS (CIRCA 1960s)

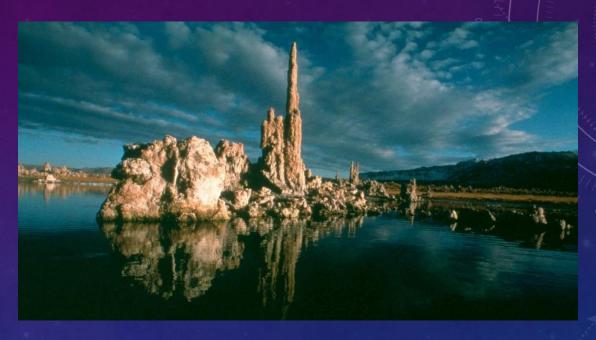
- Laws acknowledge the importance of the needs and rights of the areas where California's water originates.
- Evolving area of law and subject to court challenges.
- News Headline Aug. 3, 2011:

"Water users in the Sacramento Valley have no preferential right to delivery of Central Valley Project water under the state's 'area of origin' laws, according to the U.S. District Court in Fresno."

PUBLIC TRUST

Courts apply the doctrine of public trust to California's resources equation

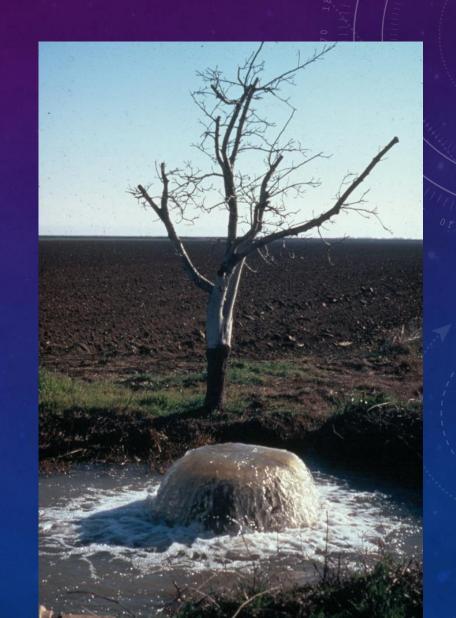
Doctrine = fish and wildlife, beauty and recreation are all public benefits of streams and lakes and gives these protection consideration.



1983 California Supreme
Court ruling upheld public trust
values of Mono Lake in case
against Los Angeles.

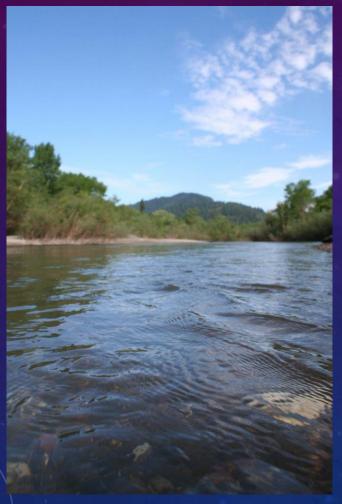
GROUNDWATER RIGHTS

- About 40% (15 million acre-feet) of state's water comes from groundwater in normal years; 50%-60% in drought years
- Correlative rights
- Preference to overlying lands
- Appropriations, prescription, self help, subordination of rights
- All fashioned by common law and a serious of adjudications
- **SGMA 2014**



BENEFICIAL USE

All water are subject to reasonable, beneficial, nonwasteful use.



- № 1928 voters approve state constitutional amendment banning waste & unreasonable use
- Commonly included municipal and industrial uses, irrigation, hydroelectric generation, and livestock watering.
- Concept been broadened to recreational use, fish and wildlife protection, and enhancement and aesthetics

SUMMARY OF WATER RIGHTS STRUCTURE

- California's water rights system is a conglomeration of pueblo and common law, legislative action and state and federal court pronouncements
- **●** It is byzantine at best, arcane and outdated at worst
- It gives highest priority to the concept of first in time first in right
- The most senior rights are largely unregulated and until recently immune from obligations to meet public trust values
- The water rights structure generally creates separate and disconnected silos for surface and groundwater rights

WATER RIGHTS AND PUBLIC POLICY INTERSECTION

- As California thinks about climate change adaptation, its archaic water rights structure oftentimes inhibits the development of sound public policy
 - The current structure tends to place the burden of the response on the most junior water right holders (State and Federal Water Projects)
 - First in time first in right can limit geographic specific solutions in some cases.
- To date riparian and senior appropriative water right holders in the Sacramento San Joaquin Delta have been absolved of responsibilities to address environmental challenges
- More fundamentally, the current water rights structure has impeded more efficient water management.

POLITICAL IMPEDIMENTS

- Virtually all State Assembly Members and State Senators have senior water right holders within their jurisdictions
- There are multifactional stakeholders whose issues defy political boundaries
- **Stakeholder advocates have defined themselves and their interests around current institutional structures**

SOLUTIONS

- **♦** Voluntary Accords
 - Yuba River Accord
 - Kings River Fishery Agreements
 - Settlements of Groundwater Adjudications
- Bay Delta Water Quality Update Voluntary Settlement Agreements

