March 15, 2022

Email: Bay-Delta@waterboards.ca.gov
State Water Resources Control Board
Water Availability/Curtailment Team

Re: Possible Curtailment Method Based on a Water Right
Term 91 Type Approach

AS APPLIED BY THE SWRCB, TERM 91 SHOULD NOT BE INTEGRATED INTO THE
WATER AVAILABILITY/CURTAILMENT ANALYSIS

Term 91 has been and is being inappropriately applied by the SWRCB to deprive water
needs within the watersheds of origin, including the Delta of 1) priority use of natural flow over
use for SWP and CVP obligations including Project exports and 2) the priority right to recapture
SWP and CVP water including stored water, foreign source water, out of season water or any
other Project Water.

Term 91 specifically states:

“No diversion is authorized by this license when satisfaction of inbasin entitlements requires
release of supplemental Project water by the Central Valley Project or the State Water Project.

A. Inbasin entitlements are defined as all rights to divert water from streams tributary to the
Sacramento-San Joaquin Delta or the Delta for use within the respective basins of origin or
the Legal Delta, unavoidable natural requirements for riparian habitat and conveyance losses,
and flows required by the State Water Board for maintenance of water quality and fish and
wildlife. Export diversions and Project carriage water are specifically excluded from the
definition of inbasin entitlements.

B. Supplemental Project water is defined as water imported to the basin by the projects, and
water released from Project storage, which is in excess of export diversions, Project carriage
water, and Project inbasin deliveries.

The State Water Board shall notify the licensee of curtailment of diversion under this term
after it finds that supplemental Project water has been released or will be released. The State
Water Board will advise the licensee of the probability of imminent curtailment of diversion as far in advance as practicable based on anticipated requirements for supplemental Project water provided by the Project operators.”

PROBLEMS WITH SWRCB’S APPLICATION OF TERM 91

1) If the Delta is in balance and the Projects release even one acre foot of “supplemental project water” to meet flows required by the State Water Board for maintenance of water quality and fish and wildlife then those within the watershed are precluded by the SWRCB application of Term 91 from appropriating (with priority over the Projects) the natural flow still in the watershed. There are periods of available natural flow even during dry periods and availability will vary as to the location within the watershed.

2) The protected supplemental water is not limited to truly surplus water developed by the Projects and includes water needed to meet Project obligations for salinity control, mitigation of Project adverse impacts, bypass flows and preservation of fish and wildlife. The planning for the CVP and SWP was to limit exports to water which is truly surplus to the present and future needs within the watersheds and to progressively continue with additional development of surplus water to meet increasing water needs within the watershed and meet increasing Project contractor demands. It was expected that the increasing needs in the Delta watershed would exceed the available natural flow and Project developed surplus water such that by the year 2000 it would be necessary to supplement water in the Delta annually with 5 million acre feet of surplus water from Project development in North Coast watersheds. The SWRCB application of Term 91 precludes the right of watershed users to secure priority for in watershed needs with priority over the Projects to recapture Project water whether stored or developed including “supplemental project water”. The adverse impact to needs within the watershed is increased when “the protected supplemental water” is withdrawn from the watershed and exported. Transfers and changes should not be allowed if the water is necessary to meet needs within the watersheds.

3) The SWRCB misapplication of Term 91 has resulted in Project water and Term 91 protected natural flow being excluded from the water availability for priority appropriation by in watershed users. The issues of payment, differences in location of proposed points of diversion, in Delta versus out of Delta protections, federal CVP or SWP water, applicability of Congressional directives and other specifics should be addressed in the application process and not in the threshold availability of water determination.

When watershed priority is applied to recapture Project stored or Project foreign water the question of payment arises as to the watershed user’s equitable share of the cost of the dam or other facilities used to capture such water. If the watershed user builds its own dam or other facilities to capture such water then the payment issue would not arise. No payment should be required for the incidental benefit from Project stored or foreign water required to mitigate Project adverse impacts, provide salinity control, protect quality at the export pumps, meet regulatory obligations, preserve fish and wildlife (SWP), meet CVPIA requirements (CVP) and meet other Project obligations including enhancement of fish and wildlife. As to the Delta the no payment for incidental benefit issue has already been adjudicated as against the SWP, CVP and

2.
SWRCB in the Superior Court Decision leading to the so-called Recanelli decision. (See ATTACHMENT A)

CVP AREA OF ORIGIN PRIORITY

Cases have addressed whether such recapture violates a federal project congressional directive. Usually the issue is related to a priority purpose or place of use. Watershed users who have executed CVP settlement or delivery contracts and have sought preferential contract allocations have not been allowed to modify contract terms. For CVP project water the court cases appear to require that watershed priority be established outside of the CVP contracts through a SWRCB water right application proceeding which would establish an appropriative right for meeting the watershed need with priority over the SWRCB permits and licenses held by the United States. For establishing watershed priority over the SWP project water the court cases do not limit the process to obtaining a new SWRCB appropriative right but allow for a process for watershed areas within the place of use of the SWP permits to establish a priority by contract. Uncertainty remains as to process for negotiation or other mechanism for establishing payment for Project water specifically delivered or provided to the watershed user.

There are cases where a distinction is suggested as to whether recapture of previously stored Project water should be treated differently than establishing a priority for use of subsequently stored Project water.

In the case of Tehama-Colusa Canal Authority v. U.S. Dept. of Interior 819 F.Supp.2d 956 (2011) at pages 994 and 995 the Court provided:

“In 1994 the Bureau issued a November 2nd, Area of Origin Issue Paper, SAR at 1317, which stated the Bureau’s position that Section 11460 is “directed toward obtaining prior water rights, not obtaining deliveries of water under the Project’s rights.” In 1996 another Bureau draft report addressed applicability of area of origin statutes to the CVP, confirming that area of origin statutes in California water law ‘do not guarantee that the water supply needs of an entire area of origin, will or can be met.’ SAR at 1154:

Under these statutes, water rights applicants within the area of origin are essentially guaranteed that new water right applications filed for development of water within the area of origin will not be rejected by the [Board] on the basis that no water is available for appropriation by virtue of a senior water right to export water from the watershed. While the area of origin statutes may result in future reductions in the quantities of CVP water that can be delivered to CVP export customers, the area of origin provisions do not become part of a contract for the delivery water; they are part of the water rights on which the contract is based and subject that right to appropriations by users within the areas of origin.”

The “Area of Origin statutes” addressed above are the “County of Origin” statutes, (WC 10505 et seq.), and the Watershed Protection Act”, (WC 11460 et seq.). Not relevant and not addressed are the additional protections for the Delta provided in (WC 12200 et seq.).
Court comments in the above Tehama case raise the issue as to whether for the CVP the “Area of Origin statutes” provide for priority appropriation beyond “natural flow”. CVP issues remain as to establishing the priority for water needed to meet water quality standards and fish and wildlife requirements in the watershed which the CVP is directly or indirectly allocating to other purposes and whether there is a difference as to previously stored water versus the storage of water after the date of the Watershed Priority permit granted by the SWRCB. The detail of resolution of payment for additional “Project water” specifically provided to the watershed user remains to be determined. Incidental benefit from “Project water” provided for other purposes is not compensable. The SWRCB could condition the priority for the compensable portion of “Project water” on payment of equitable sharing of cost, which if not agreeable between the parties could be submitted to court determination.

**SWP AREA OF ORIGIN PRIORITY**

In contrast to the CVP, for the SWP it is clear that watershed priority can be established through the SWRCB appropriative right permitting or by way of contract. The detail of resolution of payment for additional “Project water” specifically provided to the watershed user remains to be determined. Incidental benefit from “Project water” provided for other purposes is not compensable. Resolution through the SWRCB process as set forth above could also apply to the SWP. For the direct contracting process there is an issue as to whether the watershed need to be served must be within the place of use of the SWP permits. There is also no clear process to compel good faith negotiation between the watershed user and the DWR.

In the case of Eldorado Irrigation Dist. v. State Water Resources Control Bd. 142 Cal. App. 4th 937 where the SWRCB attempted to insert Term 91 into a 1927 water appropriation permit assigned jointly to El Dorado Irrigation District and El Dorado County Water Agency the Court at pages 943 and 944 provided:

“As will be seen we agree with the trial court that the Board abused its discretion in imposing term 91 on El Dorado’s permit, when it has not included that term in the permits and licenses of appropriators in the Delta watershed whose rights are junior to those of El Dorado’s. The Board’s action contravened the rule of priority, which is one of the fundament principles of California water law, because appropriators junior to El Dorado can divert when El Dorado cannot. Although the rule of priority is not absolute the Board is obligated to protect water right priorities unless doing so will result in the unreasonable use of water, harm to values protected by the public trust doctrine, or the violation of some other equally important principle or interest....

We disagree with the trial court that the Board’s action contravened the county of origin and area of origin statutes in the Water Code, but we likewise reject any argument that those statutes require inclusion of Term 91 in El Dorado’s permit.”

Although not necessary to the decision in the case the court went on to analyze WC 11462 and at page 976 provided:
“In any event, even if the area of origin statutes could otherwise be deemed to apply to the Board in this instance, section 11462 contradicts the trial court’s conclusion that appropriators in an area of origin may assert a priority to water from that area that was properly stored by another in an earlier season. That statute provides that the area of origin statutes do not “require the department to furnish to any person without adequate compensation therefor any water made available by the construction of any works by the department.” (Emphasis added)

With regard to area of origin users recapturing Project water including stored water the issue is compensation not prohibition.

The proposal to impose a Term 91 like provision into existing water rights for water availability and curtailment purposes should not receive further consideration. It is my understanding that staff may have already reached such conclusion.

There is a need in the water availability analysis and curtailment process to recognize the opportunity for those within the watershed to establish an area of origin water right for meeting needs within the watershed with priority over Project exports from the watershed. As set forth above perfection of such right can be by way of application to the SWRCB for both the CVP and SWP and also by way of contract for the SWP. The priority would extend to natural flow for both the CVP and SWP. With appropriate compensation the priority would extend to SWP Project water including stored water. For CVP Project water including stored water the law is less clear and there may be a distinction between previously stored water and water stored after the permit is granted.

The Delta Protection Act of 1959 (WC 12200 et seq.) provides protection in addition to that provided by the area of origin statutes and it is critical that in any case, as a minimum, the export of water through Project facilities which is necessary for salinity control not be allowed.

WATER BASED ON WATER RIGHTS AND CONTRACT RIGHTS INTENDED TO MEET NEEDS WITHIN THE WATERSHED SHOULD NOT BE ALLOWED TO BE EXPORTED

ADDITIONALLY EXPORT FROM THE WATERSHED THROUGH PROJECT FACILITIES OF PROJECT WATER, TRANSFER WATER AND ANY OTHER WATER SHOULD NOT BE ALLOWED IF SUCH WATER IS NECESSARY TO PROVIDE WATER TO WHICH DELTA USERS ARE ENTITLED AND WATER WHICH IS NEEDED FOR SALINITY CONTROL AND AN ADEQUATE SUPPLY FOR DELTA USERS

The policy, promises, law and plans for the SWP and CVP make it clear that the present and future needs within the Delta and other watersheds of origin have priority over exports and that the Projects are limited to water which is truly surplus to such needs.

The alleged purpose of Term 91 was to protect the Projects from others wrongfully increasing the Project burden to meet water quality standards including salinity control and meet other project obligations within the watershed. Since the Projects are obligated to yield to the priority for meeting needs within the watershed it is the prohibition of export of watershed
priority water that increases the burden of the Projects to meet obligations within the watershed. Priority for meeting needs within the watershed is not only clearly required by law but should help the Projects meet water quality standards, meet mitigation obligations, provide salinity control, satisfy fish and wildlife needs, reduce stream depletions, maintain groundwater accretions and help groundwater sustainability.

Term 91 protection for the Projects should not be applied to preclude the priority for meeting the water needs within the watershed. The need for provision for payment for stored and foreign water as discussed herein can be addressed but is not a proper basis for depriving the priority for watershed needs as to natural flow, water for salinity control, water for mitigation and incidental benefit from fulfillment of Project obligations and other purposes.

WATER DELIVERY CONTRACT PROVISIONS RECOGNIZE THE PRIORITY FOR THE AREAS OF ORIGIN WHICH THE SWRCB APPLICATION OF TERM 91 BLOCKS

Standard SWP contract provisions provide:

“(b) In the event that the State is unable to construct sufficient additional conservation facilities to prevent a reduction in the minimum project yield, or if for any other reason there is a reduction in the minimum project yield, which, notwithstanding preventative or remedial measures taken or to be taken by the State, threatens a permanent shortage in the supply of project water to be made available to the contractors:

(1) The annual entitlements and the maximum annual entitlements of all contractors, except to the extent such entitlements may reflect established rights under the area of origin statutes, shall, by amendment of Table A included in Article 6(b), and of Article 7(b), respectively, be reduced proportionately…

(c) In the event that the State, because of the establishment by a party of a prior right to water under the provisions of Sections 11460 through 11463 of the Water code, enters into a contract with such party for a dependable supply of project water, which contract will cause a permanent shortage in the supply of project water to be made available to the District hereunder:

(1) The State shall: … (ii) revise the District’s annual entitlements and maximum annual entitlement, by amendment of Table A…” (See ATTACHMENT B pages 18/2 and 18/3 of November 4, 1960 Contract Between the State of California and the Metropolitan Water District of Southern California for a Water Supply)

There should be no doubt that watershed needs are entitled to priority over State contractors for Project water including stored water, previously stored water, foreign water or any other water. The issue of payment for other than incidental benefit remains.

The Delta Protection Act of 1959.

The Delta Protection Act of 1959 (Wat. Code, § 12200 et seq.) establishes the priority for protection of the Delta over exports of water from the Delta.
Recognizing the massiveness of the State Water Resources Development System and the tremendous impacts of exporting millions of acre feet of water from the Delta, the California Legislature imposed special responsibilities on the export projects which are currently the SWP and CVP. Water Code section 12200 et seq. require that the projects provide "salinity control" for the Delta; that the projects integrate to the maximum extent possible releases from storage to maintain an adequate water supply in the Delta sufficient to maintain and expand agriculture, industry, urban and recreational development in the Delta area, provide a common source for exports, and that no water shall be exported which is necessary to meet the Delta requirements.

The interpretation of the Delta Protection Act of 1959 should not be a subject of significant dispute. DWR, the holder of the water rights for the SWP, acknowledged its responsibilities early on. As "Department of Water Resources Bulletin No. 76, Preliminary Edition December 1960 Report to the California Legislature" (See ATTACHMENT C) provides:

"The coordinated use of surplus water in and tributary to the Delta and of regulated or imported supplements to this supply, as required, is referred to as the Delta Pooling Concept. Under this concept of operation the State will ensure a continued supply of water adequate in quantity and quality to meet the needs of export water users. Advantage will be taken of surplus water available in the Delta, and as the demand for water increases and the available surplus supply is reduced by further upstream uses, the State will assume the responsibility of guaranteeing a firm supply of water, which will be accomplished by construction of additional storage facilities and import works. At the same time, the water needs of the Delta will be fully met. [Id. p. 11.]

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. [Id. p. 12.]"
The California Water code specifies that one of the functions of the State Water Resources Development System is to provide salinity control and an adequate water supply in the Delta. If it is in the public interest to provide substitute supplies in lieu of salinity control, no added financial burden shall be placed on the local water users as a result of such substitution. The code also declares that water to which the Delta is entitled shall not be diverted. It is clearly established that supplying water for the Delta must be a primary and integral function of the State Water Facilities.” [Id. p. 26.]

Of particular relevance is the Appellate Court Decision in United States vs State Water Resources Control Board cited below. Eight cases against the SWRCB were coordinated and with intervenors all major water interests were parties including the SWRCB, USBR, DWR, Federal Project contractors and State Water Project contractors.

In United States vs State Water Resources Control Board 182 Cal.App.3d 82 (1986) at page 139 the Appellate Court provides:

“[n 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.) (Emphasis Added)

But the crucial question left unanswered by the protective legislation is exactly what level of salinity control the projects must provide. As noted, the Board concluded that the projects are responsible only for maintaining that level of salinity which would exist in the Delta had the projects never been constructed, the so-called ‘without project level. The board declared that if the Delta water users desire a higher level of protection (a greater amount of outflow), they can purchase such ‘enhancement water’ from the projects.”

The Court did not agree with the Board position. At page 117 the Court concluded:

“Whatever final conclusion is to be drawn from Antioch regarding the nature and extent of common law riparian rights to salinity control, existing constitutional and legislative authorities encompass the Board’s obligation to protect the quality of the Delta waters from saltwater intrusion. As mentioned above, the water quality legislation unmistakably requires the Board to formulate water quality standards to provide salinity control to ‘ensure the reasonable
protection of beneficial uses (WC 13241), a statutory classification earlier noted as wide ranging (WC 13050, subd. (f)). Though there can be no doubt concerning the Board’s authority to take action to protect the consumptive uses (agricultural, industrial and municipal) in the Delta, its approach to that task was seriously flawed by equating its water quality planning function with protection of existing water rights.”

At page 141 the Court provided:

“Thus, the Board’s authority in setting water quality standards is not limited to the protection of water rights but extends to the protection of all beneficial uses from degradation of water quality, even if the resulting level of water quality exceeds that provided by water rights.”

At page 142 The Court provided:

“That independent basis of authority vests jurisdiction in the Board to compel compliance with water quality standards insofar as the project’s diversions and exports adversely affect water quality. Such authority, we think, includes the power to impose related costs on the projects.”

At page 128 the Court confirmed that providing Salinity control in the Delta was also a major purpose of the Projects:

“Salinity control in the Delta was unquestionably contemplated by state and federal authorities as one of the purposes to be fulfilled by the statewide water projects;”

In furtherance of the determination that protection of the Delta has priority over Project Contractors including exports from the Delta, the Court at page 148 provides:

“Thus, both substantively and conceptually, the contractors cannot justify any reasonable expectation of a certain or guaranteed water supply for delivery.

The trial court in the above case determined that there is no obligation on the part of the Delta water users to pay for the incidental benefit from the Project’s provision of salinity control for other purposes including fish and wildlife, maintenance of quality at export pumps and meeting public trust needs. The payment obligation only arises from the release of project developed truly surplus waters specifically for the enhancement of Delta water user supply. Eight separate cases were coordinated into Judicial Council Coordination Proceeding No. 548. The parties fell into nine groups: (1) the Board-SWRCB, (2) Delta industries, (3) the central Delta riparians, (4) the south Delta riparians, (5) the U. S. Bureau of Reclamation (the U.S.), (6) the federal contractors, (7) the California Department of Water Resources, (8) the state contractors, and (9) the Contra Costa municipal users. The court addressed the Delta water users’ “inchoate right to ‘recapture’ water being exported by the state and federal projects” under the Watershed
of Origin Statute and Delta Protection Act. The court generally concluded that perfection of the right to recapture water being exported would require a Delta user to obtain an appropriation permit and a contract to pay for the recaptured water that was “developed by the projects and that was released specifically for his benefit”. Specific to the payment issues the court provided that “Delta users need not pay for salinity control water even if they are incidentally benefited unless the water is released specifically for their benefit”, “Delta water users need not pay for the enhanced water quality that results from water released by the projects to maintain adequate water quality at the export pumping stations”, “Delta users need not pay for the enhanced water quality resulting from the release of abandoned water”, and “Delta users need not pay for the enhanced water quality resulting from water released to preserve or enhance fish or wildlife resources”. (See ATTACHMENT A, April 13, 1984 Superior Court decision in the above referenced case of United States v State Water Resources Control Board)

CHANGES TO SALINITY CONTROL

The SWRCB has argued that due to its authority to set the level of salinity control it can ignore the prior decisions setting the needed level of salinity control to facilitate a so called emergency change resulting in the export of the very water that would have been used to meet the salinity standard. The D-1641 water quality standards are the result of many days of adjudicatory hearings. The factual and policy basis for the salinity control standard has not changed. The D-1641 salinity standards eliminated the interior delta salinity protection for Striped bass and already incorporate relaxations due to the occurrence of droughts and the expected reoccurrence of dry years. The current plan to meet the standards is based on calculated exceedance using a forecasting period of 30 to 51 years. Such practice ignores the reality that the current and following years could be as dry as those anticipated in the past. Exports of water are allowed before the determination of the hydrology for the then current year, and years thereafter, thus sealing the likely failure to meet the salinity standards. The pattern and practice of the SWP and CVP of not planning to meet the standards in subsequent dry years and the collaboration of the SWRCB in granting temporary urgency changes and avoiding enforcement against the Projects should stop.

The SWRCB was intended to be an independent body that would be free from political influence that could, in the public interest, fairly regulate water quality and administer the allocation of water for appropriate rights including those of the State and United States. Initially the CVP contested state jurisdiction but as a result of Court decisions and congressional directives the CVP was required to meet SWRCB water quality standards. As the SWRCB proceeded with developing water quality standards to protect fish and the environment the Projects and their contractors more aggressively opposed water quality standards thereby resulting in a series of direct interventions by the Governors on behalf of export contractors. Fish and Wildlife Regulatory Agencies were and are working closely in private with the Projects and their contractors and the SWRCB staff to replace water flow needs for fish with habitat. Over time the independence of the SWRCB has deteriorated.
The D-1641 salinity standards even without the emergency relaxation have not been adequate to “protect all beneficial uses from degradation of water quality.” A number of Fish species are on the border of extinction and the health and safety of Delta waters is greatly degraded. Although D-1641 standards are basically those put forth by the Project contractors the SWRCB did hold extensive public hearings allowing the introduction of evidence and cross-examination of witnesses. The water quality standards were adopted by the SWRCB and subsequently approved by the United States EPA. The obvious ongoing conflicts of interest in having the State and United States regulating their own projects, the revolving door and interrelationship of staff, injection of politics from Governors through interference with SWRCB enforcement efforts against the Projects and applying emergency powers to circumvent senior water and statutory rights have further deteriorated the independence of the SWRCB. To suggest that changes in salinity control requirements may be made by way of temporary urgency changes is irresponsible.

b. **Watershed Protection Act.**

Water Code section 11460 provides:

“In the construction and operation by the department of any project under the provisions of this part a watershed or area wherein water originates, or an area immediately adjacent thereto which can conveniently be supplied with water therefrom, shall not be deprived by the department directly or indirectly of the prior right to all of the water reasonably required to adequately supply the beneficial needs of the watershed, area, or any of the inhabitants or property owners therein.”

Water Code section 11128 provides that the limitations also apply to any agency of the State or Federal Government.

Although physically apparent, Water Code section 12931 makes it clear that as to state water resources development the Sacramento-San Joaquin Delta shall be deemed to be within the watershed of the Sacramento River.

Section 11460 applies to the “construction and operation” of both the SWP and CVP. (See *United States v. State Water Resources Control Bd.* (1986) 182 Cal.App.3d 82, 138-139.)

The basic rules of statutory interpretation require that meaning be given to each and every word.

In People v. Weidert (1985) 39 Cal. 3d 836 at page 843 the California Supreme Court provided:
“It is a settled principle in California law that when statutory language is thus clear and unambiguous there is no need for construction, and courts should not indulge in it. (Citations omitted) This principle is but a recognition that courts ‘must follow the language used and give to it its plain meaning, whatever may be thought of the wisdom, expediency, or policy of the act, even if it appears probable that a different object was in the mind of the legislature.’ (Citations omitted)”

In the construction and operation of the CVP and SWP, the area where water originates (and the area immediately adjacent thereto) shall not be deprived directly or indirectly of the prior right to all of the water reasonably required.

Water Code section 11460 does not include any reference to exports nor does it limit the protection to any particular type of deprivation. Although deprivation by way of export is prohibited, it is not the only prohibition. The use of the terms “directly or indirectly” confirms the intent to provide the broadest protection so that whatever the scheme devised by the State, Feds and their contractors, the protection would be provided.

The intent of Water Code 11460 is most simply and best set forth in the following statement from February 17, 1945 by R.C. Calland, the Acting Regional Director of the Bureau of Reclamation, to the Joint Committee on Rivers and Flood Control of the California State Legislature. The committee had asked the question, “What is your policy in connection with the amount of water that can be diverted from one watershed to another in proposed diversions?”

In stating the Bureau’s policy, Mr. Calland quoted Water Code section 11460 of the State Water Code, which is sometimes referred to as the county of origin act, and then he said:

“As viewed by the Bureau, it is the intent of this statute that no water shall be diverted from any watershed which is or will be needed for beneficial uses within that watershed. The Bureau of Reclamation, in its studies for water resources development in the Central Valley, consistently has given full recognition to the policy expressed in this statute by the legislature and the people. The Bureau has attempted to estimate in these studies, and will continue to do so in future studies, what the present and future needs of each watershed will be. The Bureau will not divert from any watershed any water which is needed to satisfy the existing or potential needs within that watershed. For example, no water will be diverted which will be needed for the full development of all of the irrigable lands within the watershed, nor would there be water needed for municipal and industrial purposes or future maintenance of fish and wildlife resources.”

THE SWP AND CVP MUST AT PROJECT EXPENSE DEVELOP WATER THAT IS TRULY SURPLUS TO THE WATER NEEDS IN THE WATERSHEDS
OF ORIGIN AND FROM SUCH SURPLUS SUPPLY MITIGATE FOR ALL 
DETRIMENT AND MEET THE AFFIRMATIVE OBLIGATIONS OF THE 
PROJECTS WITH DUE RECOGNITION OF THE PRIORITIES ESTABLISHED 
BY LAW

The experience of prior dry years has not deterred the Projects from continuing to export 
water from the Delta without regard to meeting regulatory requirements in subsequent dry years.

The Failure of the Projects to Timely Develop 5 Million Acre Feet or More of Surplus 
Water and Their Deliberate Relaxation of Restrictions on Use of Temporarily Available 
Project Water Has Resulted In Permanent Demand for Residential Development and 
Permanent Crops in Arid and Desert Areas Which Cannot Be Met

The plan to develop water projects in the North Coast to seasonally provide to the Delta 
five (5) million acre feet of surplus water by the year 2000 was not implemented. (See 
ATTACHMENT C, December 1960 Bulletin 76 page 13) The lack of this 5 million acre feet 
results in the SWP not having a supply of water surplus to meeting the needs of the Delta and 
other areas of origin and to serve the roughly 4.25 million acre feet of so called Table A SWP 
contract entitlements.

The CVP also suffers from a shortage in meeting even the so-called firm water 
entitlements in its contracts and has failed to resolve the salt build up in the groundwater and San 
Joaquin River due to their circumvention of the San Luis Unit requirement for a drain with an 
outlet to the ocean. Such circumvention increases the demand for water for dilution.

The contracts of both the SWP and CVP clearly contained language conditioning the 
delivery of water on first meeting senior water rights, salinity control and other regulatory 
requirements including the rights of those in the areas of origin to recapture project water for 
local needs. The modification of SWP and CVP contracts, including allowing Contractors to 
transfer water entitlement for profit (including CVP subsidized water), expansion of places of 
use, elimination of effective acreage limitations, liberal internal project transfers of water, carry 
over storage, delivery of nonproject water, and elimination of restrictions on permanent demand 
creation with temporary supply are some of the actions building demand beyond supply.

Other actions such as the failure to provide a San Joaquin Valley drain with an outlet to 
the Ocean thus requiring greater amounts of water for dilution of salts, coordinated operation of 
the SWP and CVP, joint use of points of diversion, use of the Tracy intertie of the California 
Aqueduct and Delta Mendota Canal, the Cross Valley Canal, various water banks and south of 
Delta storage all added demand for exports from the Delta.

Operation of the SWP and CVP Projects with priority for exports has resulted in the 
depletion of stored water, groundwater and natural flow necessary to meet cold water for fish 
requirements, water quality standards including salinity control, permit terms and conditions, 
regulatory and statutory conditions and senior water rights in the current and likely subsequent 
dry years. In Water Year 2021 the Projects reportedly could not meet cold water requirements 
for salmon in the Sacramento River system and could not meet the salinity control Delta outflow 
requirements in D-1641. The Projects requested and the SWRCB (through an unlawful
delegation) facilitated a Temporary Urgency Change relaxing the salinity control requirements by 1000 cubic feet per second while allowing exports to continue at 1500 cubic feet per second. In addition to being contrary to the above court decision, this resulted in increased salinity intrusion into the Delta. Operation of the export pumps increased the draw of saline water into the Delta from the west. The export of allegedly “stored water” and much of the transferred water aggravates the shortage of cold water for fish and reduces the amount of water otherwise available for salinity control with resulting significant impacts.

Continuing on a path of noncompliance and depleting resources in the watersheds of origin is bad policy and is not sustainable. The SWP and CVP run out of water after one or two dry years. **ATTACHMENT D** shows the hydrology which guided the SWP and CVP planning and the anticipated shortage in water supply from the Delta watershed. A competent analysis of the SWP and CVP ability to meet obligations and requirements in a six-year drought is required. Such analysis should include consideration of recapture of stored and transfer water previously exported in violation of requirements and water stored in San Luis and water banks which can be returned to the San Joaquin River directly or by way of exchanges to meet SWRCB Delta water quality requirements.

Since 2009 the evidence shows that had exports been sufficiently limited, the water quality standards would have been met. The current crisis is simply the result of continuing the same pattern and practice of the SWRCB, DWR and USBR which wrongly favors exports over senior water rights, regulatory requirements and the public trust.

The 1960 ballot argument in favor of the California Water Resources Development Bond Act which spawned the State Water Project (SWP) included the following representations:

"No area will be deprived of water to meet the needs of another nor will any area be asked to pay for water delivered to another." (Emphasis added)

"Under this Act the water rights of Northern California will remain securely protected."

"A much needed drainage system and water supply will be provided in the San Joaquin Valley."

The Delta Reform Act Water Code section 85031(a) provides:

"(a) **This division does not diminish, impair, or otherwise affect in any manner whatsoever any area of origin, watershed of origin, county of origin, or any other water rights protections**, including, but not limited to, rights to water appropriated prior to December 19, 1914, provided under the law. This division does not limit or otherwise affect the application of Article 1.7 (commencing with Section 1215) of Chapter 1 of Part 2 of Division 2, Sections 10505, 10505.5, 11128, 11460, 11461, 11462, and 11463, and Sections 12200 to 12220, inclusive." (Emphasis added.)
Water Code Sections 11460 et seq. and 12200 et seq. are particularly specific in defining the limitation on the export of water from the Delta by the SWP and CVP. Water Code sections 11460 et seq. were added by Statutes 1943, around the time of commencement of the CVP. Water Code sections 12200 et seq. were added by Statutes 1959, around the time of commencement of the SWP.

The limitation of the projects to the export of only surplus water and the obligation of the projects to provide salinity control and assure an adequate water supply sufficient to maintain and expand agriculture, industry, urban, and recreational development in the Delta is clear.

Water Code "12200 through 12205 are particularly specific as to the requirements to provide salinity control for the Delta and provide an adequate water supply in the Delta sufficient to maintain and expand agriculture, industry, urban and recreational development.

For ease of reference, the following Water Code sections are quoted with emphasis added:

'12200. Legislative findings and declaration

The Legislature hereby finds that the water problems of the Sacramento-San Joaquin Delta are unique within the State; the Sacramento and San Joaquin Rivers join at the Sacramento-San Joaquin Delta to discharge their fresh water flows into Suisun, San Pablo and San Francisco bays and thence into the Pacific Ocean; the merging of fresh water with saline bay waters and drainage waters and the withdrawal of fresh water for beneficial uses creates an acute problem of salinity intrusion into the vast network of channels and sloughs of the Delta; the State Water Resources Development system has as one of its objectives the transfer of waters from water-surplus areas in the Sacramento Valley and the north coastal area to water-deficient areas to the south and west of the Sacramento-San Joaquin Delta via the Delta; water surplus to the needs of the areas in which it originates is gathered in the Delta and thereby provides a common source of fresh water supply for water-deficient areas. It is, therefore, hereby declared that a general law cannot be made applicable to said Delta and that the enactment of this law is necessary for the protection, conservation, development, control and use of the waters in the Delta for the public good. (Added by Stats. 1959, c. 1766, p. 4247, '1.)

'12201. Necessity of maintenance of water supply

The Legislature finds that the maintenance of an adequate water supply in the Delta sufficient to maintain and expand agriculture, industry, urban, and recreational development in the Delta area as set forth in Section 12220, Chapter 2, of this part, and to provide a common source of fresh water for export to areas of water deficiency is necessary to the peace, health, safety and welfare of the people of the State, except that delivery of such water shall be subject to the
provisions of Section 10505 and Sections 11460 to 11463, inclusive, of this code.  
(Added by Stats. 1959, c. 1766, p 4247, '1.)

'12202. Salinity control and adequate water supply; substitute water supply; delivery

Among the functions to be provided by the State Water Resources Development System, in coordination with the activities of 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. If it is determined to be in the public interest to provide a substitute water supply to the users in said Delta in lieu of that which would be provided as a result of salinity control no added financial burden shall be placed upon said Delta water users solely by virtue of such substitution. Delivery of said substitute water supply shall be subject to the provisions of Section 10505 and Sections 11460 to 11463, inclusive, of this code.  
(Added by Stats. 1959, c. 1766, p 4247, '1.)

'12203. Diversion of waters from channels of delta

It is hereby declared to be the policy of the State that no person, corporation or public or private agency or the State or the United States should divert water from the channels of the Sacramento-San Joaquin Delta to which the users within said Delta are entitled.  
(Added by Stats. 1959, c. 1766, p 4249, '1.)

'12204. Exportation of water from delta

In determining the availability of water for export from the Sacramento-San Joaquin Delta no water shall be exported which is necessary to meet the requirements of Sections 12202 and 12203 of this chapter.  
(Added by Stats. 1959, c. 1766, p 4249, '1.)

'12205. Storage of water; integration of operation and management of release of water

It is the policy of the State that the operation and management of releases from storage into the Sacramento-San Joaquin Delta of water for use outside the area in which such water originates shall be integrated to the maximum extent possible in order to permit the fulfillment of the objectives of this part.  
(Added by Stats. 1959, c. 1766, p 4249, '1.)

The December 1960 DWR Bulletin 76 (ATTACHMENT C), which includes a contemporaneous interpretation by DWR of Water Code sections 12200 through 12205 provides at page 12:
"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. (Emphasis added.)

Similarly, the DWR confirmed its interpretation of law in the contract between the State of California Department of Water Resources and the North Delta Water Agency for the Assurance of a Dependable Water Supply of Suitable Quality dated January 28, 1981, which provides:

"(d) The construction and operation of the FCVP and SWP at times have changed and will further change the regimen of rivers tributary to the Sacramento-San Joaquin Delta (Delta) and the regimen of the Delta channels from unregulated flow to regulated flow. This regulation at times improves the quality of water in the Delta and at times diminishes the quality from that which would exist in the absence of the FCVP and SWP. The regulation at times also alters the elevation of water in some Delta channels."

"(f) The general welfare, as well as the rights and requirements of the water users in the Delta, require that there be maintained in the Delta an adequate supply of good quality water for agricultural, municipal and industrial uses."

"(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." (Emphasis added.)

In SWRCB D-1485 at page 9 the SWRCB provided:

"The Delta Protection Act accords first priority to satisfaction of vested rights and public interest needs for water in the Delta and relegates to lesser priority all exports of water from the Delta to other areas for any purpose."

Water Coçe section 12205 provides:

"It is the policy of the State that the operation and management of releases from storage into the Sacramento Joaquin Delta of
water for use outside the area in which such water originates shall be integrated to the maximum extent possible to permit fulfillment of the objectives of this part."

The objectives include salinity control and an adequate water supply.

The export projects must additionally fully mitigate their respective impacts and meet the affirmative obligations to the Delta and other watershed areas including those related to flow. Failure to so do results in a shift of the cost of the project to someone else.

The California Water Resources Development Bond Act was intended to preclude such a shift in costs. See Goodman v. Riverside (1993) 140 Cal.App.3d 900 at 906 for the requirement that the costs of the entire project be paid by the contractors. In footnote 3 the court provided the following:

"Governor Pat Brown’s press comments at the time are also informative:

"Governor, what is your answer to people who say, ‘I don’t want to pay for somebody else’s water.’ Like San Franciscans. ‘I have already paid for one water project. Why should I be compelled to buy another?’

"Governor Brown: Well, they won’t. The plan itself is completely self-supporting. The law provides that the contracts have to provide for the repayment of the cost of the entire Project. That’s the real answer to it.” (Italics in original)

Water Code section 11912 requires that the costs necessary for the preservation of fish and wildlife be charged to the contractors. The term "preservation" appears to be broader than mitigation and appears to create an affirmative obligation beyond mitigation.

Title 34 of Public Law 102-575 referred to as the Central Valley Project Improvement Act in Section 3406(b) (1) authorizes and directs the Secretary of Interior to enact and implement a program which makes all reasonable efforts to ensure by the year 2002 natural production of anadromous fish (including salmon, steelhead, striped bass, sturgeon and American shad) will be sustainable on a long term basis at levels not less than twice the average levels attained during the period of 1967-1991. Such burden is that of the CVP.

PL-99-546 (HR 3113) (October 27, 1986), put to rest the Congressional intent as to the level of salinity control obligated by the CVP and the question as to any related payment to the CVP. For meeting water quality standards in D-1485 the cost is to be allocated among the project purposes in accordance with existing reclamation law and policy - water and power contractors. The costs for complying with State water quality standards above those standards is to be non-reimbursable.

In 2004 Congress passed another law to ensure that Delta water quality standards and objectives would be met.
PI. 108-361 (HR 2828) in pertinent part provides:

“(D) Program to Meet Standards. -

(i) In General. - Prior to increasing export limits from the Delta for the purposes of conveying water to south-of-Delta Central Valley Project contractors or increasing deliveries through an intertie, the Secretary shall, not later than 1 year after the date of enactment of this Act, in consultation with the Governor, develop and initiate implementation of a project to meet all existing water quality standards and objectives for which the Central Valley Project has responsibility.” (Emphasis added)

Such requirement was not accomplished, in that the Delta outflow for salinity control was ignored. The act also provided measures to reduce the demand on New Melones for meeting water quality standards and flow objectives through water purchases and recirculation of water pumped from the Delta back into the San Joaquin River. Such effort was short lived and even the planned recirculation into the San Joaquin River of fish restoration flow has been diverted before it reaches the Delta.

Emergency or other actions including facilitating transfers are clearly for the purpose of increasing exports from the Delta or likely result in use of the intertie, which to the extent such are for serving south-of-Delta Central Valley Project contractors would be directly contrary to the direction of Congress which was to assure that all existing (October 25, 2004) water quality standards and objectives would first be met.

There has been a total disregard by the SWRCB, DWR and the USBR of Water Code section 85201 adopted in 2010 which establishes the policy of the State to reduce reliance on the Delta for future water supply needs. Water Code section 85031 makes it clear that this policy applies to Delta exports and the Delta Reform Act does not diminish, impair or otherwise affect in any manner any area of origin, watershed of origin, county of origin or any other water rights protection, including but not limited to water appropriated prior to December 19, 1914 and protections provided pursuant to Water Code sections 11460 et seq. and 12200 et seq.

The Delta Reform Act of 2009 includes provisions intended to provide additional protection for the Delta. Such provisions include Water Code section 85054 which provides:

"Section 85054. Coequal goals

'Coequal goals' means the two goals of providing a more reliable water supply for California and protecting restoring, and enhancing the Delta ecosystem. The coequal goals shall be achieved in a manner that protects and enhances the unique cultural, recreational, natural resource, and agricultural values of the Delta as an evolving place."

Water Code section 85021 provides:
"§85021. Reduction of reliance on Delta for future water supply needs

The policy of the State of California is to reduce reliance on the Delta in meeting California's future water supply needs through a statewide strategy of investing in improved regional supplies, conservation, and water use efficiency. Each region that depends on water from the Delta watershed shall improve its regional self-reliance for water through investment in water use efficiency, water recycling, advanced water technologies, local and regional water supply projects, and improved regional coordination of local and regional water supply efforts."

A Credible Quantification of the Available Water Supply of the CVP and SWP to Meet the Year by Year Regulatory Requirements is Critical to Any Proper Determination of Water Availability for Project Export of Project and Transfer Water Especially as it Relates to Successive Dry Years

The largest water diverters in the Sacramento-San Joaquin Delta Watershed are the federal CVP and SWP. They are projects operated by the United States through its Department of Interior and the State of California through its Department of Water Resources. As such they are regulated by sister agencies thus creating a conflict of interest between public trust and the interest of their water contractors. The conflict is amplified by the interest of the political leadership of our nation and State.

Both projects are based upon the premise that they would construct dams and other facilities to capture surplus flows wasting to the ocean to meet the present and future needs in the watersheds of origin and supply flows in excess to the watershed needs to other areas of the State. Neither project was intended nor had planned to meet all the recognized water needs in the State. The CVP was to serve and subsidize water for farms meeting the 160 acre limitation in limited service areas. It was not intended to meet the water needs of the large land holdings which included large areas of arid land. The CVP built water projects and then contracted water based on classes reflecting the expected firmness of supply. The SWP was a build “as you go” project with contractors paying the entire cost with a limitation and share based on Table A entitlements of about 4.2 million acre feet per year. The SWP plan expected demand in the watersheds of origin to build over time with the demand of its contractors such that by the year 2000, five (5) million acre feet per year would be needed in the Delta from development of dams and pipelines capturing surplus water on North Coast Rivers. Such North Coast development did not take place and the SWP is now operating without the planned supply of surplus water thereby driving the effort to take water away from meeting the needs in the watersheds of origin.

Both projects have the obligation to provide salinity control for the Delta which protects the quality for local and project export diversions, the multiple fish, wildlife, recreation and life safety uses and public trust. Both projects have the obligation to mitigate their adverse impacts including among others blocking fish access to spawning grounds of suitable water temperature, altering natural flows, inducing upstream water diversions and delivering water to the salt loaded portions of the Central Valley without the provision of a valley drain with an outlet to the ocean
which was a precondition to the supply of water to the San Luis Unit. The fish and wildlife obligations of the CVP include the requirements of the CVPIA. The SWP has the obligations to preserve fish and wildlife. (See Water Code section 11912)

DWR contends that the SWP and CVP have had a high degree of success in meeting all operative water quality standards since 1978 claiming that the temporary urgency changes granted by the SWRCB using emergency authority were justifiable due to factors beyond the SWP/CVP reasonable control. Drought conditions are really not emergencies but historically reoccurring events. There is some future variability that cannot be accurately predicted and the information available to describe the past variability has limitations. The fact remains that the planning for both the SWF and CVP anticipated a reoccurrence of hydrology similar to the 6 year drought of 1928/29 through 1934 to estimate the firm yield of the projects to supply such firm yield in the sixth year of such drought. The importance of determination of such firm yield is to alert contractors of the reasonable expectation of delivery. The contracts contained exculpatory provisions making even such firm yield delivery subject to senior rights (including watershed of origin rights to recapture water from the Projects), variable hydrology and other measures not controllable by the Projects. In determining firm yield, the depletion of reservoir storage in the early years of a drought impacts the ability to supply water in the later years. It appears that optimism or political factors have influenced the Project decisions to take more water in the early years and gamble with availability in the later years. This practice and changes in contract provisions have fueled the increased development of permanent type demand based on infirm supply.

In the past, regulatory compliance has been equated to water quality control plan standards as relaxed by temporary urgency changes. The D-1641 water quality standards do not contain fixed objectives for cold water requirements to protect salmon spawning. Instead there is a process for developing a recommendation to the executive director of the SWRCB who determines the requirement on a real time basis. This process has resulted in the SWP and CVP inability to meet regulatory fishery requirements in even the first or second year of a drought. Water quality standards reflect a balancing process to establish minimum requirements protective of specific uses and allow for substantial degradation of pre-existing water quality in various areas of the watersheds including by example the San Joaquin River. Adequate control of health and safety threats in the Delta such as microcystis and increasing methylation of mercury are absent.

The original planning for the SWP and CVP appears to have underestimated the needs to protect fish both as to flow requirements and carryover storage required for temperature control. Without the planned 5 million acre feet of water annually from the North Coast the problem is greater and there is no truly surplus water for export except in wet years.

Water storage projects typically store natural flow in the winter and spring. The winter and spring natural flows, except in wetter years, would provide flushing of salts from the rivers flowing into the Delta and from the Delta into the Bay such that salt balance in the soil can be maintained and adequate protection can be provided to fish and wildlife and other Delta water uses. This flushing action drives saline water farther out into the Bay thereby prolonging the availability of good water quality in the Delta pool. When the stored water is used within the
watershed, the return flow is basically delayed return of natural flow. The improved summer flow is an offset or mitigation for reduced winter and spring flows. The balance is in effect a physical solution that advances the beneficial use of water.

The equity of such a physical solution is reflected in the statutory obligations of the SWP and CVP to the Delta including salinity control and in the conditions imposed on the water rights for such projects. Such statutory obligations require both mitigation and improvement.

The adverse impacts to Delta water supply and quality from State and Federal actions were clearly recognized. The near complete re-diversion of the Upper San Joaquin River to the south by way of the Friant Dam and Friant Kern canal deprived the Delta of the late spring and summer natural flow from the high Sierra snowmelt; the reverse flows and induced Bay salinity intrusion caused by export diversions; the increased salinity entering the San Joaquin River by reason of delivery of water to the west side of the San Joaquin River without a valley drain with an outlet to the ocean; the induced salinity intrusion from the Bay caused by channel enlargement for the Stockton and Sacramento ship channels; the reduced late spring and summer natural flows resulting from the State and Federal flood control projects; inducement of salinity intrusion by reason of planned permanent flooding of areas in the Delta which increase the tidal prism and the project inducement of upstream development are examples. All of the above have the result of degradation of water quality in the Delta for which the projects are responsible.

In addition to the mitigation or physical solution aspects driving the statutory commitments of the SWP and CVP to provide stored water to the Delta was the purpose of providing such salinity control to benefit a broad range of purposes. Such purposes include protection of water quality at the CVP Tracy export pumps, the SWP export pumping facilities at Clifton Court, the Contra Costa Water District intakes, the Montezuma Slough gates to serve the Suisun Marsh, and the North Bay Aqueduct. Protection of fish and wildlife, protection of water quality in the bays and meeting project contractual commitments are also served.

The SWP and CVP Obligation to Provide Salinity Control for the Delta Was and is Supported by Many Factors

The importance of agricultural production from the Delta was of great importance and avoidance of the 1931 salinity intrusion and other detrimental intrusions was critical. It was recognized that diverting the San Joaquin River flow at Friant would deprive the Delta of much of the historical flows of high quality Sierra snow melt. It was recognized that export pumps would create an additional draw of water from the Bay that needed to be offset to protect Delta water quality including water quality at the export pumps. It was recognized that channels were enlarged in the Western Delta for flood control and navigation and that such induced salinity intrusion. It was also recognized that the projects would as intended induce greater use of water in the watershed thus reducing flow through the Delta. The policy was clearly intended to meet the present and future needs for full development within the Delta and other areas of origin and only export surplus water. The logic of not developing arid lands by depriving areas near the water supply holds true today.
While the CDWA hope is that all the water needs of the State including those of agriculture in the Central Valley and the needs for urban development of the southern desert areas of the State could be met, it does not appear that there is any feasible plan to accomplish such hope. The CDWA has no objection to export of water which is truly surplus to the present and future needs within the watersheds of origin. At the present time there is no choice but to defend against the unlawful attempts to reverse the water priorities provided by law and damage the Delta and other areas in the watersheds of origin to foster development of arid areas of the State.

In determining the availability of water and curtailments no diversion of water for export from the Delta Watershed, including transfer water, should be allowed unless D-1641 requirements, without temporary urgency changes (TUC), are and will be met in both the current water year and future water years and that the water exported is truly surplus to the present and future needs within the Delta Watershed including the needs of fish and wildlife and the need to secure groundwater sustainability.

It is urged that a competent analysis be performed of the SWP and CVP availability of water which is truly surplus to the present and future needs within the Delta watershed and when and how much water may be available for export. Imposition of a Term 91 type condition in water rights to serve lands within the Delta Watershed is not helpful. Exports of transfer water and Project water should not be allowed to the detriment of meeting needs within the watershed.

A better approach is to get the cooperation of the SWP and CVP to make a good faith effort to plan for future dry years while meeting the water quality standards, permit terms, other regulatory requirements and law giving priority to the needs in the watersheds of origin. At the least, planning should assume the following year or years are dry or critical similar to hydrology experienced in the past. The use of a forecast based on exceedance probability of reoccurring hydrology has not proven to be effective. It would be prudent to include even climate change adjustments to plan for hydrology worse than the past.

Respectfully submitted,

Dante John Nomelini Sr
The Sacramento–San Joaquin Delta is the hub of two massive water projects that extend nearly the full length of California. One is run by the U.S. Bureau of Reclamation, the other by the California Department of Water Resources. The projects store water in reservoirs, release it into rivers that flow into the Delta, and pump it south from the Delta. The water pumped south is used by farmers and municipalities in the Central Valley and southern California. The water not pumped is used by Delta...
12203 is best construed as dealing with the water to which Delta users are entitled under either their riparian or appropriative rights or rights under the Watershed of Origin statutes that have been properly perfected. 42/

In summary, this court concludes the following. The Delta Protection Act creates an inchoate prior right to an "adequate water supply" in favor of Delta users. The water supply can only be adequate if salinity intrusion is controlled. The right comprises water for direct use and for controlling salinity intrusion. In order to perfect a right to water in excess of that to which they are entitled under appropriative and riparian rights, Delta users must obtain an appropriative permit 43/ and execute a repayment contract. Because the inchoate rights of Delta users have not been perfected, the Board did not err by setting water quality standards that did not reflect the enhanced water quality anticipated by the act. Of course, if any such rights are perfected, the Board will be obligated to protect them.

3. Repayment Contracts

The Delta petitioners argue that they need not pay for water released, pursuant to the Delta Protection Act, for salinity control purposes. However, this court holds that Delta users must pay for water provided under either the Watershed of Origin statute or the Delta Protection Act, regardless of whether the water is used directly by Delta users or to repel saltwater intrusion. This court further holds that repayment contracts must be executed before the projects can be
required to provide water the projects have developed.

The parties agree that water put to direct use in the
Delta must be paid for if it is made available by the projects,
i.e., if water has been stored during periods of high flow and
released during periods of low flow specifically for a user's
benefit. However, the parties disagree about whether users
must pay for water released for salinity control. The Delta
petitioners point out that there is no express payment
requirement in the section of the Delta Protection Act that
governs the provision of salinity control (Wat. Code sec.
12202), or in any other section of that act. However, a pay-
ment requirement appears in the Watershed of Origin statute
(Wat. Code sec. 11462), which is incorporated into the Delta
Protection Act (Wat. Code sec. 12201). 44/ Therefore, this
court concludes that salinity control water made available
under the Watershed of Origin statute or the Delta Protection
Act specifically for a Delta user's benefit must be paid for by
that user.

However, Delta users need not pay for salinity control
water even if they are incidentally benefited unless the water
is released specifically for their benefit. Delta users need
not pay for these incidental benefits because the water would
be released anyway. 45/ Three instances follow.

First, Delta water users need not pay for the enhanced
water quality that results from water released by the projects
to maintain adequate water quality at the export pumping
stations; this water has been alternatively characterized as
salinity control water, delivery water, or carriage water.
Because the contracts between the project operators and their export contractors provide for water of a specific water quality, this salinity control water is furnished as part of the quid pro quo of the contracts. Therefore, the costs should be borne by those who have entered into such contracts. Similarly, the export contractors should bear the full cost of any enhanced water quality that results from the release of water that is actually delivered to them.

Second, Delta users need not pay for the enhanced water quality resulting from the release of abandoned water. Abandoned water may include irrigation return flows, water used to generate electricity, and water released from reservoirs to create sufficient storage capacity to capture subsequent floodwaters. These releases of water are already paid for. Water released for improving navigation, which may not actually be abandoned, also has been paid for and, therefore, need not be paid for by Delta users.

Third, Delta users need not pay for the enhanced water quality resulting from water released to preserve or enhance fish and wildlife resources. Nowhere in Water Code section 1243, which empowers the Board to protect and enhance fish and wildlife when acting upon permits, is there any indication that anyone would have to pay for this protection. Any benefit the Delta users receive by virtue of their location in a protected area is incidental and need not be paid for. Furthermore, the Davis-Dolwig Act provides for payment for water used to preserve and enhance fish and wildlife: Water Code section 11912 provides that state contractors are to bear the cost of
fish and wildlife preservation and sections 11913 and 11900
provide that expenses for fish and wildlife enhancement are to
be borne by the state's General Fund. 46/

In summary, Delta users must pay for water made available
by the projects under the Watershed of Origin statute or the
Delta Protection Act specifically for their use, but they need
not pay for incidental benefits from water released for other
purposes.

Whether a repayment contract must be executed to perfect
a right to water under the Watershed of Origin statute or the
Delta Protection Act is an issue that must now be addressed.
There are no provisions explicitly requiring contracts within
either the Delta Protection Act or the Watershed of Origin
statute. However, the statutes governing the operation of the
two projects require contracts before water is provided.

Federal reclamation law requires contracts when a
reclamation project provides water for irrigation use (43
U.S.C. sec. 423e, sec. 485h, subds. (d)-(e)), and for
municipal or other uses (43 U.S.C. sec. 521, sec. 485h, subd.
(c)). 47/ Contracts must be executed prior to the delivery of
water. (43 U.S.C. secs. 423e, 521, sec. 485h, subd. (h).)
State law requires contracts when the state project provides
water for users. (Wat. Code secs. 12937, 12931 (incorporating
Wat. Code secs. 11455, 11625).) Although the state sections
apparently do not require that contracts be executed prior to
the delivery of water, the state project permits before the
Board in D. 1485 all contain a term that requires the prior
execution of contracts for water delivery in the Sacramento
River watershed and the Delta. 48/

Requiring contracts to be executed before providing water under the Watershed of Origin statute of the Delta Protection Act poses certain complications. First, fish and wildlife obviously lack the capacity to contract. Because provision has been made in the Davis-Dolwig Act for payment for water used to preserve or enhance fish and wildlife, there is no reason that contracts should be required for water used for this purpose.

Second, the Delta petitioners argue that a satisfactory contract for salinity control water could not be executed because it is impossible to determine in advance the exact amount of water required to be released for this purpose. Obviously, this is due to fluctuations in precipitation and uncertainty as to actual future water quality conditions.

However, satisfactory contracts can be executed. One solution could be a carefully negotiated contract in which the contracting project would agree to release sufficient water to ensure the predetermined water quality in return for annual payment of the average annual cost of providing such water. The amount of water that would need to be released specifically for the contractor in excess of water released for other purposes could be calculated with reference to long-term historical records of Delta inflow using sophisticated models developed by the projects. Such a contract has already been executed by the North Delta Water Agency. (See The Cal. State Water Project--Current Activities and Future Management Plans, Dept. Water Resources Bull. No. 132-81 (Nov. 1981) pp. 70-71.)
In summary, contracts are required prior to the delivery of water under the Watershed of Origin statute or the Delta Protection Act -- whether for direct use or for salinity control. Because no one has contracted for enhanced water quality under these statutes, the Board need not have established water quality standards to protect Delta users' inchoate rights under these statutes.

E. Protection of Fish and Wildlife

Beneficial uses, as defined by the Porter-Cologne Act, include "preservation and enhancement of fish, wildlife, and other aquatic resources." (Wat. Code sec. 13050(f).) To protect fish and wildlife in the Delta, the Board set water quality standards designed to ensure that a sufficient amount of freshwater flows out of the Delta and into San Francisco Bay. (Plan, pp. VI-31 to VI-33; Decision, pp. 38-39.) The abundance of fish in the Delta apparently depends on the magnitude of the freshwater outflow and of the saltwater intrusion. (See Plan, p. III-3.)

Fish do not have water rights, and two California Courts of Appeal have held that one cannot obtain an appropriative permit to protect fish. (California Trout, Inc. v. State Water Resources Control Board (1979) 90 Cal.App.3d 816, 820; Fullerton v. State Water Resources Control Board (1979) 90 Cal.App.3d 590, 603.) However, as explained below, the Board has powers that enable it to protect fish. If it properly employs these powers, the Board can prevent water users from taking the water allocated to fish. It can also establish
STATE OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES

CONTRACT BETWEEN
THE STATE OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES
AND THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA
FOR A WATER SUPPLY

November 4, 1960
subdivision shall be inoperative to the extent that a contractor's annual entitlement for the respective year reflects established rights under the area of origin statutes precluding a reduction in deliveries to such contractor.

(b) In the event that the State is unable to construct sufficient additional conservation facilities to prevent a reduction in the minimum project yield, or if for any other reason there is a reduction in the minimum project yield, which, notwithstanding preventive or remedial measures taken or to be taken by the State, threatens a permanent shortage in the supply of project water to be made available to the contractors:

(1) The annual entitlements and the maximum annual entitlements of all contractors, except to the extent such entitlements may reflect established rights under the area of origin statutes, shall, by amendment of Table A included in Article 6(b), and of Article 7(b), respectively, be reduced proportionately by the State to the extent necessary so that the sum of the revised maximum annual entitlements of all contractors will then equal such reduced minimum project yield: Provided, That appropriate adjustment in the contractors' respective financial obligations to the State under the Transportation Charge shall be made in accordance with such reduced entitlements if such reductions have not been strictly proportionate throughout.

(2) The District, at its option, shall have the right to use any of the project transportation facilities which by reason of such reduction in the minimum project yield are not required for delivery of project water to the District, to transport
water procured by it from any other source:  Provided, That such use shall be within the limits of the capacities provided in the project transportation facilities for service to the District under this contract:  Provided further, That except to the extent such limitation in Section 12931 of the Water Code be changed, the District shall not use the project transportation facilities under this option to transport water the right to which was secured by the District through eminent domain unless such use be approved by the Legislature by concurrent resolution with a majority of the members elected to each house voting in favor thereof.

(c) In the event that the State, because of the establishment by a party of a prior right to water under the provisions of Sections 11460 through 11463 of the Water Code, enters into a contract with such party for a dependable supply of project water, which contract will cause a permanent shortage in the supply of project water to be made available to the District hereunder:

(1) The State shall: (i) equitably redistribute the costs of all transportation facilities included in the System among all contractors for project water, taking into account the diminution of the supply to the District and other prior contractors and the payments theretofore made by the District and other prior contractors in accordance with the terms of their contracts, and (ii) revise the District's annual entitlements and maximum annual entitlement, by amendment of Table A included in Article 6(b) and of Article 7(b), respectively, to correspond to the reduced supply of project water to be made available to the District:  Provided, That such redistribution of costs of transportation facilities shall not be made until there has been reasonable
Bulletin No. 76
DELTA WATER FACILITIES

EDMUND G. BROWN
Governor
State of California

NARAYAN O. BANKS
Director
Department of Water Resources

December, 1980
STATEMENT OF CLARIFICATION

This preliminary edition presents a comparison of alternative solutions to the Delta problems. This bulletin shows that the Single Purpose Delta Water Project is the essential minimum project for successful operation of the State Water Facilities. This bulletin also presents, for local consideration, optional modifications of the Single Purpose Delta Water Project which would provide additional local benefits.

The evaluation of project accomplishments, benefit-cost ratios, and costs of project services, are intended only to indicate the relative merits of these solutions and should not be considered in terms of absolute values. Benefits related to recreation are evaluated for comparative purposes. Detailed recreation studies, presently in progress, will indicate specific recreation benefits.

Subsequent to local review and public hearings on this preliminary edition, a final edition will be prepared setting forth an adopted plan. The adopted plan will include, in addition to the essential minimum facilities, those justifiable optional modifications requested by local entities.

STATE OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES

Bulletin No. 76

REPORT TO THE CALIFORNIA STATE LEGISLATURE ON THE DELTA WATER FACILITIES AS AN INTEGRAL FEATURE OF THE STATE WATER RESOURCES DEVELOPMENT SYSTEM

EDMUND G. BROWN Governor

HARVEY O. BANKS Director

December, 1960
Full demands on the State Water Resources Development system can be met until about 1981 from surplus water in and tributary to the Delta with regulation by the proposed Oroville and San Luis Reservoirs. However, upstream depletions will reduce the available surplus supplies and water will have to be imported from north coastal sources after that year. It is anticipated that coordinated operation of the State Water Resources Development System and the Federal Central Valley Project will afford a limited increase in usable surplus Delta supplies beginning in 1981. As indicated in the chart, upstream depletions will continue to decrease the available surplus supplies.

The coordinated use of surplus water in and tributary to the Delta and of regulated or imported supplements to this supply, as required, is referred to as the Delta Pooling Concept. Under this concept of operation the State will ensure a continued supply of water adequate in quantity and quality to meet the needs of export water users. Advantage will be taken of surplus water available in the Delta, and as the demand for water increases and the available surplus supply is reduced by further upstream uses, the State will assume the responsibility of guaranteeing a firm supply of water, which will be accomplished by construction of additional storage facilities and import works. At the same time, the water needs of the Delta will be fully met.
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.
The natural availability of good quality water in the Delta is directly related to the amount of surplus water which flows to the ocean. The graph to the right indicates the historic and projected availability of water in the San Joaquin River at Antioch containing less than 350 and 1,000 parts chlorides per million parts water, under long-term average runoff and without specific releases for salinity control. It may be noted that even under natural conditions, before any significant upstream water developments, there was a deficiency of water supplies within the specified quality limits. It is anticipated that, without salinity control releases, upstream depletions by the year 2020 will have reduced the availability of water containing less than 1,000 ppm chlorides by about 60 percent, and that exports will have caused an additional 30 percent reduction.

The magnitude of the past and anticipated future uses of water in areas tributary to the Delta, except the Tulare Lake Basin, is indicated in the diagram to the left. It may be noted that, while the present upstream use accounts for reduction of natural inflow to the Delta by almost 25 percent, upstream development during the next 60 years will deplete the inflow by an additional 20 percent. By that date about 22 percent of the natural water supply reaching the Delta will be exported to areas of deficiency by local, state, and federal projects. In addition, economical development of water supplies will necessitate importation of about 5,000,000 acre-feet of water seasonally to the Delta from north coastal streams for transfer to areas of deficiency.
Planning and Design Concepts

Planning for solutions to the complex Delta problems necessitates full recognition of the interrelated effects on all phases of the Delta's economy. The best solution should reflect the greatest overall benefits and least detriments, realizing that both objectives cannot be completely achieved when basic interests differ. Economies of construction and operation generally may be effected by multi-use of facilities. Therefore, consideration must be given to multi-purpose development.

DELTA WATER SUPPLY

Water users in the Delta enjoy a naturally convenient source of supply, in the numerous channels from which water is diverted by siphon or low-lift pumps. The supply problem in portions of the Delta stems from the poor quality of water, due to salinity incursion from the Bay and degradation by agricultural and industrial wastes. Adequate water supplies could be provided either by regulated releases of stored fresh water to repel salinity incursion and flush other wastes, or by constructing a physical barrier against salinity incursion and conveying unusable wastes beyond the barrier. A third alternative would involve a reduction of present salinity control in the western Delta channels and provision of substitute fresh water supplies to users who could not then divert from the channels containing brackish water. All three alternatives were evaluated, with particular attention to minimizing modifications to existing water supply systems.

The California Water Code specifies that one of the functions of the State Water Resources Development System is to provide salinity control and an adequate water supply in the Delta. If it is in the public interest to provide substitute supplies in lieu of salinity control, no added financial burden shall be placed on the local water users as a result of such substitution. The code also declares that water to which the Delta is entitled shall not be diverted. It is clearly established that supplying water for the Delta must be a primary and integral function of the State Water Facilities.

FLOOD AND SEEPAGE CONTROL

Flood stages in the Delta result from a combination of high tides, amplified by heavy winds on the ocean and Bay systems, and inflow to the Delta. Historic inundations have generally resulted from levee failures, rather than overtopping. As the land behind the levees continues to subside, the stability of the levees decreases.

Physical and economic factors dictate an extended construction period for improvement of levees on organic soils. To reduce the extent and cost of levee improvements, it is prudent to limit flood waters on principal improved flood channels. Additional flood control reservoirs on rivers entering the Delta are contemplated for construction in the near future. Therefore, it is economical to design Delta flood channels for rates of flow anticipated after construction of upstream reservoirs. Design of improved flood channels are predicated on additional
WEBER FOUNDATION STUDIES

ESTIMATED SEASONAL NATURAL RUNOFF
KLAMATH, EEL, VAN DUSEN, MAD, AND RUSSIAN RIVERS

1917-18 to 1946-47

55 year average used by the DEPARTMENT OF WATER RESOURCES.
30 year average 16,840,000 acre feet (66.3%)
17 dry year average 13,700,000 acre feet (72.3%)
6 drought year average 10,890,000 acre feet (55.7%)

13 wet year average
15,500,000 acre feet (103.6%)

NORTH COAST AREA

Surplus
7,930,000 AF/Y

ESTIMATED SEASONAL NATURAL RUNOFF
CENTRAL VALLEY
1917-18 to 1946-47

55 year average used by the DEPARTMENT OF WATER RESOURCES.
30 year average 23,877,000 acre feet (85.0%)
17 dry year average 22,484,000 acre feet (71.0%)
6 drought year average 17,851,000 acre feet (62.6%)

13 wet year average
35,750,000 acre feet (103.9%)

SHORTAGE
8,049,000 AF/Y