WE WILL NOT DISCUSS BDCP!
How Not To Handle A Drought
The Bureau and DWR operate the Central Valley Project and the State Water Project. Those operations are based on permits granted by the State Water Resources Control Board.

Every few years the SWRCB determines what is needed to protect beneficial uses and adopts water quality objectives to protect those uses.

In a separate follow-on process, the SWRCB then assigns responsibility for meeting those objectives. The current Water Right Decision D-1641 assigns many/most Delta related objectives to the USBR and DWR.
Once a Water Right Order obligates you to meet a water quality standard you must comply with such order unless you get temporary or permanent relief.

A water right holder may petition the SWRCB for a change to its permits. The normal process involves public notice and participation and an evidentiary hearing.

An “Urgency” process exists for emergencies. It involves no public notice and no hearing.
California Water Code Section 1425. Conditional, temporary permit; findings; definition; issuance

(c) “Urgent need,” for the purposes of this chapter, means the existence of circumstances from which the board may in its judgment conclude that the proposed temporary diversion and use is necessary to further the constitutional policy that the water resources of the state be put to beneficial use to the fullest extent of which they are capable and that waste of water be prevented; except that the board shall not find an applicant’s need to be urgent if the board in its judgment concludes, if applicable, that the applicant has not exercised due diligence either (1) in making application for a permit pursuant to provisions of this division other than this chapter, or (2) in pursuing that application to permit.
2007-2008 Drought years.

2009 thought to be third drought year.

CVP notified Exchange Contractors they may not be able to supply them with export water.

DWR and USBR Petition SWRCB for relief from permit condition to meet outflow.

Exports rose from 2,000 cfs to 4,000 cfs while outflow was 7,000 cfs instead of required 11,400 cfs.
2012 A below normal year.

2013 First six months are one of the driest six month period on record.

Spring of 2013 DWR and USBR ask SWRCB (via letter) to be partially relieved from obligation to meet Western Delta Agriculture Standard and ask for cold water obligation on Sacramento River to be cut; due to insufficient storage.

SWRCB responded with letter that “okayed” the changes stating it would not prosecute any lack of compliance.
2014  DWR and USBR have no drought contingency plans

After 12+ months of drought, DWR and USBR Petition the SWRCB for relief from outflow requirement under “Urgency” process.

Eight times the projects asked for relaxation of their permit conditions. These conditions include the minimum fishery flows for critical years.

Urgency process allows no public, notice or input. Urgency Order granted, then changed 7 additional times, also without public notice or comment.
2015

After the fishery agencies and the SWRCB agreed to a change in the Sacramento River cold water standard it turned out the Bureau’s thermometer was giving faulty readings and the “approved” change was revoked.

A new “deal” is being worked out and the 3rd request for “urgency” changes is pending before the Board.
Those Damn Illegal Diverters in the Delta!
Is there water in the Delta to supply riparians and pre-1914 right holders?
DUH!
Delta Tidal Flows and Levels

The Sacramento-San Joaquin Delta is at sea level. Water levels vary greatly during each tidal cycle, from less than a foot on the San Joaquin River near Interstate 5 to more than five feet near Pittsburg. During the tidal cycle, flows can also vary in direction and amount. For example and as shown on the map below, the flow near Pittsburg during a typical summer tidal cycle can vary from 330,000 cfs upstream to 340,000 cfs downstream. The "net" summer Delta outflow is a very small amount of the total water movement, generally 5,000 to 10,000 cfs.
During the 1950’s the Department of Water Resources cooperated with the Bureau of Reclamation and the local Delta water users in studies to identify individual entitlements to the waters of the Sacramento River and the Delta. These studies, using the classical approach to solution of water rights problems, considered priority of rights to quantity of water rather than quality. No resolution was reached in the Delta using this approach. Actually, in the Delta, the question of quantity is of little concern, since the Delta is never short of water. If flow from the tributary streams were insufficient to meet Delta use, water from the Pacific Ocean would flow through the San Francisco Bay system and fill the Delta channels.
(e) Water problems within the Delta are unique within the State of California. As a result of the geographical location of the lands of the Delta and tidal influences, there is no physical shortage of water. Intrusion of saline ocean water and municipal, industrial and agricultural discharges and return flows, tend, however, to deteriorate the quality.
“Well, there may be water, but the projects release stored into the Delta and Delta folk have no right to that stored water!”
§ 7075. Reclamation of water

Water which has been appropriated may be turned into the channel of another stream, mingled with its water, and then reclaimed; but in reclaiming it the water already appropriated by another shall not be diminished. (Stats. 1943, c. 368, p. 1669, § 7075.)

In Butte Canal & Ditch Co. v. Vaughn, 11 Cal. 143, the California Supreme Court made it clear that in cases of the commingling of water where it is difficult to determine with exactness the quantity of water which parties are entitled to divert:

"The burden of proof rests with the party causing the mixture. He must show clearly to what portion he is entitled. He can claim only such portion as is established by decisive proof. The enforcement of his right must leave the opposite party in the use of the full quantity to which he was originally entitled."
§ 12201. Necessity of maintenance of water supply

... the maintenance of an adequate water supply in the Delta sufficient to maintain and expand agriculture, industry, urban, and recreational development ... to provide a common source of fresh water ... is necessary ...

§ 12202. Salinity control and adequate water supply

Among the functions ... by the State ... in coordination with the ... United States in providing salinity control for the Delta through operation of the Federal Central Valley Project, shall be the provision of salinity control and an adequate water supply for the users of water in the Sacramento-San Joaquin Delta ...
(g) The law of the State of California requires protection of the areas within which water originates and the watersheds in which water is developed. The Delta is such an area and within such a watershed. Part 4.5 of Division 6 of the California Water Code affords a first priority to provision of salinity control and maintenance of an adequate water supply in the Delta for reasonable and beneficial uses of water and relegates to lesser priority all exports of water from the Delta to other areas for any purpose.
United States vs. State Water Resources Control Board 182 Cal.App.3d82(1986) at page 139 provides:

“In 1959, when the SWP was authorized, the Legislature enacted the Delta Protection Act. (§§ 12200-12220.) The Legislature recognized the unique water problems in the Delta, particularly ‘salinity intrusion,’ which mandates the need for such special legislation ‘for the protection, conservation, development, control and use of the waters in the Delta for the public good.’ (§ 12200.) The act prohibits project exports from the Delta of water necessary to provide water to which the Delta users are ‘entitled’ and water which is needed for salinity control and an adequate supply for Delta users. (§§ 12202, 12203, 12204.)

But the crucial question left unanswered by the protective legislation is exactly what level of salinity control the projects must provide..."
“Well, when the Delta gets salty you couldn’t divert so why should you be able to take advantage of the projects’ freshening of the Delta?”
Delta Problems — salinity incursion and water supplies

Salinity incursion into the Delta results from the flooding and ebbing of ocean tides through the San Francisco Bay and Delta system during periods when the fresh water outflow from the Delta is insufficient to repel the saline water. The natural fresh water outflow from the Central Valley was historically inadequate to repel salinity during summer months of some years. The first known record of salinity encroachment into the Delta was reported by Cmdr. Ringgold, U.S. Navy, in August 1841, whose party found the water at the site of the present city of Antioch very brackish and unfit for drinking. Since that time, and particularly after the turn of the century, with expanding upstream water use salinity incursion has become an increasingly greater problem in Delta water supplies. The maximum recorded extent of salinity incursion happened in 1931, when ocean salts reached Stockton. Since 1944 extensive incursion has been repulsed much of the time by fresh water releases from Central Valley Project storage in Shasta and Folsom Reservoirs. Without such releases, saline water would have spread through about 90 percent of the Delta channels in 1955 and 1959. Although upstream uses might not have reached present levels in the absence of the Central Valley Project, salinity problems would still have been very serious during most years.

Further increase in water use in areas tributary to the Delta will worsen the salinity incursion problem and complicate the already complex water rights situation. To maintain and expand the economy of the Delta, it will be necessary to provide an adequate supply of good quality water and protect the lands from the effects of salinity incursion. In 1959 the State Legislature directed that water shall not be diverted from the Delta for use elsewhere unless adequate supplies for the Delta are first provided.
ESTATES OF ELIZABETH AUGUSTA BEZLER, deceased.

Stockton, California
February 16, 1959.

TO WHOM IT MAY CONCERN:

Mr. Herbert W. Bicknose, as Administrator with the Will
Annexed of the Estate of ELIZABETH AUGUSTA BEZLER, deceased, has
listed for sale, a tract of land comprising 2129.01 acres, more
or less, located in Reclamation District No. 1, on Union Island,
San Joaquin County, California.

SALE PRICE:

$175 per acre.

TERMS OF SALE:

Each Seller reserves all mineral rights. Offers to
purchase may be tendered either to the Administrator
of the Trust Department, Bank of America National Trust
and Savings Association, Stockton Main Office, Stockton,
California.

MAP:

A plat showing the tract of land, cultivation units,
irrigation and drainage ditches, is attached. The
tract is bounded on the south by the Grant Line Canal,
and on the north, by the County Road.

GENERAL:

Traces of peat are in evidence on various points over
most of the area excepting the eastern portion of Re-
clamation District No. 1, where brown loam and silt loam of
the Salina type is present, capping the primary formation.
Gill depth averages eight to nine feet, varying from two
to fifteen feet and is controlled with drainage to a depth
of five feet at the lowest point. The substructure is
probably a clay or water-packed substance; the profile
in the peat shows alternating strata of well decomposed
peat and dark gray loam through the upper five feet of the
soil column. There are sand pockets apparently of
minimal extent through the soil column coming to the
surface in occasional blowouts of nominal area and in-
frequent. The sand is sharp in places and miscellaneous in
GENERAL—continued

others. The soil of this property is of loam and is
mapped by the U. S. Geological Survey as "Sacramento Series." Farming operations of this tract of land have been, in the
main, satisfactory and conform in general to a better than
average standard of excellence, for the several types. It
is said that this land, when levelled, is well adapted to the
production of asparagus. 127 acres bordering the Grant Line
Canal have already been levelled and planted to asparagus.

DRAINAGE:

Drainage of the tract has been limited to the seepage ditch
along the south line near the toe of the Grant Line Canal levee
and a seepage and drainage ditch to the north, and set back from
the levee, a 10 HP pump with capacity of 2500 GPM. Drainage
ditches at the present total 1 1/2 miles in length.

IRRIGATION:

Water for irrigation is obtained from the Grant Line Canal
both by flood gates and by pumping. The pumping plant consists
of a 125 HP GE motor driving a 25" Keough Cent. pump by belt with
tightener. The plant includes a Cent. priming pump, DC SHP
GE motor. This plant and the flood gates supply water for the
property distributed through a system of canals and ditches:
reaching practically all of this unit; said ditches total seven
miles in length. The pumping unit is rated 15,000 GPM. The
irrigation water being derived from the Delta water courses, the
question naturally arises about its contamination by salt water.
In a general sense, this area is free from such menace. The
year of record drought, 1931, readings of the State Reclamation
Board show that there was an injurious concentration of chlorine
at Clifton Court Ferry, six miles down stream along the Grant
Line Canal, for a period September 16 to October 15. At Bossmade
Bridge, a few miles upstream, concentration never did reach even
dangerous concentration.

SOIL ALKALI:

In common with all reclaimed land, the soil in this property may
be considered to contain from a trace to a mild concentration of
alkali. These salts are usually the soluble varieties, Glauber and
common salt, comprising the white alkalis. They are readily leached
out and controlled where pure water and adequate drainage are avail-
able. No areas of any consequence have been noticed where the
effects of alkali were serious. Any comments herein made, however,
as to the character or condition of the soil, salt water contamination,
or alkali concentration, are to be construed as comments only and
not, in any sense, as a warranty as to actual conditions.

IMPROVEMENTS:

The improvements on the various tracts shown on the plat are as
follows:
MEASURE MEASURE MEASURE MEASURE MEASURE MEASURE MEASURE MEASURE MEASURE MEASURE MEASURE
**WEBER FOUNDATION STUDIES**

**ESTIMATED SEASONAL NATURAL RUNOFF**

**Klamath, Eel, Van Duzen, Mad, and Russian Rivers — North Coast Area**

1917-18 to 1946-47

53 year average used by the DEPARTMENT OF WATER RESOURCES:

- 18,820,000 acre feet (100.0%)
- 17 dry year average 15,700,000 acre feet (72.3%)
- 6 drought year average 10,930,000 acre feet (58.7%)

**Surplus** 7,930,000 AF/YR

**Shortage** 8,049,000 AF/YR

**Central Valley**

1917-18 to 1946-47

53 year average used by the DEPARTMENT OF WATER RESOURCES:

- 33,800,000 acre feet (100.0%)
- 17 dry year average 23,684,000 acre feet (71.0%)
- 6 drought year average 17,631,000 acre feet (52.2%)

**Surplus** 8,049,000 AF/YR
To address this 8 million acre foot shortage, the State Water Project planned to take 5 million acre feet of North Coast river flow and add it to the Sacramento River system.