INFORMATIONAL HEARING

SENATE NATURAL RESOURCES AND WATER COMMITTEE

SENATOR ROBERT M. HERTZBERG, CHAIR

July 3, 2018
9:30 a.m., State Capitol Room 112

Overview Of The Proposed Contract Amendments Between The Department Of Water Resources And The State Water Project Contractors

Background Brief

Introduction

Water Code Section 147.5 provides:

> 147.5 At least 60 days prior to the final approval of the renewal or extension of a long-term water supply contract between the department and a state water project contractor, the department [of Water Resources] shall present at an informational hearing before the Legislature the details of the terms and conditions of the contract and how they serve as a template for the remaining long-term water supply contracts. This presentation shall be made to the Joint Legislative Budget Committee and relevant policy and fiscal committees of both houses, as determined by the Speaker of the Assembly and the Senate Committee on Rules. The department shall submit a copy of one long-term contract to the Joint Legislative Budget Committee no less than 30 days prior to the scheduled hearing.

On May 10, 2018, the Department of Water Resources (DWR) sent Senator Holly Mitchell, Chair of the Joint Legislative Budget Committee (JLBC), a letter pursuant to Section 147.5. The letter was accompanied by a packet that included, among other things, an executive summary highlighting the primary components of the proposed contract amendments, and a copy of the model contract showing how a consolidated original contract and amendments to date that would appear if further amended by the proposed contract amendments.

Purpose Of This Hearing

This hearing is not the hearing called for in Section 147.5. It is an informational hearing intended to identify and explore the state water policy implications of the proposed contract amendments. The hope is that this hearing will provide the JLBC a framework within which to further explore the proposed contract amendments in their future hearing pursuant to Section 147.5.

Purpose Of This Background

The State Water Project (SWP) contracts are complex, have a long history, and amendments to the contracts have at times been controversial and subject to extended litigation. The purpose of this background is to:

- Provide a brief history of the development of the SWP contracts;
- Describe the purpose and contents of the SWP contracts;
- Briefly describe the development, adoption, and aftermath of the amendments associated with the "Monterey Agreement;"
- Identify both current and persistent issues with the SWP contracts; and
- Identify questions that the members my wish to explore.

Brief History Of The Development Of SWP Contracts[*]

While the SWP has its roots in the State Water Resources Act of 1945 (Stat. 1945, Ch. 1514), the real action began with the passage of the Burns Porter Act in 1959 (Stat. 1959, Ch. 1762).[†] The Act authorized the issuance of $1.75 billion in general obligation bonds, subject to a vote of the people at the November 1960 general election. According to the Act:

> The object of this [Act] is to provide funds to assist in the construction of a State Water Resources Development System for the State of California. Said system shall be comprised of the State Water Facilities as defined in Section 12934(d) hereof and such additional facilities as may now or hereafter be authorized by the Legislature as a part of (1) the Central Valley Project or (2) the California Water Plan, and including such other additional facilities as the department deems necessary and desirable to meet local needs, including, but not restricted to, flood control, and to augment the supplies of water in the Sacramento-San Joaquin Delta and for which funds are appropriated pursuant to this [Act].[‡]

The State Water Resources Development System authorized in the Act is now called the State Water Project.

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[*] This section draws heavily on Dennis O'Connor, Financing of the State Water Project, California Research Bureau, June 1994, especially Appendices B and D.

[†] Stat. 1959, Ch. 1762, was named the Burns-Porter Act by ACR 151, Ch. 241, Stat. 1959.

[‡] Water Code §12931

Facilities specifically authorized in the Act are:[*]

- A multi-purpose dam and reservoir at Oroville;
- Dams and reservoirs upstream from Oroville near Frenchman, Grizzly Valley, Abbey Bridge, Dixie Refuge, and Antelope Valley;
- An aqueduct system, including:
  - A North Bay aqueduct,
  - A South Bay aqueduct,
  - A reservoir near Los Banos, and
  - A San Joaquin Valley-Southern California aqueduct;
- Delta facilities for "… water conservation, water supply in the Delta, transfer of water across the Delta, flood and salinity control, and related functions,"
- A drainage system for the San Joaquin Valley;
- Electricity generating and transmitting facilities; and
- Local water development facilities authorized by the Davis-Grunsky Act (Stat. 1959, Ch. 1752).

The Act also stated, among other things, that DWR, "subject to such terms and conditions as may be prescribed by the Legislature, shall enter into contracts for the sale, delivery or use of water or power …" Further, "Such contracts shall not be impaired by subsequent acts of the Legislature during the time when any of the bonds authorized herein are outstanding and the State may sue and be sued with respect to said contracts."[†]

Much occurred between the passage of the Burns-Porter Act in July 1959 and the November 1960 election. The Legislature had a number of concerns regarding the basic financing principles of the "State Water Resources Development System." The Legislature's concerns centered on four main areas:

- Allocating costs between purposes, such as recreation and water supply;
- Pricing the water, especially any agriculture-municipal/industrial differential;
- Reimbursing the project for costs associated with recreation and fish and wildlife; and
- Enriching property values unjustly, as a result of making scarce water available.

Just before the beginning of the Legislature's 1960 Regular Session, Governor Edmund G. Brown released his "Contracting Principles For Water Service Contracts."[‡] Key policies established in the Principles included:

- Costs will be allocated among water supply, flood control, recreation, fish and wildlife, drainage, and water quality;

[*] WC §12934 (d)
[†] WC §12937
[‡] The Principles, along with the transmittal letter, are reprinted at the end of this background brief, from California Legislature, Supplement To Appendix To The Journal Of The Senate, 1960 Regular Session, 1960, pp. 51-53

- Water rates will be calculated to return to the state all costs associated with the project – costs allocated to non-reimbursable purposes (such as flood control) will not be included in the rate structure;
- Under the "Delta pooling" concept, there will be a single price for water at and above the Delta;
- Transportation costs will be allocated based on proportionate use;
- Construction will not begin on any transportation facility until contracts have been executed to ensure recovery of at least 75 percent of the costs of such facility; and
- Each contracting agency pledges it will use its taxing or assessment power to ensure payment of any and all charges.

In addition, the Principles included estimated water charges for select locations along each reach of the aqueduct.

These Principles did not resolve all the concerns with the contracts. The Metropolitan Water District of Southern California (MWD), in particular, had its own set of concerns. Long story short: It wasn't until October 1960 that a compromise was reached, on November 1 MWD endorsed what was by then Proposition 1, and on November 3 MWD signed the initial SWP contact. It is hard to say how important MWD's endorsement and subsequent signing of the contract was to the outcome of the election, but it might have been critical. On November 8, 1960, Proposition 1 passed on a 2,857,586 to 2,719,942 vote, a 137,644 vote margin of victory.

With passage of Proposition 1, it was full steam ahead. The last of the original contracts was signed on March 23, 1965. That contract brought the total number of contracts to 31, for an ultimate 4,188,400 acre-feet of water per year.

Basic Purpose Of Contracts*

The SWP is made up of 700 miles of aqueducts, tunnels, siphons, and pipelines, as well as 34 storage facilities, 30 dams, 23 pumping plants, and 9 hydroelectric power generation plants. The contracts govern the SWP's construction and on-going operations. The various articles in the contracts determine for each contractor how much water DWR is to deliver each year, what the costs associated with the delivery of that water are, how those costs are to be billed to each contractor, and address any unique water supply or delivery issues associated with each contractor. The term of contracts are for 75 years, or until all the bonds authorized by the Burns-Porter Act have been repaid, whichever is longer.

Water Service Provisions

Articles 6 through 21 of the contracts establish the details governing water delivery. The contracts recognize a number of classes of water:

* This section draws heavily on Dennis O'Connor, Financing of the State Water Project, California Research Bureau, June 1994, especially Chapters 2, 3, and 4.

- "Table A" water (Article 6),
- Carry-over water (Article 12(e) and Article 56(e))
- Turnback Pool (Article 56(d)), and
- Surplus or unscheduled water (Article 21)

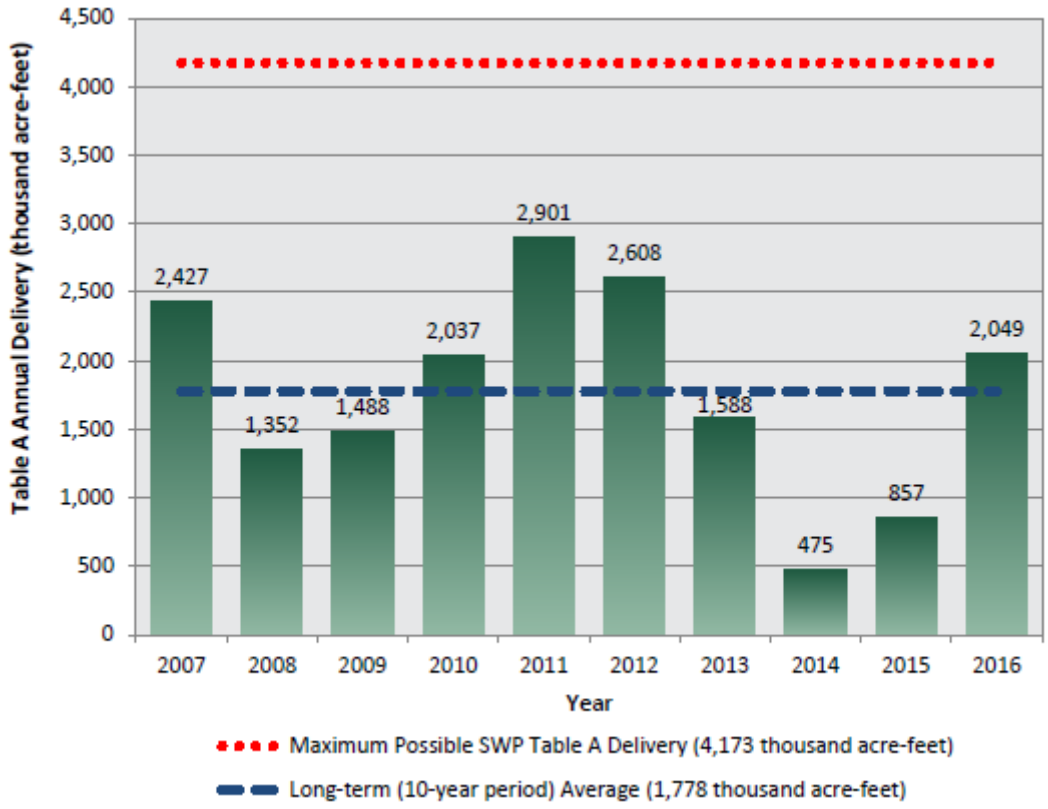
Table A

Table A establishes the maximum amount of water each contractor may request each year from the SWP. It is also the basis for allocating many of the costs associated with the SWP. Table 1 shows the maximum annual SWP Table A water delivery amounts for each SWP contractor.

The total amount of Table A water exceeds the delivery capacity of the SWP under nearly all circumstances. The total was not limited by estimating the maximum capacity of the SWP based on hydrological studies. Instead, when the initial project yield was increased by the California Water Commission in 1964, the water commission determined that it did not need to identify the source of the added yield. Instead, as demand reached that higher amount, the commission assumed that DWR would then construct whatever facilities necessary to supply that amount.

Under Article 81 (a), in years when DWR is unable to deliver the requested Table A amounts, DWR allocates to each contractor an equal proportion of their annual Table A amount.

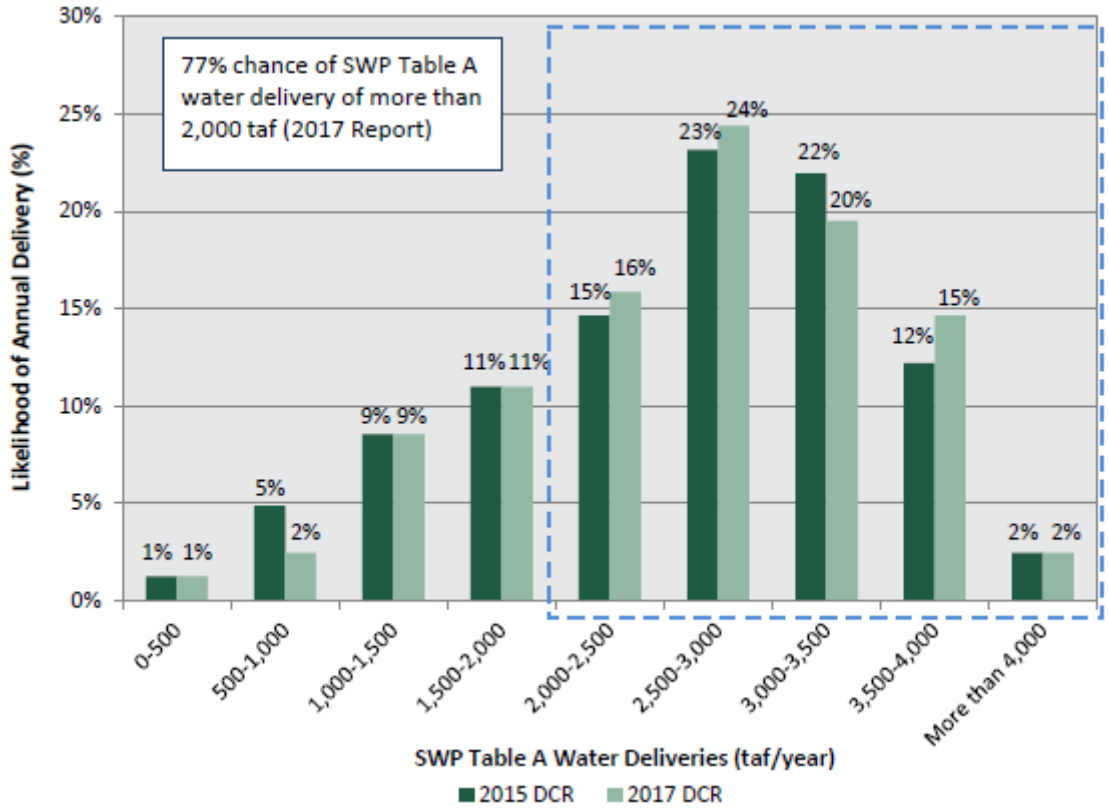
Chart 1. Historical Deliveries of SWP Table A Water, 2007–2016



Source: Final State Water Project Delivery Capability Report 2017, March 2018

TABLE 1 MAXIMUM ANNUAL SWP TABLE A WATER DELIVERY AMOUNTS FOR SWP CONTRACTORS	
CONTRACTOR	**MAXIMUM TABLE A DELIVERY AMOUNTS (ACRE-FEET)**
FEATHER RIVER AREA CONTRACTORS	
Butte County	27,500
Yuba City	9,600
Plumas County Flood Control & Water Conservation District	2,700
Subtotal	**39,800**
NORTH BAY AREA CONTRACTORS	
Napa County Flood Control & Water Conservation District	29,025
Solano County Water Agency	47,756
Subtotal	**76,781**
SOUTH BAY AREA CONTRACTORS	
Alameda County Flood Control & Water Conservation District, Zone 7	80,619
Alameda County Water District	42,000
Santa Clara Valley Water District	100,000
Subtotal	**222,619**
SAN JOAQUIN VALLEY AREA CONTRACTORS	
Dudley Ridge Water District	45,350
Empire West Side Irrigation District	3,000
Kern County Water Agency	982,730
Kings County	9,305
Oak Flat Water District	5,700
Tulare Lake Basin Water Storage District	87,471
Subtotal	**1,133,556**
CENTRAL COASTAL AREA CONTRACTORS	
San Luis Obispo County Flood Control & Water Conservation District	25,000
Santa Barbara County Flood Control & Water Conservation District	45,486
Subtotal	**70,486**
SOUTHERN CALIFORNIA AREA CONTRACTORS	
Antelope Valley–East Kern Water Agency	144,844
Castaic Lake Water Agency	95,200
Coachella Valley Water District	138,350
Crestline–Lake Arrowhead Water Agency	5,800
Desert Water Agency	55,750
Littlerock Creek Irrigation District	2,300
Metropolitan Water District of Southern California	1,911,500
Mojave Water Agency	85,800
Palmdale Water District	21,300
San Bernardino Valley Municipal Water District	102,600
San Gabriel Valley Municipal Water District	28,800
San Gorgonio Pass Water Agency	17,300
Ventura County Watershed Protection District	20,000
Subtotal	**2,629,544**
TOTAL TABLE A AMOUNTS	**4,172,786**
Source: California State Water Project Bulletin 132.	

Chart 2. Estimated Likelihood of SWP Table A Water Deliveries
(Excluding Butte County and Yuba City)



Source: Final State Water Project Delivery Capability Report 2017, March 2018

Carry-Over Water

Carryover Water is SWP water that is allocated to an SWP contractor and approved for delivery to that contractor in a given year, but not used by the end of the year. This water is exported from the Delta by the Banks Pumping Plant, but instead of being delivered to the contractor, it is stored in the SWP's share of San Luis Reservoir, when space is available, for the contractor to use in the following year.

Turnback Pool

Contractors may offer a portion of their Table A water that has been allocated in the current year and exceeds their needs to a "turnback pool," where another contractor may purchase it. Contractors that sell their extra Table A water in a turnback pool receive payments from contractors that buy this water.

Surplus Or Unscheduled Water

SWP water that is available and surplus to Table A deliveries is often referred to as Article 21 water. When it becomes available, it is generally either in a very wet year, or arises within a very short window due to unique hydrologic conditions. The availability and delivery of Article 21 water cannot interfere with normal SWP operations.

Payment Provisions

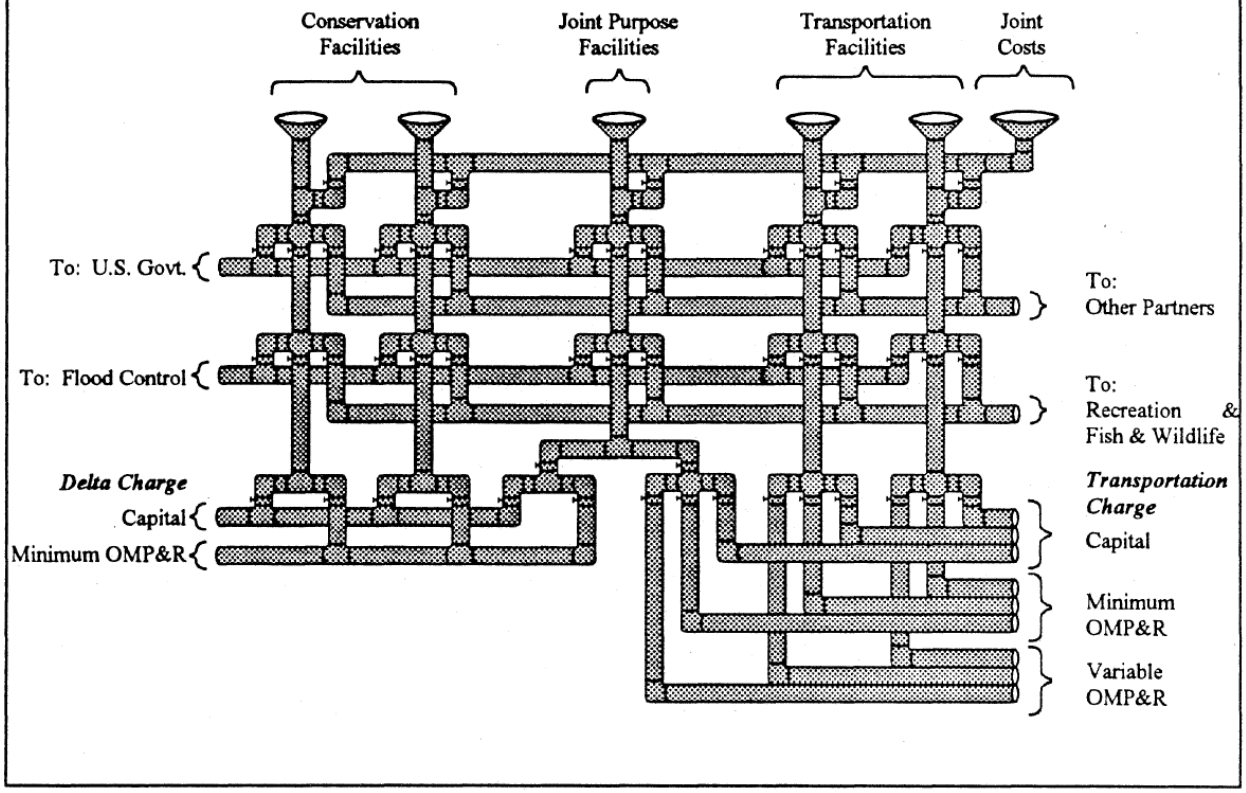
Articles 22 through 34 of the contracts establish the financial accounting details. The SWP contractors repay all reimbursable costs associated with acquiring and distributing SWP water. However, not all costs are reimbursable.

The process of sorting through all the costs and assigning them to the contractors is complicated. In concept, it is a five step process:

1. Assign costs to each facility,
2. Separate costs for each facility among project partners,
3. Allocate DWR costs to different purposes, e.g., recreation,
4. Subdivide reimbursable costs into function and type, and
5. Allocate costs to specific contractors.

The first 4 steps of process are illustrated in the figure below.*

Figure 2.A
State Water Project
Cost Allocation Process



* Reprinted from Dennis O'Connor, Financing of the State Water Project, California Research Bureau, June 1994.

Each vertical pipe represents an individual SWP facility. The facilities categorized as one of three types. The two vertical pipes on the left represent conservation facilities, such as Oroville Dam and the Delta facilities. These are the facilities that capture, store, and deliver water to the Delta. The vertical pipe in the middle represents facilities that serve both conservation and transportation functions, such as Reach 3.[*]

Each funnel symbolizes DWR assigning costs to either a specific facility or group of facilities. The funnels on top of the vertical pipes symbolize costs DWR assigns directly to specific facilities. The funnel on the upper right represents costs incurred by DWR that are related to the SWP, but which are not directly attributable to particular facilities.

As the plumbing chart shows, DWR allocates costs among various "partners," purposes, and functions. The horizontal pipes symbolize the assignment of the costs away from the SWP contractors.

The valves (below each branch of the pipes) represent points where DWR allocates costs among different categories. The valves are set based on specific contract provisions, Gov. Brown's contracting principles, or generally accepted accounting principles.

Assign Costs To Each Facility

DWR has divided the SWP facilities into conservation and transportation facilities. For conservation facilities that supply water to the Delta, the physical facility is the cost account unit. For conservation facilities south of the Delta, the associated reach is the accounting unit. For transportation facilities, the reach is the cost accounting unit. Any expenditure that DWR can identify directly with an individual facility or reach, DWR charges to that facility.

Not all of DWR's SWP activities can be readily identified with specific facilities. These include costs such as:

- General operating costs,
- General administrative costs,
- Direct operating costs, and
- General capitol costs.

DWR has specific rules for distributing each of these types of costs to individual facilities.

Separate Costs For Each Facility Among Project Partners

Certain SWP facilities coexist with facilities owned or operated by others and serve non-SWP purposes. For example, the SWP shares the costs of the San Luis Dam and Reservoir with the U.S. Bureau of Reclamation's Central Valley Project. DWR owns and operates most facilities by itself. Hence, most facilities do not have non-SWP partners. For those facilities with non-SWP partners, some sort of authorizing agreement establishes the terms of the partnership. These agreements also govern the cost-sharing terms between DWR and the non-SWP partner.

[*] A reach is a specific segment of an aqueduct. Each of the reaches on each aqueduct is designated by a number.

Allocate DWR Costs To Different Purposes

The SWP serves four distinct purposes. These purposes are:

1. Water supply,
2. Power generation,
3. Flood control, and
4. Recreation and fish and wildlife enhancement.

Water supply and power generation costs are "reimbursable" costs; i.e., the SWP contractors are responsible for reimbursing DWR for the costs it incurs in providing those purposes. Flood control and recreation and fish and wildlife enhancement are not.

Up to certain limits, the Army Corps of Engineers pays all costs associated with flood control.[*]

Recreation and fish and wildlife enhancement costs are governed by the Davis-Dolwig Act, (Stat. 1961, Ch. 861). In the Davis-Dolwig Act, the Legislature, among other things, made the following statement of policy:

> The Legislature further finds and declares it to be necessary for the general public health and welfare that facilities for the storage, conservation or regulation of water be constructed in a manner consistent with the full utilization of their potential for the enhancement of fish and wildlife and to meet recreational needs; and further finds and declares that the providing for the enhancement of fish and wildlife and for recreation in connection with water storage, conservation, or regulation facilities benefits all of the people of California and that the project construction costs attributable to such enhancement of fish and wildlife and recreation features should be borne by them.[†]

Consequently, the state, and not SWP contractors, is responsible for funding recreation and fish and wildlife enhancement costs.[‡]

The challenge, then, is how to allocate costs of a facility that serves two or more purposes to those purposes. A dam, for example, may provide all 4 benefits.

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[*] The federal government paid its share of capital costs at or around the time of construction. For example, DWR and the Army Corps of Engineers entered into a contract for federal payments for construction of the flood control aspects of Oroville Dam and Reservoir on March 8, 1962. The contract provided for federal payments equal to 22% of the construction costs of the dam and reservoir, not to exceed $85 million.

It is not clear at this time how repairs to Oroville dam and its appurtenants structures will be cost shared.

[†] WC §11900

[‡] The General Fund initially covered the costs of the non-SWP share of recreation and fish and wildlife enhancement costs. Between 1998 and 2011, no appropriation of General Fund moneys was made to DWR for these purposes. Beginning with the 2012-13 fiscal year, $10 M from the General Fund portion of the Harbors and Watercraft Revolving Fund has been continuously appropriated each year to DWR for these purposes: $7.5 M for current recreation and fish and wildlife enhancement costs, $2.5 M for costs incurred before 2012.

Consistent with the first of Governor Brown's contracting principles, DWR uses what is known as the "separable costs-remaining benefits" method. This is a fairly complicated method that takes into consideration a number of factors, including the cost of including each purpose in the project and the dollar value of the benefits received by including each purpose in the project.[*]

Subdivide Reimbursable Costs Into Function And Type

The contracts provide that the contractors will be charged a "Delta Charge" (Article 22) and a "Transportation Chart" (Article 23). Essentially, the Delta Charge represents those cost incurred in capturing, storing, and delivering water to the Delta, whereas the transportation charges represent the costs incurred in moving water from the Delta to the individual contractors. The contracts further subdivide those charges into a capital cost component; a minimum operation, maintenance, power and replacement component; and a variable operation, maintenance, power and replacement component. Once the costs are broken down into their components, they are then allocated among the contractors.

The full set of cost subdivided into function and type are shown in Table 2.

Allocate Costs To Specific Contractors

The formula used to calculate each contractor's Delta Charge is both elegant and complex.[†] The costs assigned to each contractor for the Delta Charge is essentially the net present value of actual and projected Delta water costs and credits, divided by the net present quantity of total annual Table A quantities, then multiplied by the specific contractor's Table A quantity for that year. Consequently, the Delta Charge is a fixed charge. That is, it does not vary with the quantity of water actually delivered to the contractor in any given year.

Basically, the transportation charge for each contractor is calculated by determining the costs assigned for each reach and each component, allocating those costs among each contractor that use that reach, and then adding together all the reaches that contractor uses. Fixed costs for each reach are allocated among contractors based on both the maximum Table A quantities measured in acre-feet and the capacity of the reach measured in cubic feet per second. Variable costs for each reach are allocated among the contractors based on the actual quantity of water delivered to that contractor through that reach.

Other Contract Provisions

Articles 35 through 50 of the contracts cover a variety of topics. Many are standard provisions in most contracts, such as remedies, amendments, inspection of the books, etc. Others are provisions unique to specific contractors or groups of contractors. For example, Article 48 in Metropolitan Water District's contract addresses the operation of the East Branch Aqueduct. Many contractors do not use that aqueduct, and so those provisions would not apply to them.

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[*] A summary of the use of separable costs- remaining benefits can be found in Dennis O'Connor, Financing of the State Water Project, California Research Bureau, June 1994, Appendix E. A critique of DWR's use of separable costs- remaining benefits can be found in Ronald C. Griffin & David R. Bell, Cost Allocation Procedures of the California State Water Project, Final Report, January 2011.

[†] It is shown beginning on page 36 in the Model Contract Showing MWD Original Contract and Amendments, As If Amended by The Proposed Contract Extension amendments, March 20, 2018

Table 2: Composition of Delta Water Charge and Transportation Charge

Delta Water Charge

Capital Cost Component

1. Planning, design, right-of-way, and construction costs of Conservation Facilities
2. Operations and maintenance (O&M) costs for newly constructed Conservation Facilities prior to initial operations
3. Activation costs for newly constructed Conservation Facilities
4. Power costs allocated to initial filling of San Luis Reservoir
5. Capitalized O&M costs (major repair work and so forth) for Conservation Facilities
6. Program costs (portion) to mitigate impacts on current Delta fishery population due to State Water Project (SWP) pumping prior to 1986 (Department of Water Resources-Department of Fish and Game agreement)

Minimum Operations, Maintenance, Power, and Replacement (OMP&R) Component

1. Direct O&M costs of Conservation Facilities
2. General O&M costs allocated to Conservation Facilities
   a. Contractor Accounting Office (portion)
   b. Financial and contract administration (portion)
   c. Water rights
   d. Power planning for SWP facilities (portion)
3. Replacement deposits for SWP control centers (portion)
4. Credits for a portion of Hyatt-Thermalito power generation
5. Power costs and credits related to pumping water to San Luis Reservoir for project operations (storage changes)
6. Value of power used and generated by Gianelli Pumping-Generating Plant
7. Program costs (portion) to offset annual fish losses resulting from pumping at Banks Pumping Plant (Department of Water Resources-Department of Fish and Game agreement)

Transportation Charge

Capital Cost Component

1. Planning, design, right-of-way, and construction costs of Transportation Facilities
2. Operations and maintenance (O&M) costs for newly constructed Transportation Facilities prior to initial operation
3. Activation costs for newly constructed Transportation Facilities
4. Power costs allocated to initial filling of Southern California reservoirs
5. Capitalized O&M costs (e.g., major repair work) for Transportation Facilities
6. Program costs (portion) to mitigate impacts on current Delta fishery population due to SWP pumping prior to 1986 (Department of Water Resources-Department of Fish and Game agreement)

Minimum OMP&R Component

1. Direct O&M costs of Transportation Facilities
   a. Headquarters and field divisions (portion)
   b. Insurance and Federal Energy Regulatory Commission (FERC) costs (portion)
2. General O&M costs related to Transportation Facilities
   a. Contractor Accounting Office (portion)
   b. Financial and contract administration (portion)
   c. Power planning for SWP facilities (portion)
3. Power costs and credits related to pumping water to Southern California reservoirs for project operations (storage changes)
4. Power costs for pumping water to replenish losses from Transportation Facilities (downstream costs)
5. Other power costs
   a. Station service at Transportation Facility power and pumping plants
   b. Certain transmission service costs (transmission access charges, downstream costs, etc.)
6. Replacement deposits for SWP control centers (portion)
7. Off-Aqueduct Power Facility costs—bond service, bond cover costs (25 percent of bond service), bond reserves, transmission service costs, fuel costs, taxes, and O&M—less power sales allocated to Off-Aqueduct Power Facilities
8. Program costs (portion to offset annual fish losses resulting from pumping at Banks Pumping Plant (Department of Water Resources-Department of Fish and Game agreement)

Variable OMP&R Component

1. Power purchase costs
   a. Capacity
   b. Energy
   c. Pine Flat Powerplant bond service, O&M, and transmission costs allocated to aqueduct pumping plants
2. Alamo, Devil Canyon, Warne, and Castaic power generation credited at the power plant reach and charged to aqueduct pumping plants
3. Hyatt-Thermalito Diversion Dam Powerplant generation charged to aqueduct pumping plants (credits for this generation are reflected in the Delta Water Rate)
4. Replacement deposits for equipment at pumping plants and power plants
5. Credits from sale of excess SWP system power
6. Program costs (portion) to offset annual fish losses resulting from pumping at Banks Pumping Plant (Department of Water Resources-Department of Fish and Game agreement)

Note: Excludes costs recovered under the East Branch Enlargement Transportation Charge.
Source: Department of Water Resources, Bulletin 132 – 2016, Appendix B, p. B-5

Monterey Agreement

In 1994, SWP contractors and DWR met in Monterey County to try to resolve issues with the SWP. The result of that meeting was "the Monterey Agreement." Among other things, that agreement called for significant amendments to the SWP contracts. The agreement was not without controversy, some of which lingers to today. This section will present a very abbreviated description of the perceived problems with the SWP, a summary of key provisions of the Agreement, and the aftermath of that agreement.

Problems[*]

In signing the SWP contracts, DWR implicitly committed to build those facilities which, when completed, would enable it to deliver to all contractors the total "entitlements" of over 4 maf of water. However, the parties anticipated a possible shortage in the water supply. As noted above, Article 18 of the contracts outlines the reallocation of water among contractors in years of temporary shortage and also addresses the prospect of long-term shortfalls. However, the original provisions of Article 18 are much different than they are today, and were the main impetus for the Monterey Agreement.

Originally, Article 18(a) provided "In any year in which there may occur a shortage due to drought or other temporary cause in the supply of project water available for delivery to the contractors, with the result that such supply is less than the total of the annual entitlements of all contractors for that year, the State shall, before reducing deliveries of project water to all contractors, reduce the delivery of project water to each contractor using such water for agricultural purposes by a percentage, not to exceed fifty percent (50%) in any one year or a total of one hundred percent (100%) in any series of seven consecutive years, of that portion of the contractor's annual entitlement for the respective year which is to be put to agricultural use as determined by the State ...." Subdivision (a) was often referred to as "the agriculture first" provision. Although agricultural contractors would suffer first during a temporary shortage under subdivision (a), they were also entitled to makeup water first in times of surplus.

If the shortage of water was of a more permanent nature, and threatened to reduce the minimum project yield, Article 18(b) would take over. Under Article 18(b), the DWR would be required to proportionately reduce the annual entitlements and the maximum annual entitlements "... 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 ... "

By the late 1980's and early 1990's, the pressures on the SWP grew acute. Supplies were severely diminished as a result of a seven-year drought. Laws and regulations designed to protect the environment also limited the supply of water. Disputes arose among agricultural and urban contractors and DWR about how the limited amount of water should be distributed.

In its search for additional water supplies, DWR investigated the plausibility of establishing a water bank in Kern County. The Kern Water Bank was a subsurface reservoir designed to store surplus water from the Delta in the groundwater basin during wet years for extraction during dry

[*] The description of problems and the agreement draws heavily on the findings of fact in *Planning & Conservation League v. Department of Water Resources*, 83 Cal. App. 4th 892

years. One of eight elements comprising the Kern Water Bank was the Kern Fan Element. In 1986, DWR purchased the Kern Fan Element, planning to construct recharge basins, extraction wells and conveyance facilities. The improvements were expected to increase storage capacity to about 1 M acre-feet. After completion of a supplemental environmental impact report, however, DWR halted all design work, preparation of contracts and feasibility work because of problems in the Delta and the adverse environmental impacts of the Kern projects.

In 1991, as California entered a fifth year of drought, DWR organized a drought water bank allowing for large scale water transfers to ameliorate the overall water shortage. DWR prepared an extensive environmental impact report (EIR) to meet its CEQA charge. In spite of the lengthy drought, DWR was able to meet contractors' requests for delivery in each year except 1994.

Nevertheless, urban and agricultural contractors disputed DWR's implementation of Article 18 of their long-term contracts. The agricultural contractors contended that the shortages were not due to the drought, but rather to DWR's failure to complete the facilities originally envisioned as the SWP. The urban contractors held secret negotiations concerning Article 18. Each urban contractor was obligated to execute a confidentiality agreement before participating in the meetings held to discuss revision of Article 18. The threat of litigation loomed.

Agreement

The warring factions agreed to negotiate a settlement of the Article 18 controversy. The primary objective was to avoid litigation. Agricultural and urban contractors met with DWR in Monterey in the fall of 1994 to "search for an answer to a single-but critical-problem in managing the SWP: How to allocate the water supply equitably during times of shortage." Soon after discussions began, the parties determined that the water allocation problem was far too complex to be effectively approached as a single-issue problem. Article 18 negotiations grew into an omnibus revision of the SWP long-term contracts and their administration-an endeavor to update management of the SWP.

After two months of negotiations, DWR and agricultural and urban contractors agreed to a statement of 14 principles, which came to be known as the Monterey Agreement. One of the major goals of the Monterey Agreement was to "[i]ncrease water management flexibility, providing more tools to local water agencies to maximize existing facilities." To accomplish this goal, DWR would:

- Transfer control of the Kern Water Bank property to the agricultural contractors,
- Provide for permanent sales of water among contractors,
- Provide more flexibility in using certain reservoirs for local use,
- Implement a simpler program for interruptible water supplies, and
- Provide new rules for transportation of non-SWP water to contractors, and provide new rules for storing water outside a contractor's service area.

As part of this agreement, 45,000 acre feet of annual Table A entitlements belonging to two agricultural contractors will be retired. In addition, voluntary entitlement transfers of about 130,000 acre-feet from agricultural to urban users will likely proceed.

The Monterey Agreement afforded many benefits to individual contractors by increasing their own water supply reliability through:

- Water transfers,
- Water banking,
- Storage outside service areas,
- Transport of nonproject water, permanent sales of water among contractors,
- Annual turn-back programs,
- Use of Kern Water Bank property by agricultural contractors for water banking, and
- Access by urban water contractors to Kern Water Bank use.

For the settlement to become effective, the 14 principles of the Monterey Agreement had to be translated into legally binding contract amendments, and the two largest water contractors, Kern County Water Agency and Metropolitan Water District of Southern California, had to execute the amended contracts. This was done.

Consequences

Those contractors who participated in the Monterey negotiations, together with DWR, determined that implementation would have potential adverse environmental impacts necessitating the preparation of an EIR. They agreed to appoint the Central Coast Water Authority (CCWA) to serve as lead agency under CEQA.

A programmatic EIR was completed and certified by CCWA in October of 1995. DWR, as a responsible agency, issued findings and adopted the EIR two months later. On December 13, 1995, DWR executed the Agreement for the Exchange of the Kern Fan Element of the Kern Water Bank, by which DWR agreed to divest and convey the 20,463 acres of state property known as the Kern Fan Element.

The EIR was challenged by a water agency as well as citizens groups. Planning and Conservation League (PCL) petitioned the superior court for a writ of mandamus compelling DWR to serve as lead agency and to properly prepare and certify a legally adequate EIR. A later amendment, to which Citizens Planning Association of Santa Barbara County, Inc. (CPA) and Plumas County Flood Control and Water Conservation District (Plumas) were added as plaintiffs, challenged DWR's transfer of title to the Kern Fan Element and execution of amended contracts in a reverse validation cause of action.

On Sept. 15, 2000, the Court of Appeal, Third District found that DWR, not the joint powers water agency, had the statutory duty to serve as lead agency in preparing the EIR. The court further held that the EIR was defective in its failure to adequately consider a no project alternative in regard to proposed elimination of the original contracts' provision for reallocation of water among contractors in the event of permanent water shortage; i.e., Article 18(b).

Two years later, on July 22, 2002, an agreement was reached regarding the principles for a settlement among the parties. As noted in the Joint Statement on the Monterey Agreement Amendments Litigation dated, February 27, 2003, this was a complex agreement. Selected key components of the settlement included:

- DWR and the SWP contractors would take actions, including adoption of new amendments to the SWP contracts, to improve and clarify disclosure of information about the delivery capability of the SWP. Contract amendments would delete the term "entitlement" and replace that term with "Table A Amount." The amendment would not change DWR's water delivery obligations under the SWP contracts. The amendment would also require DWR to distribute a biennial report to SWP contractors and all city, county, and regional planning agencies within the SWP project area, providing information as to SWP delivery capabilities, historic deliveries, and estimated deliveries under a range of hydrologic conditions.
- Agreement on the content, scope and process for the new EIR.
- DWR would act as lead agency in preparing the new EIR.
- Future negotiations for certain amendments to SWP water contracts between DWR and the SWP contractors would be conducted in public.
- DWR would issue guidelines for its review and approval of permanent water transfers.
- The Kern Water Bank would remain in local ownership and will operate as it has, but will be subject to additional restrictions on use.
- $8 million would be paid to Plumas, primarily for watershed improvements in the Feather River watershed, and for other district-related purposes, to be disbursed with input from a watershed forum composed of representatives of Plumas, local community groups, DWR, and SWP contractors.
- $5.5 million would be paid in installments to plaintiffs to implement the settlement, including watershed restoration projects, follow-up actions arising from the settlement, and technical studies.
- The State Water Project would be operated pursuant to the Monterey Amendments and new amendments pending completion of the new EIR and termination of the litigation.

The settlement agreement has not ended all the litigation regarding the Monterey Amendments. While the courts have allowed DWR to proceed with the implementation of the Monterey Amendment, the DWR was required to prepare a new EIR. This EIR was subsequently challenged in court. Long story still continuing, three appeals, including the appeal of the revised EIR, have been consolidated for a single oral argument and decision by the Third District Court of Appeal. It is unknown when the Court of Appeal will conduct oral argument and issue an opinion, but it will not be until sometime in 2019.

Current and Persistent Issues

From the very beginning, some aspect of the SWP or another has been controversial, and that remains true to this day. This section identifies some issues that may have relevance to SWP contract amendments.

WaterFix

California WaterFix is a proposal to build two tunnels under the Delta in an attempt to move water in a more reliable and benign way from the Sacramento River to the SWP pumps near Tracy. There are strong feelings regarding this proposal on all sides. The details on the construction, financing, and which water agencies will ultimately participate in the project are still unresolved. Also unresolved is how the SWP contracts would be amended to incorporate repayment of the construction and operating costs associated with WaterFix. SWP contactors and DWR assert that the currently proposed contract amendments are a necessary, but not sufficient condition to incorporate WaterFix into the SWP. Many environmental organizations contend that unless and until the various issues with WaterFix are resolved, any contract amendments are premature at best.

Lingering Concerns With Monterey Agreement

The settlement agreement resolved the issues among the litigating parties, but not all those critical of the Monterey Agreement participated in that litigation. In particular, there are a number of environmental groups that question why the total Table A amounts haven't been reduced à la the old Article 18 (b): Perhaps to something closer to the long-term average yield of the project.

Davis-Dolwig Decisions and SWP "Off Budget"

On numerous occasions the Legislative Analyst's Office (LAO) has commented on the SWP being "off budget" and how the Legislature has no input on Davis-Dolwig expenditures. In its most through discussion of the issues, the LAO wrote:[*]

"There has been no opportunity for legislative input into DWR decisions to allocate certain costs to Davis-Dolwig. That is, DWR alone determines what costs are to be charged to the SWP contractors and what costs are potentially to be borne by the state. That is largely because these and other budget decisions affecting the SWP are made largely outside of the annual legislative budget process. Although the department must obtain authorization from the Legislature to create new staff positions, the allocation of SWP funds to support SWP operations and capital outlay expenditures is not subject to appropriation in the annual budget bill. Existing statute provides DWR with the authority to spend SWP funds without legislative approval for these purposes."

The LAO also observed, "The DWR is continuing to incur new recreation costs at SWP facilities without identifying a state funding source to pay for them or considering legislative priorities for spending for recreation programs. For example, DWR has spent SWP funds for the recreation facilities at Lake Perris without any consideration of what may be higher-priority projects in other state parks or any legislative review of its spending for this purpose."

Additionally, they found regulatory compliance costs are being allocated by DWR to Davis-Dolwig. "In order to continue to operate the hydroelectric facility at Lake Oroville, DWR must renew its license from the Federal Energy Regulatory Commission (FERC). Part of the licensing

[*] Legislative Analyst's Office, Reforming Davis-Dolwig: Funding Recreation in The State Water Project, March 19, 2009.

requirements is the provision of additional recreation facilities. The DWR has allocated a portion of the added costs of these facilities to Davis-Dolwig and the state, rather than including them in charges to SWP contractors, even though these costs are the result of regulatory requirements that must be met to operate the hydroelectric plant."

The proposed amendments do not appear to address any of these concerns raised in the past by the LAO.

Reduce Dependence On The Delta

In enacting Delta Reform Act (Stats. 2009, 7th Ex. Sess., Ch. 5), the Legislature added Section 85021 to the Water Code, which reads:

> 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.

The proposed amendments do not appear to facilitate reducing dependence on the Delta.

Source Watersheds

Water Code Section 108.5 states, in subdivision (a):

> It is hereby declared to be the established policy of the state that source watersheds are recognized and defined as integral components of California's water infrastructure.

The proposed amendments do not appear to facilitate investment in the source watersheds of the SWP.

Legislature's Role In Future Contract Amendments

As noted previously, Section 147.5 provides that at least 60 days prior to the final approval of the *renewal or extension* of a long-term water supply contract between DWR and a SWP contractor, DWR must present the details to the Joint Legislative Budget Committee. However, it does not appear that DWR would have to present contract amendments to the Legislature if the amendments simply addressed financing an additional water facility, such as proposed by WaterFix.

Questions

The Executive Summary that is included in the briefing packet identifies the principal changes to the contracts and the reasons for those changes. The following are questions members may wish to explore with the witnesses:

- Do the amendments benefit some classes of contractors more than others? Eg., agricultural contractors versus urban contractors, large contractors versus smaller contractors, north of Delta contractors versus south of Delta contractors, etc.?
- Were other amendments considered and rejected? If so, what were they?
- Why not simply extend the contracts?
- The allocation of costs to purposes has not been revised since the early 1980s. In the intervening years, the relative value of water, recreation, and fish and wildlife have likely changed. As these amendments essentially reset the SWP contracts, why not also reallocate costs among purposes?
- The proposed Article 61, subdivision (c) would establish a new State Water Resources Development System Finance Committee composed of representatives from the State and the Contractors. Why should the SWP contractors get formal input on the financing policies of the SWP, while the Legislature gets no say over one of the State's most valuable assets?
- Please respond to each of the issues raised above in "Current and Persistent Issues."
- Article 1 (ap), in defining water system facilities, states, inpart, that the facilities include:

  > "(11) Capital projects which are approved in writing by the State and eighty (80) percent of the affected Contractors as "Water System Facilities," provided that the approving Contractors' Table A amounts exceed eighty (80) percent of the Table A amounts representing all affected Contractors and provided further that "affected Contractors" for purposes of this subdivision (11) shall mean those Contractors which would be obligated to pay a share of the debt service on Revenue Bonds issued to finance such project."

  What does this mean? What sorts of capital projects are in mind? Is this a back-door for including Water Fix?

GOVERNOR EDMUND G. BROWN

CONTRACTING PRINCIPLES FOR WATER SERVICE CONTRACTS*

CALIFORNIA DEPARTMENT OF WATER RESOURCES

SACRAMENTO, JANUARY 21, 1960

These principles will establish the framework and terms under which the State will negotiate water delivery contracts with local agencies. Obviously minor details of contracts which may be peculiar to given districts cannot be included in these principles.

The policy to be established on power marketing and acreage limitation is included in a single statement of principle. Because of the fact that the project, under full operation, will consume more power than it will produce, power will be sold at market value in order to reduce the cost of water. The value of the power will be determined by the difference between the actual cost of producing it and what it will bring on the open market.

This value, estimated at between two and three dollars per acre-foot, will be applied to reduce the cost of water for all purposes, agricultural, municipal and industrial, except for use on land in excess of 160 acres (320 acres in the case of community property). Water will be furnished to lands in excess of 160 acres but the price will be the cost of delivering the water, including pricing of necessary power at its market value.

All water in and above the Delta will be sold at the same price, which will reflect the capital costs and operation and maintenance costs of works constructed in and north of the delta. Water exported from the Delta will reflect the Delta price plus each area's proportionate share of capital costs and operation and maintenance costs of transportation facilities (aqueducts, pumping plants, etc.)

In the event of a shortage the water supply will be prorated among all export contractors. Provision is made for the accumulation of funds to finance additional storage facilities to insure a continuity of supply of water for local needs and for export from the Delta in the event area of origin statutes are exercised and to provide for increased demands.

The State Department of Water Resources will proceed immediately to negotiate water delivery contracts, based upon these principles, with local agencies. Local agencies will be required to sign contracts guaranteeing recovery by the State of at least 75 percent of the cost of

* Reprinted from: California Legislature, Supplement To Appendix To The Journal Of The Senate, 1960 Regular Session, 1960, pp. 51-53

transportation facilities necessary to furnish water to them before construction financed wholly or partly from sale of bonds will be initiated.

The State will make every effort to encourage the formation of comprehensive contracting agencies in order to insure that project benefits are spread as widely as possible and also in the interest of guaranteeing a sound market for project water.

CONTRACTING PRINCIPLES FOR WATER SERVICE CONTRACTS UNDER THE CALIFORNIA WATER RESOURCES DEVELOPMENT SYSTEM

JANUARY 20, 1960

1. Cost allocations shall be on the separable costs-remaining benefits basis for multipurpose facilities and on a proportionate use basis by areas for water transportation facilities.

2. For purposes of project commodity pricing, costs will be allocated among water supply, flood control, recreation, enhancement of fish and wildlife, drainage, quality control, and such other functions as may be authorized and performed by the particular facility or facilities under consideration.

3. Rates for water and power and for other reimbursable items will be established so as to return to the State all costs of project operation, maintenance and replacement, all principal and interest on (1) bonds, (2) expenditures from the California Water Fund, and (3) other moneys used in the construction of the project works. Those costs declared by the Legislature to be nonreimbursable and the federal contributions for flood control and for other items will not be included in the rate structure.

4. The project will require more power for pumping purposes than it will produce. Power required in the operation of the project must be paid for by the water users whether it is obtained from project or nonproject sources. Therefore, the costs of the project facilities producing the power is properly a cost of water supply and in the project cost allocation no separate allocation of the capital costs of power facilities will be made. The capital costs of power will be included in the costs allocated to water supply. The difference between the actual cost of power, that is, the amount necessary to repay the capital and operation and maintenance costs of the power facilities, and the market value of the power provides an economic benefit. A cost allocation study will be made with reference to power facilities for the purpose of determining the economic benefit to be derived from the use of project power for project purposes.

   In addition, to the extent that from time to time any power is available for sale, it will be sold at its market value. Preference will be given to public agencies in such sale as required under existing law. The difference between the actual cost and the market value of such power will result in income to reduce project costs. This added income (power credit) will be applied, and the computed economic benefit will be made available, to reduce the cost of project water except for water used on land in single ownership in excess of 160 acres (320 acres in the case of community property).

5. Under the Delta pooling concept, there will be a single price for state project water at the Delta and for state project service areas above the Delta which will be referred to as the Delta water rate. The Delta water rate will consist of an annual (1) capital costs component, (2) necessary minimum operation, maintenance and replacement component; and (3) an operation and maintenance component which will vary with the amounts of water furnished.

   The Delta water rate will be based on the cost of construction and the cost of operation, maintenance and replacement of these conservation facilities allocated to water supply upstream from and within the Delta. The capital cost component and the minimum maintenance and replacement component will be collected irrespective of the amount of water furnished. The operation and maintenance component will be collected from the contractors receiving water in proportion to the amount of water furnished. Increases and decreases in the capital cost component of the Delta water rate will be made from time to time to reflect the then outstanding unpaid reimbursable cost incurred in the construction of facilities necessary to make water available at the Delta.

6. Those contracting for water from a project aqueduct will pay, in addition to the Delta water rate, a charge herein referred to as the 'transportation rate." The transportation rate will consist of an annual (1) capital cost component, (2) necessary minimum maintenance and replacement component, and (3) maintenance and operation component which will vary with the amount of water furnished.

   The capital cost component, and the minimum maintenance and replacement component will be allocated to service areas by reaches of aqueduct, using the proportionate use method of cost allocation and will be collected annually irrespective of the amount of water furnished. The maintenance and operation component which varies with the quantity of water delivered will be computed for the same reaches of aqueduct as used for the other components of the transportation rate and will be allocated among, and collected annually from, the contractors receiving water in proportion to the amounts of water received. Provision will be made for reserve funds to be used for the purpose of meeting large, unforeseen costs of operation and maintenance, repair and replacement of works.

   The total annual charge to project water contractors will be the sum of the transportation rate plus the Delta water rate.

7. The following is a breakdown of the Delta water rate and the transportation rate. The transportation rate is stated for reaches of the aqueducts where the rate will be set by reaches. These rates are based upon estimated costs. Provision will be made in the contracts for revision of the rates when actual costs become known:

Areas of water service by aqueduct reaches	Estimated operation and maintenance costs plus the Delta water rate, in dollars per acre-foot	Estimated annual capital costs component,* in dollars
1. Areas within and upstream from Delta (Delta Water Rate)	$3.50†	
2. Entire North Bay Aqueduct to terminus in Marin County	7.50	$1,440,000
3. Entire South Bay Aqueduct (includes cost of possible future extension to Airpoint Reservoir in Santa Clara County if later found necessary)	13.00	1,910,000
4. Pacheco Pass Tunnel Aqueduct	14.00	980,000
SAN JOAQUIN VALLEY		
5. San Luis Reservoir to Avenal Gap	11.50	330,000
6. Avenal Gap to Buena Vista Lake	11.50	4,700,000
7. Buena Vista Lake to Wheeler Ridge	13.00	2,610,000
8. Wheeler Ridge to Tehachapi Tunnel	18.50	560,000
COASTAL AQUEDUCT		
9. San Joaquin Valley east of Devils Den	14.00	1,580,000
10. San Joaquin Valley west of Devils Den	19.00	1,070,000
11. In San Luis Obispo and Santa Barbara Counties	22.00	4,420,000
WEST BRANCH AQUEDUCT IN SOUTHERN CALIFORNIA		
12. Entire service area	25.00	24,530,000
EAST BRANCH AQUEDUCT IN SOUTHERN CALIFORNIA		
13. Tehachapi Tunnel to Pearblossom	32.00	1,910,000
14. Pearblossom to Perris Reservoir	35.50	22,580,000

* Average annual payment necessary to repay, with interest. the portion of the aqueduct system capital cost allocated to each service area, based on a 50-year pay-out period.

† Delta Water Rate shown includes capital cost component for conservation facilities within and above Delta. Power credit has been deducted.

8. Contracts for dependable water supply shall be for at least 50-year terms, but shall contain provision for changes in rates and operation provisions. Upon expiration of the term of the contract, the contracting agency shall have the option of continued service on terms and conditions prescribed by the State, but at no greater cost than would have been the case had the original contract continued in effect. Should the terms and condition$ provide (or the furnishing of such continuing water service for only a specified period of years, the contracting agency shall have a like right to continued service at the expiration of such succeeding term during which it was receiving project water.

9. To insure continuity and dependability of water supplies the contracts will provide:

(a) That contracts for dependable water service will aggregate to no more than a stated amount based upon the yield of the project. This amount, which will be approximately 4,000,000 acre-feet annually, is to be increased by the yield due to added storage facilities when and as constructed. In addition, contracts may be executed for interim or nondependable water supply subject to reduction or termination by the State at any time.

(b) For the furnishing of stated maximum annual amounts of project water. The time and rate of furnishing of water delivery during any year by the State will be pursuant to schedules and amendments thereof submitted by the contracting agency for such year. The State will comply with such schedules consistent with its delivery ability taking into account all such schedules submitted by agencies entitled under contract to a dependable project water supply.

(c) That in the event of a shortage in the dependable project supply available in any year for export, project water will be prorated among all export contractors. Each contracting agency will receive an amount of water which bears the same relationship to the available supply, computed on the same basis as the project yield studies, that the amount called for in the agency's contract for a particular year bears to the total amount of water required to be delivered pursuant to all contracts in the respective year. However, the Department will reserve the right to prorate on some other basis if required to meet necessary demands for domestic supply, fire prevention, or sanitation in the respective year or season.

(d) That bond funds will be used to construct added storage facilities and related facilities for local needs to meet commitments to export from the Delta to the extent that California Water Fund moneys are used for construction of the original facilities and to the extent such added construction is required by virtue of a reduction, occasioned by operation of area of origin statutes, in the amount of water available for export. This will be subject to the proviso, however, that to the extent that the director at any time after 1985 finds that any such funds are not then required to meet such reduction and will not be required for such purpose within the next succeeding 10 years, any such funds may be used for the construction of added storage facilities to meet increased demands for export to or from the Delta and to meet local needs.

(e) That the State will plan the availability of water from the Delta so that deliveries can be made at the time and in the amounts scheduled in the contracts. To the extent possible, five years notice shall be given of any reduction in deliveries which will occur as a result of operation of area of origin statutes.

10. Construction of any transportation facility financed wholly or in part through the sale of bonds, will not be started unless water service contracts have been executed which will insure recovery of at least 75 percent of the cost of such facility.

11. Local contracting agencies may make funds available for construction or completion of construction of initial or ultimate facilities and will be credited to the extent of such contributions.

12. As a general policy, contracts for project water will be executed with public agencies having the taxing, assessment or equivalent power and all other powers required in order to comply

with the terms of the contract. Contracts will be executed with others not having the taxing, assessment or equivalent power only when the State can be provided with security sufficient to insure that the obligations incurred will be paid.

13. Each contracting agency will agree that, in the event in any year it is unable or fails through other means to raise the funds necessary in any year to pay to the State the sum required under the contract, it will use its taxing or assessment power to raise such sum.