



Chairman	Steve Mello
Vice-Chairman	Jack Kuechler
Secretary/Treasurer	Tom Slater
Director	Justin van Loben Sels
Director	Mark van Loben Sels
Manager	Melinda Terry

March 16, 2023

Via e-mail (DLL-DCP-EIS@usace.army.mil)

Zachary Simmons
U.S. Army Corps of Engineers
1325 J Street, Room 1350
Sacramento, CA 95814-2922

Subject: Comments of the North Delta Water Agency on the U.S. Army Corps of Engineers' Draft Environmental Impact Statement for the Delta Conveyance Project (No. 20220183)

Dear Mr. Simmons:

To secure the current contractual and individual water rights of landowners within its boundaries, the North Delta Water Agency ("NDWA" or "Agency") submits these comments to the United States Army Corps of Engineers (the "Corps") on the Draft Environmental Impact Statement ("Draft EIS") for the Delta Conveyance Project ("DCP" or "Project"). As the Draft EIS draws heavily from the information and analysis in the Draft Environmental Impact Report ("Draft EIR") under the California Environmental Quality Act ("CEQA"), the Agency's comments on that document are incorporated by reference as though fully stated herein.

NDWA has reviewed the Draft EIS and provides these comments pursuant to the National Environmental Policy Act ("NEPA"), 42 U.S.C. § 4321 *et seq.*, and the Council on Environmental Quality's ("CEQ") NEPA Implementation Regulations, 40 C.F.R. 1500-1508. NDWA's comments are intended to assist the Corps by identifying gaps in the Draft EIS' analysis and requesting that the Corps consider additional significant environmental issues, and should therefore be treated as such for purposes of responding to these comments pursuant to NEPA and the CEQ Regulations. The Agency appreciates the opportunity to comment and welcomes further discussion with the Corps regarding the issues raised.

I. BACKGROUND

NDWA has a statutory mandate under California law to assure that the lands within its boundaries have a dependable supply of water of suitable quality sufficient to meet present and future beneficial uses.¹ In accordance with its statutory responsibilities, in 1981 NDWA and the California Department of Water Resources ("DWR") executed the *Contract for the Assurance of a Dependable Water Supply of Suitable Quality* ("1981 Contract"), attached hereto as "Exhibit A."

¹ North Delta Water Agency Act, Chapter 283, California Statutes of 1973.

The crux of the 1981 Contract, which remains in full force and effect, is a guarantee by the State of California that, on an ongoing basis, DWR will ensure through the operation of the State Water Project (“SWP”) that suitable water will be available to satisfy all agricultural and other reasonable and beneficial uses in all channels within NDWA’s boundaries. Specifically, the State is obligated to furnish “such water as may be required within the Agency to the extent not otherwise available under the water rights of water users.” (Ex. A, Art. 8(a)(ii).) The 1981 Contract contains specific minimum water quality criteria to be maintained year-round, and obligates DWR to avoid or repair damage from hydrological changes resulting from its operation of the SWP. California law also requires that the operation of the SWP and federal Central Valley Project (“CVP”) do not impinge on area-of-origin water rights.

The 1981 Contract prohibits DWR from conveying SWP water if doing so would cause a decrease in natural flow, increase in natural flow, reversal of natural flow direction, or alteration of water surface elevations in Delta channels to the detriment of Delta channels or water users within the Agency. (Ex. A, Art. 6.) The State must either repair or alleviate damage, improve the channels as necessary, or provide diversion facility modifications required for any seepage or erosion damage to lands, levees, embankments, or revetments adjacent to Delta channels within the Agency associated with conveyance of SWP water supply. (*Id.*) In addition to enforcement of the 1981 Contract, the Agency has a clear statutory mandate under its Agency Act to take all actions necessary to assure that the lands within the North Delta have a dependable supply of water of suitable quality sufficient to meet present and future needs.

DWR’s compliance with the binding terms of the 1981 Contract is not discretionary. The legal standards that govern DWR’s performance of its contractual obligations under the 1981 Contract are distinct and independent of DWR’s compliance with NEPA, CEQA, and other applicable laws. For example, CEQA requires that DWR adopt feasible mitigation measures to reduce significant impacts of the Project to “less than significant” levels, but as a matter of contract law, DWR may not disregard specific requirements of the 1981 Contract based on perceived infeasibility.

In reviewing the Draft EIR that DWR issued last year, NDWA found the document lacked adequate consideration and analysis to demonstrate DWR’s ability to comply with the provisions of the 1981 Contract. As further detailed below, the Draft EIS similarly lacks sufficient analysis to comply with NEPA, and further indicates that implementation of the Project could result in environmental effects that violate several provisions of the 1981 Contract, including, but not limited to exceedances of contractual water quality criteria, and alteration of water surface elevations to the detriment of North Delta channels and water users.

It is with this background that the Agency submits these comments on the Draft EIS.

II. COMMENTS

NEPA “is our basic national charter for protection of the environment.” (40 C.F.R. § 1500.1(a).) NEPA has two fundamental purposes: first, to ensure that agencies take a “hard look” at the consequences of their actions; and second, to ensure meaningful public involvement “in both the

decisionmaking process and the implementation of that decision.” (*Robertson v. Methow Valley Citizens*, 490 U.S. 332, 349 (1989) citing *Kleppe v. Sierra Club*, 427 U.S. 390, 410 n.21 (1976).) NEPA requires a detailed EIS by the lead agency that addresses “the environmental impact of the proposed action,” the adverse environmental effects which cannot be avoided should the proposed action be implemented,” and “any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.” (42 U.S.C. § 4332(2)(C) (i), (ii), and (v).) As the federal lead agency with permitting responsibility over the Project, the Corps must prepare an EIS that considers “every significant aspect of the environmental impact of [the] proposed action,” including the changes to water supply and operations that will occur as a result of these unanalyzed changes. (*Ore. Natural Desert Ass’n v. BLM*, 531 F.3d 1114, 1130 (9th Cir. 2008) citing *Vermont Yankee Nuclear Pwr. Corp. v. NRDC*, 435 U.S. 519, 553 (1978).)

The Draft EIS, as presented, does not meet NEPA’s informational requirements because it obscures the environmental effects of the Project by limiting the scope of its analysis to exclude operation and other impacts. Even in the context of Project construction, the Draft EIS does not fully analyze the potential effects on water supply and quality, water diversion infrastructure, or Delta channels and embankments. For the impacts that the Draft EIS does identify, the determinations of significance are cursory and appear to be derived from DWR’s artificially constrained modeling and conclusions, which do not accurately reflect DWR’s ability to utilize the full capacity of the proposed north Delta diversion facilities.

NDWA spent considerable time and resources analyzing the Draft EIS and its appendices to try and better understand the potential impacts of the Project, and found it lacking critical information. While the Draft EIS is clearer than the Draft EIR in some respects, it fails to encompass the full scope of the Project and should be revised.

A. Improperly Defined Project

NEPA requires that the project analyzed in an EIS is properly defined (40 C.F.R. § 1502.4(a)). An EIS must provide “coherent and comprehensive up-front environmental analysis to ensure informed decision making to the end that the agency will not act on incomplete information, only to regret its decision after it is too late to correct.” (*Blue Mountains Biodiversity Project v. Blackwood*, 161 F.3d 1208, 1216 (9th Cir. 1998) quotation and citation omitted.) In other words, a proper EIS must provide sufficient information as to the size and scope of all major project components and existing baseline conditions, presented in an accurate and understandable project description.

As described in the Background section above, NDWA has a statutory mandate to ensure that DWR’s operation of the SWP does not adversely affect water quality, water supplies, and water elevations in the North Delta. If the Project commences as described, water users within NDWA stand to be harmed by the construction and operation of the upstream facilities, which will siphon water that would have otherwise flowed through Delta channels. The Draft EIS treats the DCP as merely a construction project, and does not describe or analyze the Project in a manner that can apprise NDWA or the public of the Project’s impacts that directly or indirectly result

from its operation. (See Draft EIS, Appx. H, § 1.1.1 at H-1 (“The proposed action includes the construction of new intake facilities, a tunnel, and a forebay.”).)

The Corps prepared the Draft EIS as the federal lead agency for the project, with responsibility for issuing permits under Section 10 and 14 of the Rivers and Harbors Act, and Section 404 of the Clean Water Act. (Draft EIS, § ES.1, at ES-1.) Despite being the lead federal agency, the Corps has disclaimed any need to consider and analyze Project operations, as “operations-related elements of the project are not within [its] authority...” (Draft EIS, § 2.82 at 2-63) and therefore “are not covered by this EIS.” (*Id.*, Table ES-2 at ES-32.) This attempt to avoid responsibility for analyzing the full Project is in direct conflict with existing law. (See *Baykeeper v. U.S. Army Corps of Engineers*, 2006 WL 2711547 *8 (E.D. Cal., No. CIV S-06-1908, September 20, 2006.) In *Baykeeper*, a court addressed this very issue, stating “the development’s impact on jurisdictional waters ... determines the scope of the Corps’ permitting authority, [but] it is the impact of the permit on the environment at large that determines the Corps’ NEPA responsibility.” (*Id.*) The exercise of the Corps’ regulatory authority includes “those activities which affect” the “condition, or capacity of the navigable waters of the United States.” (33 C.F.R. § 322.5(g.) Effects or impacts of a Project include all reasonably foreseeable direct, indirect, and cumulative impacts.

The Corps readily acknowledges that, under all action alternatives, the Project involves “operating the new conveyance facilities” in conjunction with existing infrastructure in the Delta to create a *dual conveyance system*. (Draft EIS, § ES.1.2, at ES-2.) The stated purpose of the Project is to protect the reliability of SWP water deliveries, “*and potentially, CVP water deliveries, south of the Delta...*” (Draft EIS, § ES.1, at ES-1, emphasis added.) Despite its description of the Project as the *operation* of new and existing facilities and recognizing the potential integration of CVP operations, the Draft EIS does not contain *any* substantial analysis of the potential effects of Project operations. Likewise, the Corps has summarily dismissed and does not consider the alternatives proposed by DWR, which include additional conveyance capacity for CVP operations.

While many of the sections in the Draft EIS simply defer to DWR’s analysis in the Draft EIR, the Corps acknowledges that the impacts of the Project on surface water and water supply were not evaluated in that document either. (Draft EIS, § ES.1.3 at ES-3; § 3.22.2.1 at 3.22-2.) By ignoring Project operations and alternatives, the Draft EIS only evaluates a portion of the Project, so its conclusions as to the severity of various impacts are incomplete under NEPA. (See *Wetlands Action Network v. U.S. Army Corps of Engineers*, 222 F.3d 1105, 1118 (9th Cir. 2000) (applying “independent utility” test to determine whether the Corps was required to consider effects of multi-phase project in a single NEPA analysis) abrogated on other grounds by *Wilderness Soc. v. U.S. Forest Serv.*, 630 F.3d 1173 (9th Cir. 2011).)

The Corps’ decision not to consider the impacts of Project operations further undermines the function and purpose of the Draft EIS. Indeed, even within the scope of the Corps’ regulatory authority, it must evaluate how the DCP diversions will affect the Sacramento River and certain Delta channels, which are navigable waters of the United States. (Draft EIS § 3.14.1 at 3.14-1; see also 33 C.F.R. § 322.5(g) (providing the Corps has authority over “those activities which affect” the “condition, or capacity of the navigable waters of the United States.”).) Without

analysis of the impacts caused by DWR's operation of the Project, including its continued utilization of existing Delta infrastructure, there is no way for the public to understand from the Draft EIS what the full effects of the Project on the human environment will be.

B. Limited Range of Reasonable Alternatives

The identification and evaluation of a reasonable range of alternatives to a proposed project is a fundamental aspect of NEPA analysis. Section 1502.2(e) states that “The range of alternatives discussed in environmental impact statements shall encompass those to be considered by the decision maker.” The Council on Environmental Quality regulations for implementing NEPA require all reasonable alternatives to be objectively evaluated in an EIS, so that each alternative is evaluated at an equal level of detail. (40 CFR § 1502.14(b).) The Corps has an obligation under NEPA to “rigorously explore and objectively evaluate all reasonable alternatives’ to a proposed plan of action that has significant environmental effects.” (*NRDC v. USFS*, 421 F.3d 797, 813 (9th Cir. 2005) citing 40 C.F.R. § 1502.14(a).) In this analysis the Corps must “[d]evote substantial treatment to each alternative considered in detail including the proposed action so that reviewers may evaluate their comparative merits.” (40 C.F.R. § 1502.14(a), (b).) “[F]or alternatives which were eliminated from detailed study,” the Corps must “briefly discuss the reasons for their having been eliminated.” (40 C.F.R. § 1502.14.)

For reference, Section 3.2 of the Draft EIR describes DWR's alternative screening process, which culminated in three potential conveyance alignments, and diversion facilities with incremental variations in water capacity, from 3,000 cfs to 7,500 cfs. (Draft EIR, § 3.2, at 3-4, 3-5.) Despite the continued possibility that DWR may select Alternatives 2c or 4c—which contemplate CVP participation, a maximum capacity of 7,500 cfs, and three as opposed to two new intakes—the Corps has eliminated the CVP alternatives because they “would result in additional adverse effects on the aquatic ecosystem beyond those of the proposed action.” (Draft EIS, § 2.1 at ES-6.) Little else is provided to justify the Corps' removal of the only two alternatives that capture the upper-range of tunnel capacity that DWR still may ultimately pursue, but doing so obscures the full scope of possible impacts that the Project may have.

C. Inadequate Water Quality Analysis

As presented by DWR, the Project contemplates two or three water intake facilities in the Sacramento River near Hood, Courtland, and possibly Clarksburg, with each intake capable of diverting up to 3,000 cubic feet per second of fresh water, which would have otherwise traveled through the Delta. (Draft EIR, § 3.2, at 3-4.) By taking approximately 589,000 acre-feet of fresh water from upstream intakes each year, entirely bypassing the channels and sloughs that comprise the Delta, the Project will necessarily result in less fresh water—and therefore degraded water quality—for Delta residents, agriculture, fish, and wildlife. (See Draft EIS, § 3.21.2.1 at 3.21-2 (indicating long-term water quality degradation for salinity from brine disposal in the zone of initial mixing with ocean waters).) Importantly, the Draft EIS does not provide any analysis of the Project's effects on Delta water quality conditions relative to NDWA's 1981 Contract criteria, leaving the Agency uncertain about the true extent of the modeled increases in EC in the Delta.

Within the analysis presented, very little attention is paid to the increases in salinity, measured by electrical conductivity (“EC”), that are expected under each alternative. Section 3.21 of the Draft EIS purports to describe the effects that could occur from “construction, operation, and maintenance of the action alternatives...” (Draft EIS, § 3.21 at 3.21-1.) Section 3.21.2 also claims to “identif[y] the direct, indirect, and cumulative effects on water quality associated with the action alternatives, as well as the No Action Alternative.” (See *id.* at § 3.21.2.) However, these sections only focus on construction and compensatory mitigation for the Project. (See Draft EIS, § 3.21.2.2 at 3.21-5 through 3.21-19.) Little else is provided beyond a statement that operation of the facility would result in “varying degrees of accumulation” of constituents that degrade water quality, and the effects would be “dependent upon the location.” (*Id.* at 3.21-24.)

For detailed information on water quality impacts, the Draft EIS refers to Chapter 9 of the Draft EIR. Chapter 9 states that DWR’s operation of the Project in accordance with Water Rights Decision 1641 (“D-1641”) “would not increase the frequency at which contract EC thresholds would be exceeded.” (Draft EIR, § 9.0, at 9-3, citing Table 9-0.) But with the pending development and implementation of the Bay-Delta Water Quality Control Plan Update, DWR may have entirely different obligations to maintain water quality objectives from what is presently required under D-1641. Criteria under D-1641 are not identical to the year-round water quality impact criteria under the 1981 Contract. By assuming DWR will avoid water quality impacts because it intends to comply with D-1641, without taking into account its history of exceedances, the prevalence of temporary urgency change permits that relax water quality criteria, and the development of a new Bay-Delta Plan update, the Draft EIR downplays the effects that the Project’s upstream diversions could have on Delta water quality. The Draft EIS cannot simply rely on those assurances in the face of substantial evidence to the contrary.

Furthermore, Table 9-0 of the Draft EIR only describes the greatest average *monthly* increase in EC at Three Mile Slough (with a high of 62 mS/cm under Alternative 5), while the 1981 Contract imposes salinity thresholds based on a *14-day* average EC. (Ex. A, Art. 2.) NDWA’s prior review of the sensitivity analysis for DWR’s modeling showed increases in EC, particularly in August and September at the Emmaton monitoring station. In the past several years, NDWA has observed multiple exceedances of the 1981 Contract criteria at Three Mile Slough during the late summer and fall months, which could occur more frequently with the DCP. EC spikes on a less-than monthly time scale would not be evident from DWR’s modeling, meaning any statement that operations under the Project would not increase the frequency of exceedances of contractual thresholds cannot be verified.

A Delta water user’s ability to divert water of usable quality is decided on a daily basis, sometimes only during certain tidal cycles. Thus, improvements made during periods when water quality is already high cannot offset degradation of water quality during periods when the quality is low, contrary to what monthly averages may suggest. The Corps should incorporate analysis of DWR’s ability to fully comply with the 14-day mean EC criteria of the 1981 Contract as part of the Draft EIS’ baseline condition. As currently presented, the water quality analysis prevents a clear understanding of the impacts that can be attributed to the Project.

D. Missing Analysis of Water Surface Elevation and Water Supply Impacts

The alternatives for the Project will alter water elevations in the Delta by reducing surface flows in the summer and early fall, with effects being “larger for certain water types.” (See Draft EIS, § 3.18.2.2 at 3.18-2 through 3.18-3.) (“The modeling results showed consistent decreases in long-term average flows for all months on the Sacramento River north of Courtland (i.e. downstream of the proposed north Delta intakes).”) As noted above, changes to water surface elevations are of particular importance to NDWA because of the protections in the 1981 Contract, which prohibit adverse modifications of flow patterns in the Delta.

The Corps avoids evaluating the Project’s water supply impacts by suggesting that “operation of the SWP, including the facilities proposed in the action alternatives, is outside [Corps] authority under Section 408, Section 404, and Section 10.” (Draft EIS, § 3.22 at 3.22-1.) Instead, the Draft EIS refers to Section 6 of the Draft EIR for a supposedly “full analysis” of the effects of Project operations on water supply; however, no such analysis exists in that document. The Draft EIR also evades analyzing impacts to surface water resources and water supplies, stating those impacts “by themselves” are not considered impacts under CEQA, so DWR only describes the potential changes as a basis for understanding effects on other surface water-related resources. (Draft EIR, § 5.0 at 5-2.) As a result, neither the Draft EIR nor the Draft EIS contain analysis of one of the primary direct and fundamental impacts that the DCP will have on the environment: changes in water elevations by removing substantial surface water flows from the Delta.

Conversely, in the event that Project operations variably result in *increases* in surface water flows above historical levels during the growing season, unwanted and involuntary sub-irrigation could increase due to increased hydro-static pressure caused by the increase in seepage. Many crops grown within NDWA, including grapes, alfalfa, kiwis, apples, pears and cherries, are extremely sensitive to increased water within plant root zones. During the growing season, reduced oxygen to the root zone would reduce crop yield and, potentially, result in the loss of trees and vines. This will be damaging to crops, and to Delta agriculture in general.

The Draft EIS considers impacts to agricultural properties caused by additional seepage and higher groundwater elevations. (Draft EIS, § 3.2.2.2 at 3.2-15 through 3.2-16.) But despite finding changes in groundwater elevation and increases in salinity in groundwater, it summarily concludes that those impacts are not significant because the “natural interannual variability in Delta outflows would remain a much larger driver of electrical conductivity levels” than the modeled increases caused by the Project. (Draft EIS, § 3.2.2.2 at 3.2-17.) In addition to the deficiencies of the salinity modeling noted above, the extent to which increases in water elevations could be mitigated through increased drainage pumping operations of the reclamation districts and the cost of such operations would be substantial and should be a required obligation of the Project proponent through an enforceable mitigation program. No such mitigation is contemplated in the Draft EIS.

The Draft EIS must include an analysis of impacts—including cumulative impacts—of the DCP on surface water and local water supplies within the Project area, not just as an effect on the other resource categories. Impacts analysis and disclosures in the Draft EIS need to provide details on specific locations, durations, timing, size, and intensity of changes to water supply and

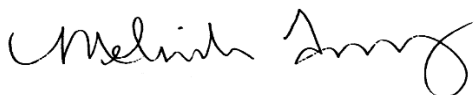
surface water elevations caused by Project operations in order to provide the public with a useful environmental document and appropriate mitigation that will reduce adverse impacts to a less than significant level.

The analysis and conclusions in the Draft EIS foster uncertainty because they make generally optimistic assumptions about the extent and duration of Project impacts, without site-specific analysis or scientific justification. Failure to ensure the implementation and effectiveness of mitigation actions could result in an increase in significant effects on the environment that must be analyzed. An incomplete picture of the Project's impacts undermines the credibility of the Draft EIS as a reliable environmental document, thereby harming the public's trust in the Corps' ability to protect the unique and valuable ecosystem, water supply, agriculture, and communities of the Delta.

III. CONCLUSION

The DCP represents a major change to the SWP, but it is not clear that DWR's operation of the Project will avoid or adequately mitigate the significant impacts to affect water quality and supplies in the Delta. The Draft EIS improperly relies on a deficient Draft EIR and further masks the potential effects of the Project by limiting environmental review to construction effects and removing potential alternatives that the Corps recognizes would cause additional adverse impacts on the environment. NEPA Regulations require that "[i]f a draft statement is so inadequate as to preclude meaningful analysis, the agency shall prepare and publish a supplemental draft of the appropriate portion." (40 C.F.R. § 1502.9(b).) NDWA appreciates the opportunity to provide these comments for consideration, and requests that the Corps revise the document to address the issues raised herein. For the reasons laid out above, the Draft EIS does not meet the requirements of NEPA and should be supplemented.

Sincerely,



Melinda Terry,
Manager

EXHIBIT A

Contract for the Assurance of a Dependable Water Supply of Suitable Quality
Between the Department of Water Resources and
North Delta Water Agency

January 28, 1981

CONTRACT
BETWEEN
STATE OF CALIFORNIA
DEPARTMENT OF WATER RESOURCES
AND
NORTH DELTA WATER AGENCY

FOR THE ASSURANCE
OF A DEPENDABLE WATER SUPPLY OF SUITABLE QUALITY

TABLE OF CONTENTS

Topic	Page
RECITALS	1
AGREEMENTS	1
1. Definitions	1
2. Water Quality	2
3. Monitoring	2
4. Emergency Provisions	2
5. Overland Water Supply Facilities	2
6. Flow Impact	2
7. Place of Use of Water	3
8. Scope of Contract	3
9. Term of Contract	3
10. Amount and Method of Payment for Water	3
11. Participation of the United States	3
12. Remedies	3
13. Comparable Treatment	4
GENERAL PROVISIONS	
14. Amendments	4
15. Reservation with Respect to State Laws	4
16. Opinions and Determinations	4
17. Successors and Assigns Obligated	4
18. Assignment and Subcontract	4
19. Books, Records, Reports and Inspections Thereof	4
20. Waiver of Rights	4
21. Assurance Relating to Validity of Contract	4
22. Notices	4
ATTACHMENTS	
Attachment A. Water Quality Contract Criteria	5
Part 1 of 4. Sacramento at Emmaton	
Part 2 of 4. North Fork Mokelumne at Walnut Grove, Sacramento at Walnut Grove, Steamboat Slough at Sutter Slough	
Part 3 of 4. San Joaquin at San Andreas Landing, Sacramento at Rio Vista	
Part 4 of 4. Mokelumne at Terminous	
Attachment B. Location of Water Quality Stations	6

**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**

THIS CONTRACT, made this 28 day of Jan., 1981, between the STATE OF CALIFORNIA, acting by and through its DEPARTMENT OF WATER RESOURCES (State), and the NORTH DELTA WATER AGENCY (Agency), a political subdivision of the State of California, duly organized and existing pursuant to the laws thereof, with its principal place of business in Sacramento, California.

RECITALS

(a) The purpose of this contract is to assure that the State will maintain within the Agency a dependable water supply of adequate quantity and quality for agricultural uses and, consistent with the water quality standards of Attachment A, for municipal and industrial uses, that the State will recognize the right to the use of water for agricultural, municipal, and industrial uses within the Agency, and that the Agency will pay compensation for any reimbursable benefits allocated to water users within the Agency resulting from the Federal Central Valley Project and the State Water Project, and offset by any detriments caused thereby.

(b) The United States, acting through its Department of the Interior, has under construction and is operating the Federal Central Valley Project (FCVP).

(c) The State has under construction and is operating the State Water Project (SWP).

(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.

(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.

(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.

(h) The Agency asserts that water users within the Agency have the right to divert, are diverting, and will continue to divert, for reasonable beneficial use, water from the Delta that would have been available therein if the FCVP and SWP were not in existence, together with the right to enjoy or acquire such benefits to which the water users may be entitled as a result of the FCVP and SWP.

(i) Section 4.4 of the North Delta Water Agency Act, Chapter 283, Statutes of 1973, as amended, provides that the Agency has no authority or power to affect, bind, prejudice, impair, restrict, or limit vested water rights within the Agency.

(j) The State asserts that it has the right to divert, is diverting, and will continue to divert water from the Delta in connection with the operation of the SWP.

(k) Operation of SWP to provide the water quality and quantity described in this contract constitutes a reasonable and beneficial use of water.

(l) The Delta has an existing gradient or relationship in quality between the westerly portion most seriously affected by ocean salinity intrusion and the interior portions of the Delta where the effect of ocean salinity intrusion is diminished. The water quality criteria set forth in this contract establishes minimum water qualities at various monitoring locations. Although the water quality criteria at upstream locations is shown as equal in some periods of some years to the water quality at the downstream locations, a better quality will in fact exist at the upstream locations at almost all times. Similarly, a better water quality than that shown for any given monitoring location will also exist at interior points upstream from that location at almost all times.

(m) It is not the intention of the State to acquire by purchase or by proceeding in eminent domain or by any other manner the water rights of water users within the Agency, including rights acquired under this contract.

(n) The parties desire that the United States become an additional party to this contract.

AGREEMENTS

1. **Definitions.** When used herein, the term:

(a) "Agency" shall mean the North Delta Water Agency and shall include all of the lands within the boundaries at the time the contract is executed as described in Section 9.1 of the North Delta Water Agency Act, Chapter 283, Statutes of 1973, as amended.

(b) "Calendar year" shall mean the period January 1 through December 31.

(c) "Delta" shall mean the Sacramento-San Joaquin Delta as defined in Section 12220 of the California Water Code as of the date of the execution of the contract.

(d) "Electrical Conductivity" (EC) shall mean the electrical conductivity of a water sample measured in millimhos per centimeter per square centimeter corrected to a standard temperature of 25° Celsius determined in accordance with procedures set forth in the publication entitled "Standard Methods of Examination of Water and Waste Water", published jointly by the American Public Health Association, the American Water Works Association, and the Water Pollution Control Federation, 13th Edition, 1971, including such revisions thereof as may be made subsequent to the date of this contract which are approved in writing by the State and the Agency.

(e) "Federal Central Valley Project" (FCVP) shall mean the Central Valley Project of the United States.

(f) "Four-River Basin Index" shall mean the most current forecast of Sacramento Valley unimpaired runoff as presently published in the California Department of Water Resources Bulletin 120 for the sum of the flows of the following: Sacramento River above Bend Bridge near Red Bluff; Feather River, total inflow to Oroville Reservoir; Yuba River at Smartville; American River, total inflow to Folsom Reservoir. The May 1 forecast shall continue in effect until the February 1 forecast of the next succeeding year.

(g) "State Water Project" (SWP) shall mean the State Water Resources Development System as defined in Section 12931 of the Water Code of the State of California.

(h) "SWRCB" shall mean the State Water Resources Control Board.

(i) "Water year" shall mean the period October 1 of any year

through September 30 of the following year.

2. Water Quality.

(a) (i) The State will operate the SWP to provide water qualities at least equal to the better of: (1) the standards adopted by the SWRCB as they may be established from time to time; or (2) the criteria established in this contract as identified on the graphs included as Attachment A.

(ii) The 14-day running average of the mean daily EC at the identified location shall not exceed the values determined from the Attachment A graphs using the Four-River Basin Index except for the period February through March of each year at the location in the Sacramento River at Emmaton for which the lower value of the 80 percent probability range shall be used.

(iii) The quality criteria described herein shall be met at all times except for a transition period beginning one week before and extending one week after the date of change in periods as shown on the graphs of Attachment A. During this transition period, the SWP will be operated to provide as uniform a transition as possible over the two-week period from one set of criteria to the next so as to arrive at the new criteria one week after the date of change in period as shown on the graphs of Attachment A.

(b) While not committed affirmatively to achieving a better water quality at interior points upstream from Emmaton than those set forth on Attachment A, the State agrees not to alter the Delta hydraulics in such manner as to cause a measurable adverse change in the ocean salinity gradient or relationship among the various monitoring locations shown on Attachment B and interior points upstream from those locations, with any particular flow past Emmaton.

(c) Whenever the recorded 14-day running average of mean daily EC of water in the Sacramento River at Sacramento exceeds 0.25 mmhos, the quality criteria indicated on the graphs of Attachment A may be adjusted by adding to the value taken therefrom the product of 1.5 times the amount that the recorded EC of the Sacramento River at Sacramento exceeds 0.25 mmhos.

3. **Monitoring.** The quality of water shall be measured by the State as needed to monitor performance pursuant to Article 2 hereof with equipment installed, operated, and maintained by the State, at locations indicated on "Attachment B". Records of such measurements shall at regular intervals be furnished to the Agency. All monitoring costs at North Fork Mokelumne River near Walnut Grove, Sacramento River at Walnut Grove, and Steamboat Slough at Sutter Slough incurred by the State solely for this contract shall be shared equally by the Agency and the State. All monitoring costs to be borne by the Agency for monitoring at the above locations are included in the payment under Article 10.

4. Emergency Provisions.

(a) If a structural emergency occurs such as a levee failure or a failure of an SWP facility, which results in the State's failure to meet the water quality criteria, the State shall not be in breach of this contract if it makes all reasonable efforts to operate SWP facilities so that the water quality criteria will be met again as soon as possible. For any period in which SWP failure results in failure of the State to meet the water quality criteria, the State shall waive payment under Article 10, prorated for that period, and the amount shall be deducted from the next payment due.

(b) (i) A drought emergency shall exist when all of the following occur:

(1) The Four-River Basin Index is less than an average of 9,000,000 acre feet in two consecutive years (which occurred in 1933-4 and 1976-7); and

(2) An SWRCB emergency regulation is in effect providing for the operation of the SWP to maintain water quality different from that provided in this contract; and

(3) The water supplied to meet annual entitlements of

SWP agricultural contractors in the San Joaquin Valley is being reduced by at least 50 percent of these agricultural entitlements (it being the objective of the SWP to avoid agricultural deficiencies in excess of 25 percent) or the total of water supplied to meet annual entitlements of all SWP contractors is being reduced by at least 15 percent of all entitlements, whichever results in the greater reduction in acre feet delivered.

(ii) A drought emergency shall terminate if any of the conditions in (b) (i) of this Article ceases to exist or if the flow past Sacramento after October 1 exceeds 20,000 cubic feet per second each day for a period of 30 days.

(iii) Notwithstanding the provisions of Article 2 (a), when a drought emergency exists, the emergency water quality criteria of the SWRCB shall supersede the water quality requirements of this contract to the extent of any inconsistency; provided, however, that the State shall use all reasonable efforts to preserve Delta water quality, taking into consideration both the limited water supply available for that purpose and recognizing the priority established for Delta protection referred to in Recital (g).

(iv) When a drought emergency exists, and an overland supply is not available to an individual water user comparable in quality and quantity to the water which would have been available to the user under Attachment A, the State shall compensate the user for loss of net income for each acre either (A) planted to a more salt-tolerant crop in the current year, (B) not planted to any crop in the current year provided such determination not to plant was reasonable based on the drought emergency, or (C) which had a reduced yield due to the drought emergency, calculated on the basis of the user's average net income for any three of the prior five years for each such acre. A special contract claims procedure shall be established by the State to expedite and facilitate the payment of such compensation.

5. Overland Water Supply Facilities.

(a) Within the general objectives of protecting the western Delta areas against the destruction of agricultural productivity as a result of the increased salinity of waters in the Delta channels resulting in part from SWP operation, the State may provide diversion and overland facilities to supply and distribute water to Sherman Island as described in the report entitled "Overland Agricultural Water Facilities Sherman Island" dated January 1980. Final design and operating specifications shall be subject to approval of the Agency and Reclamation District No. 341. The Agency or its transferee will assume full ownership, operation, and maintenance responsibility for such facilities after successful operation as specified. After the facilities are constructed and operating, the water quality criteria for the Sacramento River at Emmaton shall apply at the intake of the facilities in Three Mile Slough.

(b) The State and the Agency may agree to the construction and operation of additional overland water supply facilities within the Agency, so long as each landowner served by the overland facilities receives a quality of water not less than that specified in Attachment A for the upstream location nearest to his original point of diversion. The design and operation of such facilities and the cost sharing thereof are subject to approval of any reclamation district which includes within its boundaries the area to be served. The ownership, operation, and maintenance of diversion works and overland facilities shall be the subject of a separate agreement between the Agency or its transferees and the State.

6. **Flow Impact.** The State shall not convey SWP water so as to cause a decrease or increase in the natural flow, or reversal of the natural flow direction, or to cause the water surface elevation in Delta channels to be altered, to the detriment of Delta channels or water users within the Agency. If lands, levees, embankments, or revetments adjacent to Delta channels within the Agency incur seepage or erosion damage or if diversion facilities must be modi-

fied as a result of altered water surface elevations as a result of the conveyance of water from the SWP to lands outside the Agency after the date of this contract, the State shall repair or alleviate the damage, shall improve the channels as necessary, and shall be responsible for all diversion facility modifications required.

7. Place of Use of Water.

(a) Any subcontract entered into pursuant to Article 18 shall provide that water diverted under this contract for use within the Agency shall not be used or otherwise disposed of outside the boundaries of the Agency by the subcontractor.

(b) Any subcontract shall provide that all return flow water from water diverted within the Agency under this contract shall be returned to the Delta channels. Subject to the provisions of this contract concerning the quality and quantity of water to be made available to water users within the Agency, and to any reuse or recapture by water users within the Agency, the subcontractor relinquishes any right to such return flow, and as to any portion thereof which may be attributable to the SWP, the subcontractor recognizes that the State has not abandoned such water.

(c) If water is attempted to be used or otherwise disposed of outside the boundaries of the Agency so that the State's rights to return flow are interfered with, the State may seek appropriate administrative or judicial action against such use or disposal.

(d) This article shall not relieve any water user of the responsibility to meet discharge regulations legally imposed.

8. Scope of Contract.

(a) During the term of this contract:

(i) This contract shall constitute the full and sole agreement between the State and the Agency as to (1) the quality of water which shall be in the Delta channels, and (2) the payment for the assurance given that water of such quality shall be in the Delta channels for reasonable and beneficial uses on lands within the Agency, and said diversions and uses shall not be disturbed or challenged by the State so long as this contract is in full force and effect.

(ii) The State recognizes the right of the water users of the Agency to divert from the Delta channels for reasonable and beneficial uses for agricultural, municipal and industrial purposes on lands within the Agency, and said diversions and uses shall not be disturbed or challenged by the State so long as this contract is in full force and effect, and the State shall furnish such water as may be required within the Agency to the extent not otherwise available under the water rights of water users.

(iii) The Agency shall not claim any right against the State in conflict with the provisions hereof so long as this contract remains in full force and effect.

(b) Nothing herein contained is intended to or does limit rights of the Agency against others than the State, or the State against any person other than the Agency and water users within the Agency.

(c) This contract shall not affect, bind, prejudice, impair, restrict, or limit vested water rights within the Agency.

(d) The Agency agrees to defend affirmatively as reasonable and beneficial the water qualities established in this contract. The State agrees to defend affirmatively as reasonable and beneficial the use of water required to provide and sustain the qualities established in this contract. The State agrees that such use should be examined only after determination by a court of competent jurisdiction that all uses of water exported from the Delta by the State and by the United States, for agricultural, municipal, and industrial purposes are reasonable and beneficial, and that irrigation practices, conservation efforts, and groundwater management within areas served by such exported water should be examined in particular.

(e) The Agency consents to the State's export of water from

the Delta so long as this contract remains in full force and effect and the State is in compliance herewith.

9. Term of Contract.

(a) This contract shall continue in full force and effect until such time as it may be terminated by the written consent and agreement of the parties hereto, provided that 40 years after execution of this contract and every 40 years thereafter, there shall be a six-month period of adjustment during which any party to this contract can negotiate with the other parties to revise the contract as to the provisions set out in Article 10. If, during this period, agreement as to a requested revision cannot be achieved, the parties shall petition a court of competent jurisdiction to resolve the issue as to the appropriate payment to be made under Article 10. In revising Article 10, the court shall review water quality and supply conditions within the Agency under operation of the FCVP and SWP, and identify any reimbursable benefits allocated to water users within the Agency resulting from operation of the FCVP and SWP, offset by any detriments caused thereby. Until such time as any revision is final, including appeal from any ruling of the court, the contract shall remain in effect as without such revision.

(b) In the event this contract terminates, the parties' water rights to quality and quantity shall exist as if this contract had not been entered into.

10. Amount and Method of Payment for Water.

(a) The Agency shall pay each year as consideration for the assurance that an adequate water supply and the specific water quality set forth in this contract will be maintained and monitored, the sum of one hundred seventy thousand dollars (\$170,000.00). The annual payments shall be made to the State one-half on or before January 1 and one-half on or before July 1 of each year commencing with January 1, 1982.

(b) The payment established in (a) above shall be subject to adjustment as of January 1, 1987, and every fifth year thereafter. The adjusted payment shall bear the same relation to the payment specified in (a) above that the mean of the State's latest projected Delta Water Rate for the five years beginning with the year of adjustment bears to \$10.00 per acre foot; provided that, no adjusted payment shall exceed the previous payment by more than 25 percent.

(c) The payments provided for in this article shall be deposited by the State in trust in the California Water Resources Development System Revenue Account in the California Water Resources Development Bond Fund. The trust shall continue for five years (or such longer period as the State may determine) but shall be terminated when the United States executes a contract as provided in Article 11 with the State and the Agency at which time the proportion of the trust fund that reflects the degree to which the operation of the FCVP has contributed to meeting the water quality standard under this contract as determined solely by the State shall be paid to the United States (with a pro rata share of interest). In the event that the United States has not entered into such a contract before the termination of the trust, the trust fund shall become the sole property of the State.

11. **Participation of the United States.** The Agency will exercise its best efforts to secure United States joinder and concurrence with the terms of this contract and the State will diligently attempt to obtain the joinder and concurrence of the United States with the terms of this contract and its participation as a party hereto. Such concurrence and participation by the United States in this contract shall include a recognition ratified by the Congress that the excess land provisions of Federal reclamation law shall not apply to this contract.

12. Remedies.

(a) The Agency shall be entitled to obtain specific perfor-

mance of the provisions of this contract by a decree of the Superior Court in Sacramento County requiring the State to meet the standards set forth in this contract. If the water quality in Delta channels falls below that provided in this contract, then, at the request of the Agency, the State shall cease all diversions to storage in SWP reservoirs or release stored water from SWP reservoirs or cease all export by the SWP from Delta channels, or any combination of these, to the extent that such action will further State compliance with the water quality standards set forth in this contract, except that the State may continue to export from Delta channels to the extent required to meet water quality requirements in contracts with the Delta agencies specified in Section 11456 of the California Water code.

(b) To the extent permitted by law, the State agrees to forego the use of eminent domain proceedings to acquire water rights of water users within the Agency or any rights acquired under this contract for water or water quality maintenance for the purpose of exporting such water from the Delta. This provision shall not be construed to prohibit the utilization of eminent domain proceedings for the purpose of acquiring land or any other rights necessary for the construction of water facilities.

(c) Except as provided in the water quality assurances in Article 2 and the provisions of Article 6 and Article 8, neither the State nor its officers, agents, or employees shall be liable for or on account of:

(i) The control, carriage, handling, use, disposal, or distribution of any water outside the facilities constructed, operated and maintained by the State.

(ii) Claims of damage of any nature whatsoever, including but not limited to property loss or damage, personal injury or death arising out of or connected with the control, carriage, handling, use, disposal or distribution of any water outside of the facilities constructed, operated and maintained by the State.

(d) The use by the Agency or the State of any remedy specified herein for the enforcement of this contract is not exclusive and shall not deprive either from using any other remedy provided by law.

13. Comparable Treatment. In the event that the State gives on the whole substantially more favorable treatment to any other Delta entity under similar circumstances than that accorded under this contract to the Agency, the State agrees to renegotiate this contract to provide comparable treatment to the Agency under this contract.

GENERAL PROVISIONS

14. Amendments. This contract may be amended or terminated at any time by mutual agreement of the State and the Agency.

15. Reservation With Respect to State Laws. Nothing herein contained shall be construed as estopping or otherwise preventing the Agency, or any person, firm, association, corporation, or public body claiming by, through, or under the Agency, from contesting by litigation or other lawful means, the validity, constitutionality, construction or application of any law of the State of California.

16. Opinions and Determinations. Where the terms of this contract provide for action to be based upon the opinion, judgment, approval, review, or determination of either party hereto, such terms are not intended to be and shall never be construed as permitting such opinion, judgment, approval, review, or determination to be arbitrary, capricious, or unreasonable.

17. Successors and Assigns Obligated. This contract and all of its provisions shall apply to and bind the successors and assigns of the parties hereto.

18. Assignment and Subcontract. The Agency may enter into subcontracts with water users within the Agency boundaries in which the assurances and obligations provided in this contract as

to such water user or users are assigned to the area covered by the subcontract. The Agency shall remain primarily liable and shall make all payments required under this contract. No assignment or transfer of this contract, or any part hereof, rights hereunder, or interest herein by the Agency, other than a subcontract containing the same terms and conditions, shall be valid unless and until it is approved by the State and made subject to such reasonable terms and conditions as the State may impose. No assignment or transfer of this contract or any part hereof, rights hereunder, or interest herein by the State shall be valid except as such assignment or transfer is made pursuant to and in conformity with applicable law.

19. Books, Records, Reports, and Inspections Thereof. Subject to applicable State laws and regulations, the Agency shall have full and free access at all reasonable times to the SWP account books and official records of the State insofar as the same pertain to the matters and things provided for in this contract, with the right at any time during office hours to make copies thereof, and the proper representatives of the State shall have similar rights with respect to the account books and records of the Agency.

20. Waiver of Rights. Any waiver at any time by either party hereto of its rights with respect to a default, or any other matter arising in connection with this contract, shall not be deemed to be a waiver with respect to any other default or matter.

21. Assurance Relating to Validity of Contract. This contract shall be effective after its execution by the Agency and the State. Promptly after the execution and delivery of this contract, the Agency shall file and prosecute to a final decree, including any appeal therefrom to the highest court of the State of California, in a court of competent jurisdiction a special proceeding for the judicial examination, approval, and confirmation of the proceedings of the Agency's Board of Directors and of the Agency leading up to and including the making of this contract and the validity of the provisions thereof as a binding and enforceable obligation upon the State and the Agency. If, in this proceeding or other proceeding before a court of competent jurisdiction, any portion of this contract should be determined to be constitutionally invalid, then the remaining portions of this contract shall remain in full force and effect unless modified by mutual consent of the parties.

22. Notices. All notices that are required either expressly or by implication to be given by one party to the other shall be deemed to have been given if delivered personally or if enclosed in a properly addressed, postage prepaid, envelope and deposited in a United States Post Office. Unless or until formally notified otherwise, the Agency shall address all notices to the State as follows:

Director, Department of Water Resources
P.O. Box 388
Sacramento, California 95802

and the State shall address all notices to the Agency as follows:

North Delta Water Agency
921 - 11th St., Rm. 703
Sacramento, California 95814

IN WITNESS WHEREOF, the parties hereto have executed this contract on the date first above written.

Approved as to legal form and sufficiency: STATE OF CALIFORNIA

By /s/ P. A. TOWNER
Chief Counsel
Dept. of Water Resources

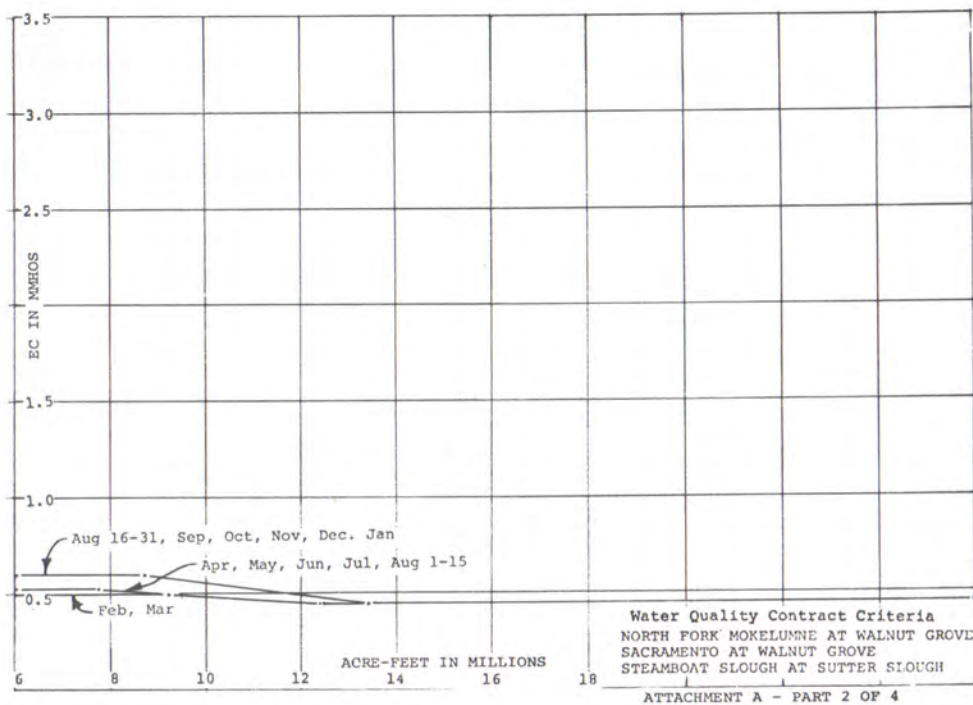
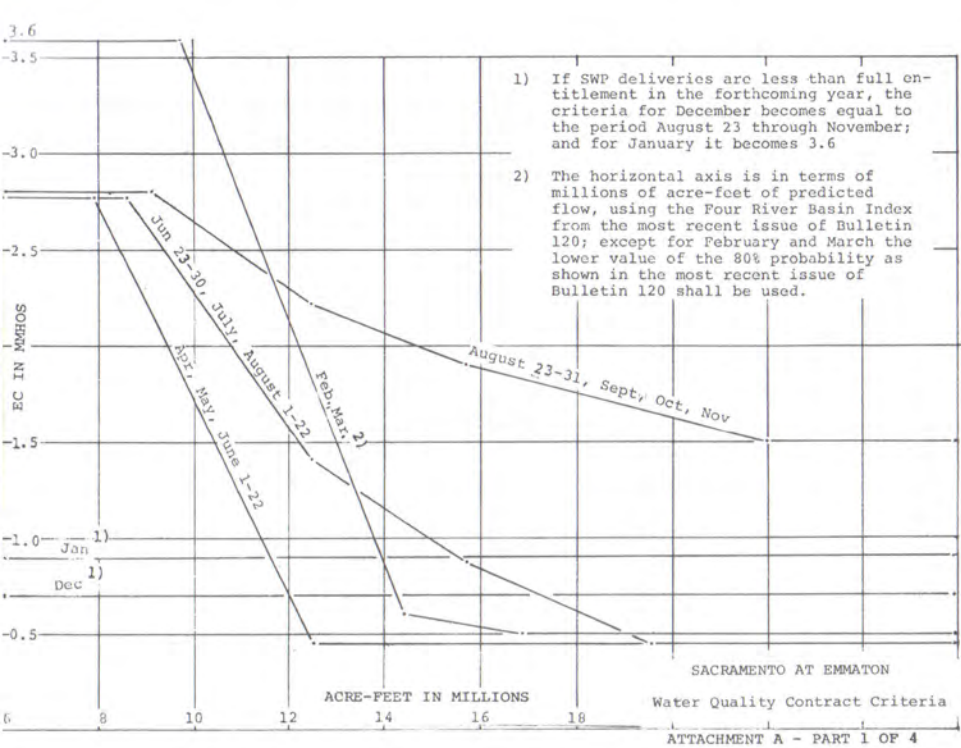
By /s/ RONALD B. ROBIE
Dept. of Water Resources

Approved as to legal form and sufficiency:

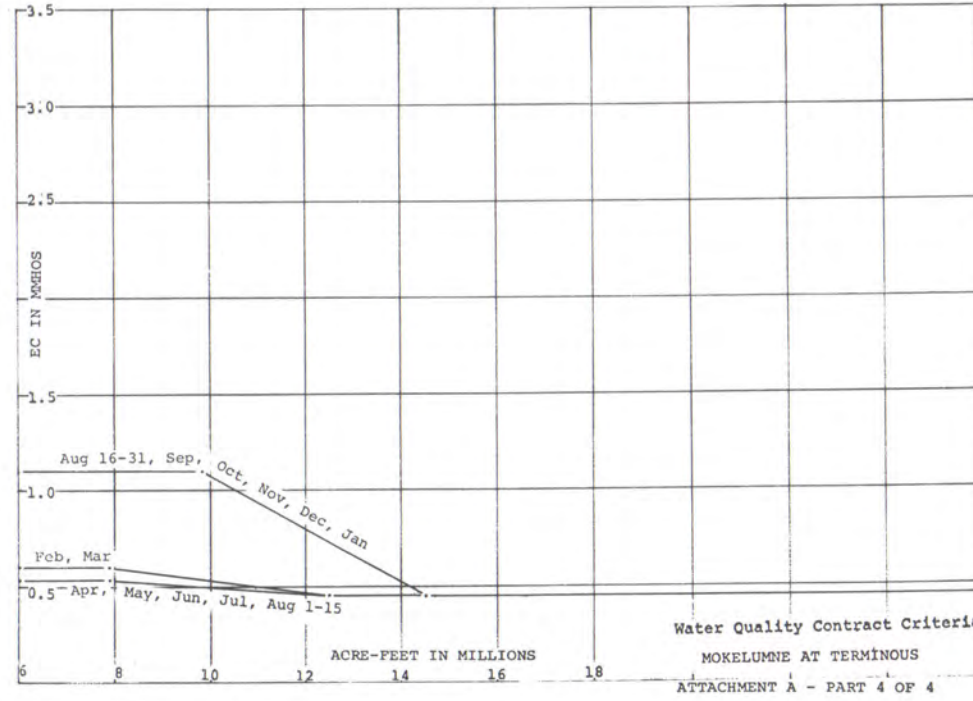
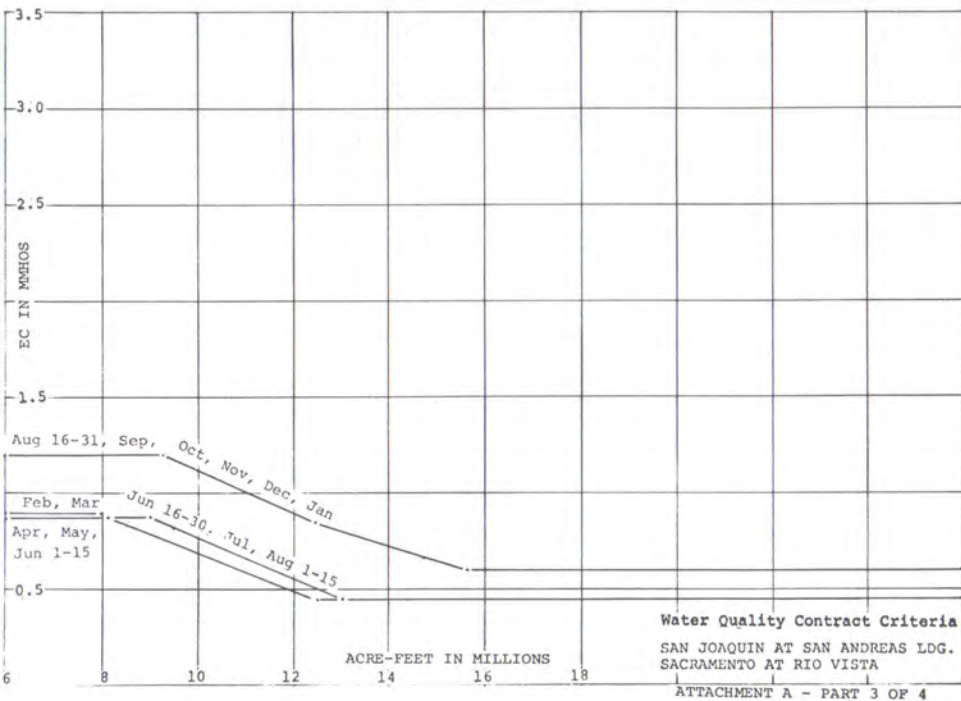
NORTH DELTA WATER AGENCY

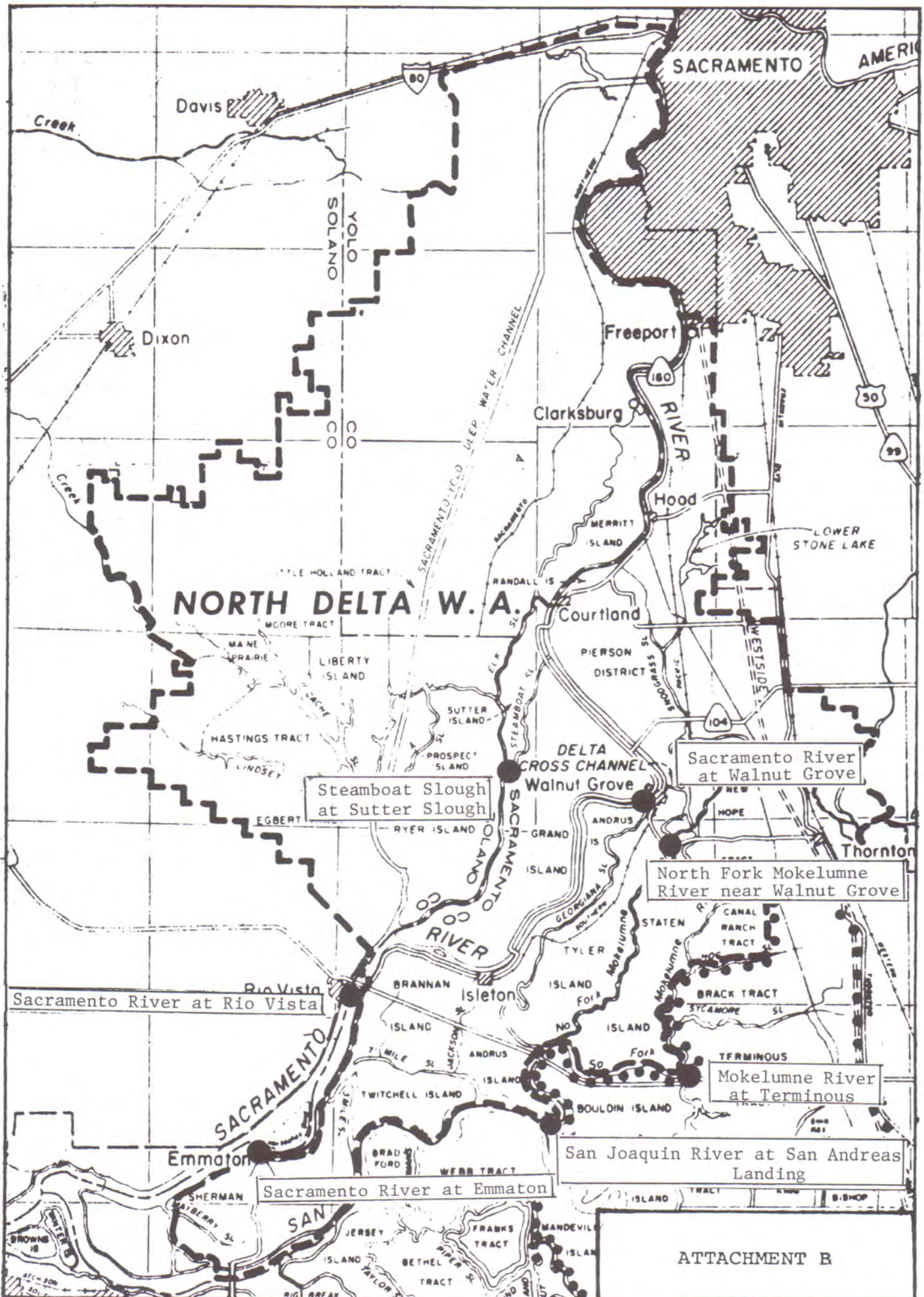
By /s/ GEORGE BASYE
General Counsel
North Delta Water Agency

By /s/ W. R. DARSIE
Chairman
Board of Directors



5





ATTACHMENT B