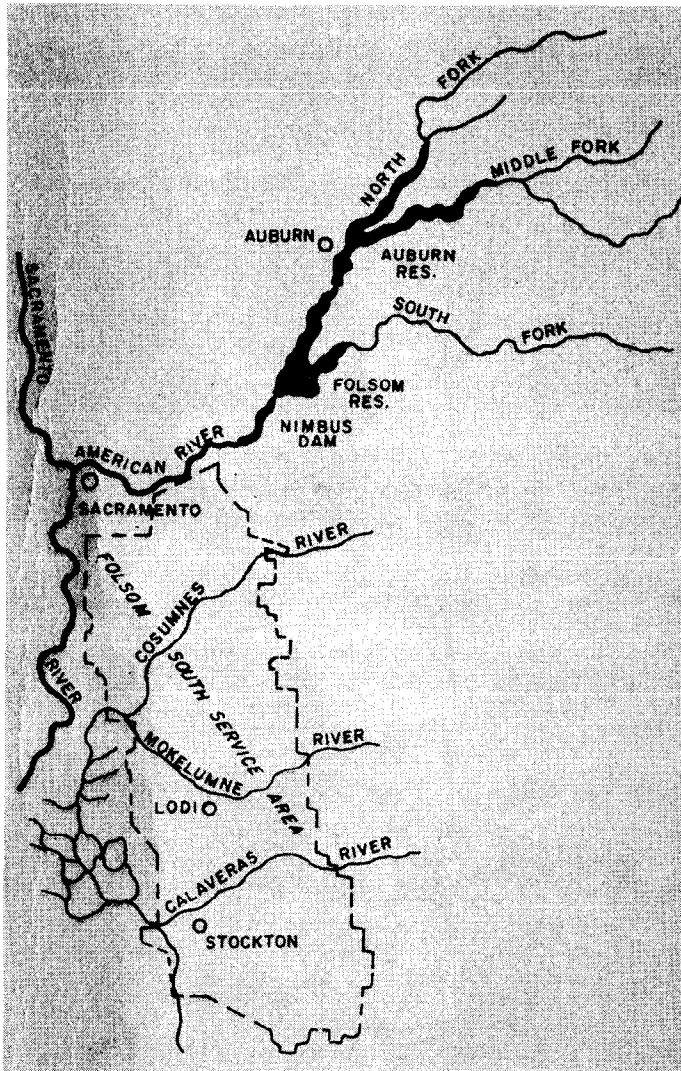


LOWER AMERICAN RIVER WATER RIGHTS DECISION

*See also Order Clarifying
Dec 1400
+
Order Amending Allocation*



In the Matter of Applications 18721, 18723, 21636 and 21637 of United States Bureau of Reclamation to Appropriate from the North Fork American River in Placer County

DECISION 1400

DECISION IN FURTHERANCE OF JURISDICTION RESERVED IN DECISION 1356 TO ESTABLISH MINIMUM FLOWS IN THE AMERICAN RIVER BELOW AUBURN DAM

APRIL, 1972



STATE WATER RESOURCES CONTROL BOARD





CALIFORNIA

Ronald Reagan
Governor

Resources Agency
STATE WATER RESOURCES
CONTROL BOARD

W. W. Adams, Chairman
Edward F. Dibble, Vice Chairman

Members:
Norman B. Hume
Ronald B. Robie

Bill B. Dendy
Executive Officer

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

In the Matter of Applications 18721,)
18723, 21636 and 21637 of UNITED)
STATES BUREAU OF RECLAMATION to) Decision 1400
Appropriate from the North Fork)
American River in Placer County)
_____)

DECISION IN FURTHERANCE OF
JURISDICTION RESERVED IN DECISION 1356

The Reserved Jurisdiction

Decision 1356 approved Applications 18721, 18723, 21636 and 21637 of the United States Bureau of Reclamation (Bureau) for permits to appropriate water from the North Fork American River and Knickerbocker Creek, a tributary of the North Fork, at Auburn Dam and Knickerbocker Dam, in Placer County.

In Decision 1356 the State Water Resources Control Board reserved continuing jurisdiction over permits issued on the applications "for the purpose of formulating terms and conditions relative to flows to be maintained from Auburn Dam downstream to the mouth of the American River for recreational purposes and for protection and enhancement of fish and wildlife".

This decision relates to the reserved jurisdiction, and follows nine days of hearing between June 23 and August 12, 1971. Evidence was presented by the Bureau, and by prospective users of project water. Evidence regarding needs for recreational, fish and wildlife purposes was presented by various public agencies, private organizations, and concerned individuals.

Major Federal Water Developments on the American River

The American River Watershed

The American River, second largest tributary of the Sacramento River, rises in the Sierra Nevada and flows generally southwestward to Sacramento, where it joins the Sacramento River. Two of the three principal forks, the North and Middle, join above the site of the proposed Auburn Dam. The third, the South Fork, joins the North Fork at Folsom Reservoir, about 20 miles downstream from Auburn. From Folsom Dam, the American River flows through Lake Natoma, which is an afterbay and diversion reservoir formed by Nimbus Dam, and then another 23 miles through the valley to the Sacramento River.

The Folsom Development -- Decision D 893

Folsom Dam and Reservoir were constructed by the Corps of Engineers, with a storage capacity of 1,000,000 acre-feet, for flood control and other purposes. Decision D 893

approved consumptive use applications of the Bureau for a total of 1,300,000 acre-feet per annum (afa) to be collected to storage between November 1 and the succeeding July 1, and direct diversion totaling 8,700 cubic feet per second (cfs) between November 1 and the succeeding August 1. Authorized uses, in addition to flood control, are for irrigation, salinity control, municipal, industrial, domestic and incidental recreational purposes. Part of the place of use is the Folsom South service area, which lies south of the American River and east of the Sacramento and San Joaquin Rivers in Sacramento and San Joaquin Counties. The Folsom South service area is to be supplied with water by the Folsom South Canal, which is being constructed to divert water from Lake Natoma and will extend southerly along the easterly side of the entire service area.

Decision D 893 also approved applications to appropriate by storage or direct diversion substantially the same quantities of water for power purposes. The power is authorized to be generated at Folsom and Nimbus powerhouses. The water is returned to the American River below each of the powerhouses, and direct diversion for power purposes is authorized year-round.

The Auburn-Folsom South Unit of the U. S. Central Valley Project -- Decision 1356

Auburn Dam and Reservoir are to be constructed by the Bureau with a storage capacity of 2,300,000 acre-feet.

Decision 1356 approved Bureau consumptive use applications, subject to reserved jurisdiction, for storage in the total amount of 2,500,000 afa between November 1 and the succeeding July 1, and direct diversion during the same period in the total amount of 1,000 cfs. Permits issued on these applications do not authorize appropriation by either storage or direct diversion during the months of July, August, September and October. Authorized uses are for irrigation, municipal, industrial, recreational, domestic and water quality control purposes. Other applications were also approved in Decision 1356 for the same quantity of stored water and a total of 6,900 cfs by direct diversion to be used throughout the year for power purposes at Auburn, Folsom, and Nimbus power plants.

The primary place of use to be supplied water as part of the Auburn-Folsom South Unit of the Central Valley Project is the Folsom South service area, served by the Folsom South Canal. A much larger area is also authorized to be served by water stored in Auburn Reservoir, commingled with much greater quantities of water from other Central Valley Project sources, including Trinity River, Clear Creek and Sacramento River.

The Auburn-Folsom South Unit of the Central Valley Project is discussed in two reports to Congress, House Document No. 305 of the 87th Congress, 2nd Session (1962) (SJCFWCD Exh. 25), and House Document No. 171 of the 88th

Congress, 1st Session (1964) (SJCFCWCD Exh. 26). These documents are identified in this decision by house document number only.

These reports, as well as testimony by the Bureau, indicate an intent to integrate the operation of Auburn and Folsom Reservoirs and Lake Natoma. Collectively, they are intended to develop water supplies for project water diversions to be made upstream from Nimbus Dam, including 25,000 afa for Folsom-Malby service area (sometimes included with Folsom South service area requirements), and about 852,000 afa to be diverted through the Folsom South Canal for the following uses within the Folsom South service area:

Agriculture	713,000 afa
Municipal and Industrial	139,000 afa

(House Document No. 171, page 5)

The Folsom South service area is not expected to develop its ultimate needs for many years, and the two house documents discuss use of water developed by Auburn Reservoir in other areas served by the Central Valley Project.

"Auburn Reservoir would further assure the Central Valley Project's ability to provide adequate quantities of water of suitable quality at the Tracy pumps for service to the San Joaquin Valley and, as an incident thereto, to maintain the present level of salinity control benefits in the Delta. Water for the existing Delta-Mendota Canal and the

San Luis Unit, which is being readied for construction, must come from the Delta, and the proposed Auburn Reservoir will help supply water for the Delta" (House Document No. 305, page XII).

The 1964 report to Congress refers to studies to determine the feasibility of providing water service to a large area along the east side of the San Joaquin Valley and, separately, to the Santa Clara Valley. The report says that these two projects, if approved, will require pumping 1,107,000 acre-feet annually from the Sacramento-San Joaquin Delta area and would place heavy new demands on existing Central Valley Project water and power supplies (House Document No. 171, page 10). If the East Side Project were authorized by Congress, pumps and a pipeline would be required to pump water from the Sacramento River at Hood to an enlarged Folsom South Canal at Clay. It would be physically possible to serve the San Joaquin County portion of the Folsom South service area either by the Folsom South Canal, or by a Hood-Clay facility which would pump American River water commingled with other water, regardless of whether an East Side Project is authorized. The amount of water to be released from Nimbus Dam for recreational purposes and for protection and enhancement of fish and wildlife has a direct bearing on the need and size of a Hood-Clay facility to supplement the Folsom South Canal supply of American River Project water to San Joaquin County.

Although Auburn and Folsom Reservoirs and Lake Natoma are to be operated as an integrated unit, jurisdiction was reserved by the Board only with respect to Auburn Reservoir and therefore this decision and its order must relate only to the Auburn Reservoir permits. The permits issued pursuant to Decision 1356 allow use of water in both the Folsom South and proposed East Side Project service areas, as well as in areas to be served by release of American River water into Sacramento River.

The Issues

The issues considered are:

1. Flows needed for protection and enhancement of fish and wildlife -- Auburn Dam to mouth of American River.
2. Flows needed for recreational purposes -- same area.
3. Effect of any proposed order on the Auburn-Folsom South Unit and the Central Valley Project.
4. How the reserved jurisdiction should be exercised in the public interest.

In Decision 1356 the Board also reserved jurisdiction to impose additional terms relative to flows to be maintained in the Sacramento-San Joaquin Delta for salinity control and for fish and wildlife. The jurisdiction reserved with respect to the Delta was not included in the hearing notice, but was the subject of a separate hearing involving

other permits which culminated in Decision 1379. Although not directly involved in this decision, any variations in American River flows of necessity affect both salinity and fish in the Delta.

Flows Needed for Protection and Enhancement of Fish
And Wildlife -- Auburn Dam to Mouth of American River

Decision D 893 contains language which in various ways affects the requirements for quantities of water flowing down the natural channel of the American River from Folsom Dam to the Sacramento River. One permit term requires compliance with an agreement between the Bureau and the California Department of Fish and Game for flows between Nimbus Dam and the Sacramento River of 250 cfs from January 1 to September 14, and 500 cfs for the balance of the year. Flows of these respective quantities are required to reach "the mouth of said river for the protection, propagation and preservation of fish life." Therefore, Nimbus releases of water must also include all water to be diverted from the lower American River. Future diversions by Carmichael Irrigation District and City of Sacramento in the summer months are expected to reach about 300 cfs. Decision D 893 at page 44 also considered summer releases needed from Nimbus for Sacramento-San Joaquin Delta salinity control, estimated to be 151 cfs, and Delta consumptive needs, ranging from about 100 cfs to a little over 200 cfs. Another important effect

of Decision D 893 upon streamflows below Nimbus Dam results from its finding that unappropriated water is not available in the summer months, and the denial of appropriation during the months of August, September and October, except for power use.

The evidence includes a 1971 Environmental Study of the Lower American River - Interim Status Report - made by the Bureau in cooperation with other federal, state, and local agencies (USBR Exh. 20). The report states that of particular importance on the lower American River are the anadromous fish species, Chinook salmon, steelhead trout, striped bass, and American shad (p. I-3). "Adult and juvenile forms of these species are found in the river year round, although the most important period of use extends from about October 15 to July 15" (p. IV-1). "The Bureau of Sport Fisheries and Wildlife, in cooperation with the State Department of Fish and Game, has reevaluated the need for increased minimum flows in the lower American River for fishery purposes. Their studies indicate that near-optimum conditions for the least amount of flow could be provided with minimum flows below Nimbus of 1,400 cfs from October 15 through July 15, and 1,000 cfs for the remaining portion of the year..." (p. I-3).

According to the State Department of Fish and Game, "maintenance of the fishery resources of the Lower American

River at levels not less than pre-Folsom project conditions" would require 1,250 cfs from Nimbus Dam to the mouth of the American River from October 15 through July 15, and 800 cfs for the remainder of the year. Additional requirements for maintenance of the fishery resources at not less than pre-Folsom project conditions include operation of the existing Nimbus salmon and steelhead hatchery at present levels, and a minimum flow of 75 cfs in the reach from Auburn Dam to Folsom Reservoir. These flows do not include quantities needed for recreational purposes, and would not result in optimum conditions for the fishery resources - merely a maintenance of the fishery resources at pre-Folsom project conditions (F and G Exh. 9).

Flows Needed for Recreational Purposes - Auburn
Dam to Mouth of American River

The American River Parkway

In 1962 the concept of an American River Parkway was adopted by the Sacramento County Board of Supervisors and made a part of the recreation element of the Sacramento County General Plan. This development has received state and national recognition (USBR Exh. 20, p. V-1).

The American River Parkway is planned to include a 12-square-mile recreational and open space greenbelt along

30 miles of the American River flood plain from Folsom Dam to the Sacramento River. The county has primary parkway responsibility for the 23-mile reach of stream from Nimbus Reservoir to the mouth of the American River, including the portion within the City of Sacramento. The Plan would preserve the character of natural areas along the river, improved only by additional access, riding and hiking trails. Developed recreation areas would provide for picnicking, swimming, boating, and other types of day-use, plus several camping locations along the river.

To date the county has invested over \$6 million and acquired about one-third of an ultimate 5,400 acres. For the next 20 to 25 years, the county expects to spend \$1 to \$1½ million annually for land acquisition, and annual operational costs will increase from the present \$½ million to \$1 million (USBR Exh. 20, pp V-2, V-3).

Recreational Uses of the American River and
Flows Needed for Recreational Purposes

The Bureau of Outdoor Recreation of the Department of the Interior identifies the major water-dependent uses of the lower American River, other than fishing, as consisting of swimming, water-skiing, motor-boating and non-motorboating (B.O.R. Exh. 1, p.7). Non-motorboating includes the use of canoes, kayaks, and all other types of free-floating and manpowered craft.

The Bureau of Outdoor Recreation stated that one of its central concerns in its analysis is the identification of the lowest river flow that generally does not limit water activity participation. "Observations and experiences of water recreationists during test flows of 500, 750, 1,000 and 1,500 cfs as compared with higher flows indicate that 1,500 cfs is generally the minimum flow which would not significantly affect water-dependent activities under existing channel conditions" (B.O.R. Exh. 1, pp. 11, 12). According to the Bureau of Outdoor Recreation study, more than 80% of the annual participation in water-related activities occurs in the period from May to October.

Some of the most knowledgeable and persuasive testimony regarding American River flows needed for recreational use came from Mr. Ben Glading, who, although a Regional Manager of the Department of Fish and Game, was testifying in his private capacity. During the last 13 years, Mr. Glading has traveled the river by canoe at various flows, from flood flows of about 30,000 cfs to a minimum once of 700 cfs. Most of the trips have been when the river was flowing between 3,500 cfs and 2,000 cfs, with a few trips around 1,000 cfs. Mr. Glading found the river to be "ideal" for mass canoe and kayak trips at about the 2,000 - 2,500 cfs level. "At 1,000 cfs the whole river is forced into the rough water channels giving all boaters not much choice -- either run the rough spots or

get out and walk" (RT 184). The rough spots further have less water in them and consequently boat damage is a real possibility. "The river at low flows (in the neighborhood of 1,000 cfs) becomes a combination of hard work and boredom in the pools interspaced by moments of hazard or walking" (RT 184). Mr. Glading's testimony is impressive both as to the importance of the recreational use and its potential in the lower American River, and the need throughout this reach for a minimum of 1,500 cfs during the recreation season.

Water Supply in the American River Watershed

The total water supply available in the American River watershed has varied from 5,709,000 acre-feet (1906-07) to 530,000 acre-feet (1923-24). The average annual discharge for the 62 years from 1905-06 through 1967-68 was 2,700,000 acre-feet (USBR Exh. 2).

Prospective Use of American River Runoff

Prospective use of American River runoff in normal years is summarized in USBR Exhibits 18 and 20:

<u>Water Needs</u>	<u>1,000's of af</u>	<u>Average cfs</u>
Diversions of American River water at or above Folsom	492	680
Folsom South Canal diversions	875	1,210
American River below Nimbus Dam to meet water supply, fishery, recreational, and other uses	493	680
Spills and other intermittent releases at Nimbus	<u>680</u>	<u>940</u>
Total average American River flow (1921 through 1954)	2,540	3,510

Assuming the Bureau's estimate of 492,000 afa to be a sound figure for the ultimate needs of the area at or above Folsom, and 875,000 afa to be a sound figure for ultimate Folsom South Canal diversions to the Folsom South service area (including 150,000 afa for diversion to East Bay Municipal Utility District (EBMUD)), the entire water supply of the American River, with the exception of these amounts, will be available to flow down the river below Nimbus Dam, until and unless an East Side project might be authorized and in operation which would obtain some of its water through the Folsom South Canal. If Congress authorizes the East Side Unit, a large Hood-Clay pumping plant and connection will be necessary, with capacity adjusted to provide for recovery of water released at Nimbus Dam to maintain minimum flows in American River. Thus the water supply available to the proposed East Side Unit will be unaffected regardless of the flow requirements of this decision.

Regulated Flows for July, August, September and
October Under Ultimate Project Development

Consumptive use permits of the Bureau do not authorize appropriation of water during the summer months, and therefore the Bureau must release from Nimbus Dam into the lower American River all inflow into the Auburn and Folsom Reservoirs during the restricted season. The restricted months are August, September and October for diversions under permits pursuant to Decision D 893 and July, August, September and

October for those diversions under permits pursuant to Decision 1356. Analysis of information submitted by USBR (USBR Exhibits 29 and 29B) shows that under conditions of ultimate development the average annual quantity of water flowing into Folsom Reservoir and required to be released during these three months will be about 240,000 acre-feet, consisting of an average flow of about 1,365 cfs in August, 1,405 cfs in September and 1,225 cfs in October.

These summer inflows into Auburn and Folsom Reservoirs will be required to be released from Nimbus Dam even if no additional permit conditions are needed with respect to Auburn Reservoir pursuant to the reserved jurisdiction which is the subject of this proceeding.

These summer flows in the American River are larger than under natural conditions. The increased flows are caused by the major hydroelectric power developments of Sacramento Municipal Utility District (SMUD) and Placer County Water Agency (PCWA). Both of these projects include storage of water which is used to supplement natural flows for electric power generation. The greatest withdrawals from storage generally occur during August, September and October, the times of lowest streamflow under natural conditions. A portion of these augmentations to summer flow, particularly from the PCWA project, will be rediverted above Nimbus Dam for consumptive uses. However, part of the releases for power generation are abandoned after that use.

Releases from storage by these projects also tend to stabilize the annual flows so that the relative variation from year to year is much less than occurred under natural conditions.

Augmentation of River Flows By
Federal Project Developments

Because there have thus far been no major deliveries of water under contracts for use of water from the Folsom project, the modification of summer flows due to the Folsom Reservoir, as with the upstream projects, has resulted from operation for power production, thus further increasing flows in the lower river during summer and fall, so that these flows have often been from 2,000 - 3,000 cfs. However, this level of augmented flows in the lower river will decrease as demand for water from the Auburn-Folsom South Project develops.

Effect of Maintenance of Minimum Flows for
Fish and Wildlife and for Recreational
Purposes on Auburn-Folsom South Project

Although much testimony was presented concerning the urgent need for supplemental water supplies in the Folsom South Canal service area, only two contracts for project water supply from the Folsom South Canal have been executed. One is for 75,000 acre-feet annually for SMUD, including the rediversions under water rights of SMUD's upper American River project. The other is for a maximum of 150,000 acre-feet annually to be supplied to East Bay Municipal Utility District.

According to testimony of USBR (USBR Exh. 19A), eight water service contracts for water from Folsom South Canal for a potential 824,000 acre-feet annually are under negotiation.

Project water used to maintain minimum American River flows could be diverted or rediverted to meet contracts for project water supply at Hood or at other appropriate points downstream on the Sacramento River.

Depending on hydrologic conditions and the rapidity of development of demand for project water in the Folsom South Canal service area, the project may, for many years, except in dry years, be able to meet the requirements for both minimum flows in the river below Nimbus and deliveries under water supply contracts without recovery from Sacramento River of released water. In dry years when the Bureau is required to impose deficiencies in water for irrigation supplied to the Folsom South service area, no flows should be required for recreational purposes in the lower American River, until after completion of a Hood-Clay connection. Flow requirements in the lower American River for fish and wildlife should be subject to deficiencies, but only in the same proportion as is water for agricultural use under contracts for project water deliveries until completion of means of recovering these flows.

In connection with flows in the American River, the Environmental Study says in part:

"The best plan appears to be to provide increased flows down the American River and into the Sacramento River where the water would then be recovered and pumped back into the Folsom South Canal through the proposed Hood-Clay Pump Connection"

(USBR Exh. 20, p. VII-3).

After completion of a Hood-Clay facility, dry year deficiency provisions should be modified so that flows required to reach the Sacramento River for fish, wildlife and recreation are not diminished below concurrent deliveries of water from American River to areas that can be served via the Hood-Clay connection. The Order will so provide.

The evidence indicates a need for management of all kinds of water supplies within the Folsom South service area. Most of the releases for streamflow maintenance during the season of low demand in the service area will be of no use to supply that demand even if recovered via the Hood-Clay connection unless facilities to store the recovered water are provided. It appears that the need for surface storage for this purpose might be eliminated or at least deferred if a coordinated program for use of both groundwater and surface water supplies, along with a managed recharge program, were developed. Such a program could require the use of surface water supply by major users of water during the winter season (such as City of Stockton) with uses of groundwater during the summer.

The Bureau contract with East Bay Municipal Utility District provides for delivery of project water through the Folsom South Canal rather than from a downstream location. This type of water development, while satisfying one water requirement, eliminates the possibility for multiple beneficial uses of the water, and is not sound management of the water resource. If the Bureau contract with the District had required that the District take delivery of project water from the Sacramento River or some other downstream location rather than the Folsom South Canal, an additional 150,000 acre-feet of project water supply (equivalent to about 210 cfs of continuous supply) would have been available for streamflow augmentation below Nimbus for fish and recreational purposes prior to ultimate use for municipal purposes. To this extent the decrease in diversion via Folsom South Canal resulting from increased minimum flows below Nimbus Dam would be eliminated if EBMUD's point of delivery were made from the Sacramento River.

Concern was expressed in the hearing by representatives of potential contractors for agricultural water supply in the Folsom South Canal service area that provision of higher minimum flows in lower American River would increase cost of water to them. According to testimony by USBR the effect of increases in cost would result in a longer payoff period for the project but not in higher water charges, because the project is financially integrated with the other parts of the Central Valley Project.

Hopefully, Congress will agree with the evaluation of federal, as well as state, agencies as to the importance to fish, wildlife, and recreation of the minimum flows found herein to be needed in the lower American River and will consider costs related to these minimum flows to be nonreimbursable, possibly taking such action with respect to authorization or funding of the Hood-Clay connection.

Storage releases and flow requirements under various assumed conditions are illustrated in the Appendix.

Findings and Conclusions

1. Minimum flows of 75 cfs are needed year-round from Auburn Dam to Folsom Reservoir for maintenance of fishery resources at not less than pre-Folsom project conditions.

2. The lower American River has an important anadromous fishery which, in the public interest, should be protected and enhanced.

3. Minimum flows of 1,250 cfs from October 15 to July 14 of the succeeding year and of 800 cfs from July 15 to October 14 are needed in the entire reach of the American River from Nimbus Dam to the Sacramento River for the protection of fish and wildlife.

4. An important and increasing use is being made of the lower American River for water-dependent recreational purposes. This use will increase with the expansion of the American River Parkway and increased access to the river.

5. Minimum flows of 1,500 cfs from May 15 to October 14 are needed in the entire reach of the American River from Nimbus Dam to the Sacramento River for recreational purposes.

6. Diversions of water between Nimbus Dam and Sacramento River reach a maximum summer rate of about 100 cfs under present conditions and will increase to about 300 cfs under ultimate conditions.

7. Provided reductions in flow for fish and wildlife are taken concurrently and proportionately with irrigation deficiencies and that no flows are required for recreational purposes in addition to those required for fish and wildlife during periods of deficiency, the Bureau will be able for many years to make releases from Nimbus Dam of the flows found herein to be needed for fish and wildlife and for recreational purposes without impairing its ability to meet the full requirements of the Folsom South service area via the Folsom South Canal. While a reduced flow, if required, would have an undesirable effect on the recreational uses of the river, the problems created would be of a limited-term duration, and no permanent damage would be expected to result.

8. The Bureau anticipates that in 15 or 20 years there will be a need for a Hood-Clay connection to pump water from the Sacramento River to the Folsom South Canal. Such a facility will be required if the East Side project is authorized. It may be required as a result of Nimbus Dam releases in order to supplement the Folsom South Canal supply of water to the

southerly portion of the Folsom South service area.

9. The Hood-Clay pumping plant is shown on the maps accompanying the Auburn applications as a point of rediversion. However, this point is not listed as a point of rediversion in the Auburn permits or in the amended copy of the applications from which the permits were prepared. The order will authorize the pumping plant at Hood to be a point of rediversion of stored water. It will also be authorized as an alternative point of direct diversion with appropriate limitations.

10. Continuing jurisdiction should be retained because the regimen of flow in the lower American River will change as a result of diversions downstream as well as upstream from Nimbus Dam, and a period of time will be needed to evaluate the effect of such changes upon fish, wildlife and recreation.

ORDER

IT IS HEREBY ORDERED THAT:

The Board continue the reservation of jurisdiction over these permits for the purpose of formulating terms and conditions relative to flows to be maintained from Nimbus Dam downstream to the mouth of the American River for recreational purposes and for protection and enhancement of fish and wildlife. This jurisdiction will not be exercised except after notice to the parties and a hearing.

IT IS FURTHER ORDERED THAT:

Permits issued on Applications 18721, 18723, 21636 and 21637 be

amended to include the following terms and conditions:

1. Flows of not less than 75 cfs shall be maintained year-round from Auburn Dam to Folsom Reservoir.

2. Flows shall be maintained in the entire reach of the American River from Nimbus Dam to the Sacramento River for maintenance of fish and wildlife of not less than 1,250 cfs from October 15 of each year to the succeeding July 14, and not less than 800 cfs from July 15 to October 14. Reductions below these ordered amounts may be made in the same proportion as deficiencies are taken for irrigation purposes in project water delivered within the Folsom South service area, subject to the provisions of condition 4.

3. Flows shall be maintained in the entire reach of the American River from Nimbus Dam to the Sacramento River for recreational purposes of not less than 1,500 cfs from May 15 to October 14 of each year. The flows required by this condition and condition 2 are not cumulative. No flows shall be required under this condition when any irrigation deficiencies are required in project water delivered within the Folsom South service area, subject to the provisions of condition 4.

4. The reduction in flows for fish, wildlife and recreational purposes authorized in conditions 2 and 3 shall not result in failure to bypass August, September and October flows to which permittee is not entitled. After completion of a Hood-Clay connection, no reduction in flows shall be made

pursuant to conditions 2 or 3 which will result in American River flow into the Sacramento River less than the concurrent supply of water from American River to any areas which can be served through a Hood-Clay connection.

5. No water shall be appropriated to storage in Auburn Reservoir, and no water stored in Auburn Reservoir shall be rediverted into the Folsom South Canal except when the releases of water from Nimbus Dam required by Decision D 893 are supplemented by releases from Auburn Dam to the extent necessary to result in the flows required by this decision, provided this term shall not be interpreted to interfere with any Bureau-integrated operation of Auburn, Folsom, and Nimbus dams and reservoirs that will result in releases of the required flows at Nimbus Dam.

IT IS FURTHER ORDERED THAT:

Permits issued on Applications 18721 and 21637 be amended to provide that the pumping plant at Hood on the Sacramento River is (a) an authorized point of rediversion of water stored pursuant to this permit and released down the American River, and (b) an authorized alternative point of direct diversion of American River water, provided that the combined direct diversion and rediversion of stored water at Hood shall not exceed the concurrent flow of American River into the Sacramento River.

Adopted as the decision and order of the State
Water Resources Control Board at a meeting duly called and
held at Sacramento, California.

Dated: April 11, 1972

W. W. Adams
W. W. Adams, Chairman

E. F. Dibble
E. F. Dibble, Vice Chairman

Norman B. Hume
Norman B. Hume, Member

Ronald B. Robie
Ronald B. Robie, Member

A P P E N D I X

STORAGE RELEASES AND FLOW REQUIREMENTS
UNDER VARIOUS CONDITIONS

MEDIAN MONTHS

Maintenance of minimum American River flows to the Sacramento River for fish and wildlife and for recreational purposes, respectively, as required by the preceding Order will ultimately necessitate during median months the following minimum releases of water from storage over that which Bureau exhibits indicate is required under its present commitments and restrictions (see Plate 1):

MINIMUM STORAGE RELEASES REQUIRED TO MAINTAIN
MINIMUM FLOWS - DURING MEDIAN MONTHS

	<u>CFS</u>		<u>CFS</u>
January	-0-	July	840
February	-0-	August	640
March	-0-	September	320
April	-0-	October	250
May	-0-	November	530
June	-0-	December	-0-

BASIC FLOW REQUIREMENTS - CFS
(Conditions 2, 3 and 4)

	<u>Jan 1 to May 14</u>	<u>May 15 to July 14</u>	<u>July 15 to Oct 14</u>	<u>Oct 15 to Dec 31</u>
Fish and Wildlife	1250	1250	800	1250
Recreation (not cumulative)	---	1500	1500	---

DRY YEARS WHEN IRRIGATION DEFICIENCIES ARE TAKEN

Dry year deficiencies prior to Hood-Clay are based upon conditions 2 and 3. After Hood-Clay, the deficiency provisions are modified by condition 4.

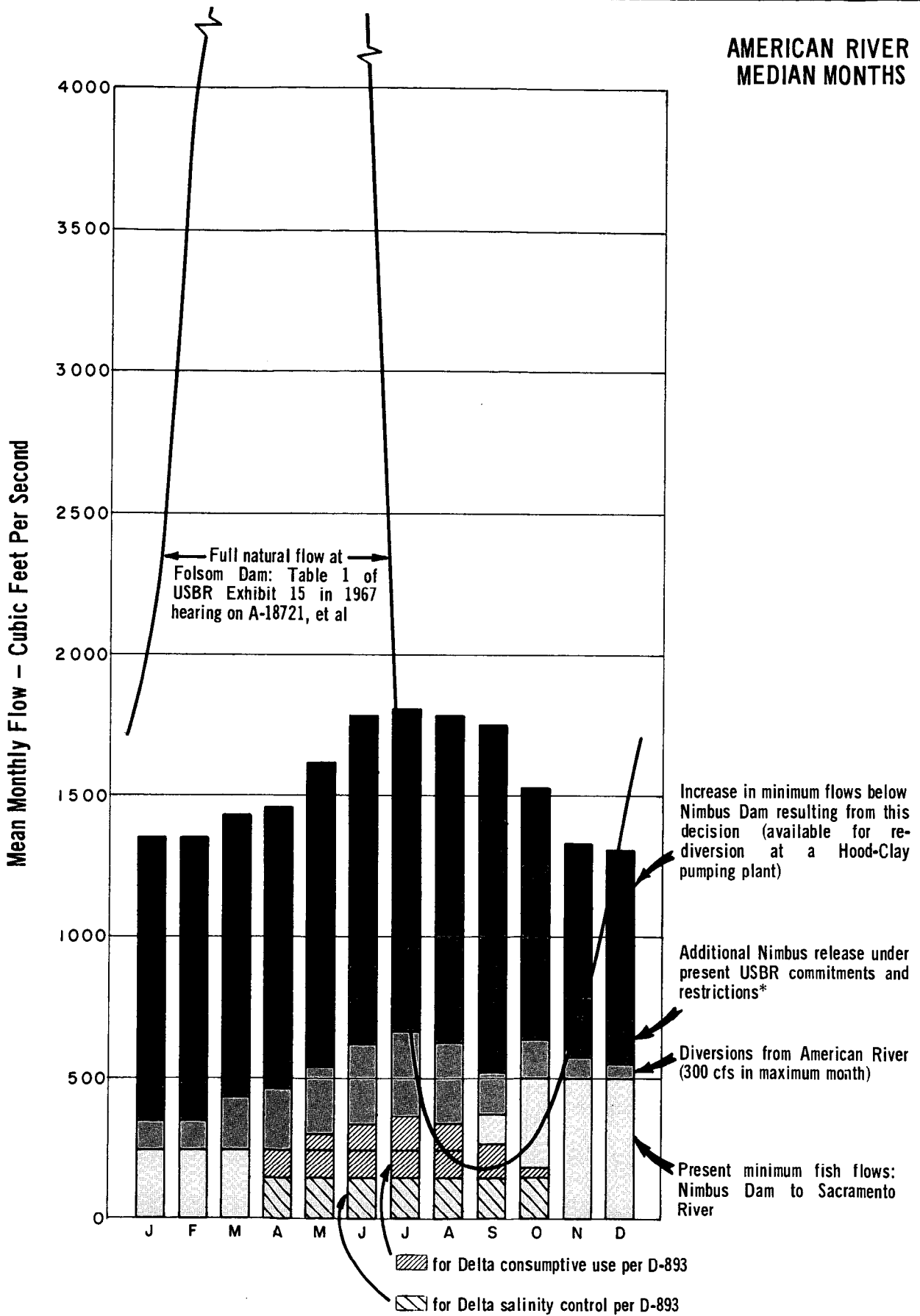
BEFORE HOOD-CLAY CONNECTION
 Dry Year Flow Requirements in cfs
 Summer Months

<u>Assumed Irrigation Deficiency</u>	<u>April - May 14</u>	<u>May 15 - July 14</u>	<u>July 15 - Oct 14</u>	<u>Oct 15 - Oct 31</u>
0	1250	1500	1500	1250
10%	1125	1125	720	1125
25%	938	938	600	938
50%	625	625	400	625

AFTER HOOD-CLAY CONNECTION
 Dry Year Flow Requirements in cfs
 Summer Months
 Assumed irrigation deficiency 25%

<u>Concurrent delivery of water from American River to areas serviceable via Hood-Clay</u> cfs	<u>April - May 14</u>	<u>May 15 - July 14</u>	<u>July 15 - Oct 14</u>	<u>Oct 15 - Oct 31</u>
500	938	938	600	938
700	938	938	700	938
1000	1000	1000	1000	1000
1400	1250	1400	1400	1250
1700	1250	1500	1500	1250

AMERICAN RIVER
MEDIAN MONTHS



*Staff estimate: from USBR 29A except Aug.-Sept.-Oct. from Table 10 (modified) of USBR Exhibit 15 in 1967 hearing on A-18721, et al

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

In the Matter of Applications 18721,)
18723, 21636 and 21637 of UNITED)
STATES BUREAU OF RECLAMATION to)
Appropriate from the North Fork)
American River in Placer County)
)
)

PROPOSED ORDER CLARIFYING DECISION 1400

In order to clarify the meaning and intent of permit conditions 2 and 3 on page 23 of the order in Decision 1400, and to conform said conditions with the discussion on page 17 of the decision, said order is hereby amended as follows:

1. Revise condition 2 to read:

2. Flows shall be maintained in the entire reach of the American River from Nimbus Dam to the Sacramento River for maintenance of fish and wildlife of not less than 1,250 cfs from October 15 of each year to the succeeding July 14, and not less than 800 cfs from July 15 to October 14. Reductions below these ordered amounts may be made in the same proportions as deficiencies are imposed in project water delivered for irrigation within the Folsom South service area due to an inadequate project water supply, subject to the provisions of condition 4.

2. Revise condition 3 to read:

3. Flows shall be maintained in the entire reach of the American River from Nimbus Dam to the Sacramento River for recreational purposes of not less than 1,500 cfs from May 15 to October 14 of each year. The flows required by this condition and condition 2 are not cumulative. Flows required by this condition may be reduced or eliminated to the extent necessary to prevent imposition of deficiencies in project water delivered for irrigation within the Folsom South service area due to an inadequate project water supply, subject to the provisions of condition 4.

Adopted as the order of the State Water Resources
Control Board at a meeting duly called and held at Sacramento,
California.

Dated: May 4, 1972

W. W. ADAMS
W. W. Adams, Chairman

E. F. DIBBLE
E. F. Dibble, Vice Chairman

RONALD B. ROBIE
Ronald B. Robie, Member

ROY E. DODSON, JR.
Roy E. Dodson, Jr., Member

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

In the Matter of Applications 18721,)
18723, 21636 and 21637 of UNITED)
STATES BUREAU OF RECLAMATION to)
Appropriate from the North Fork)
American River in Placer County)
)

ORDER DENYING RECONSIDERATION OF DECISION 1400

Five petitions for reconsideration and/or clarification of Decision 1400 have been filed. These petitions are on behalf of the following parties:

1. San Joaquin County Flood Control and Water Conservation District; North San Joaquin Water Conservation District; Central San Joaquin Water Conservation District; Stockton-East Water District, formerly Stockton and East San Joaquin Water Conservation District (San Joaquin County parties)
2. U. S. Bureau of Reclamation (USBR)
3. Omochumne-Hartnell Water District (OHWD)
4. Sacramento Municipal Utility District (SMUD)
5. East Bay Municipal Utility District (EBMUD)

The Board denies reconsideration and responds as follows to the items upon which reconsideration has been requested.

Contentions of the San Joaquin County Parties

1. Although the decision states that it relates only to Auburn Reservoir permits, the evidence clearly shows that the

effect of the order extends in substantial measures to water diverted and stored pursuant to permits issued for Folsom Reservoir.

The Order in Decision 1400 does not cover permits issued for Folsom Reservoir. The Order states that "Permits issued on Applications 18721, 18723, 21636 and 21637 be amended...". All of these numbered applications are for the Auburn-Folsom South Unit and not Folsom Reservoir. If correction is made for the lack of right to make consumptive use diversions upstream from Nimbus Dam in summer months, as discussed in the decision, USBR Exhibit 29A shows the flows which would occur in the lower American River under the USBR's rights for Folsom project with present restrictions and commitments and without an Auburn project. Decision 1400 requires that these flows be supplemented by sufficient releases at Nimbus Dam, to be supplied from concurrent flow at Auburn Dam, if available, or by releases from Auburn Reservoir storage if the direct flow is insufficient, to maintain the lower American River flows required by conditions 2, 3 and 4. However, to avoid interfering with USBR-integrated operation of its reservoirs, condition 5 also allows releases from storage other than Auburn Reservoir

to meet the requirements of the decision. Testimony at hearings preceding both Decision 1356 and Decision 1400 indicates that the USBR intends to operate the reservoirs as an integrated project. The full water conservation benefits from Auburn Reservoir include the increased potential for controlling and conserving the flow of South Fork American River in Folsom Reservoir. Thus releases from storage in Folsom Reservoir in lieu of required releases from Auburn Reservoir may occur as a result of Bureau-integrated operation of Folsom and Auburn Reservoirs to obtain these benefits. This merely represents an option which is available to the applicant, rather than by a requirement imposed by the decision.

2. The Board failed to give priority to the domestic and irrigation uses of the Folsom South Canal service area as required by law.

This ground is based upon Water Code Section 1254. However, many other sections are involved. The use of water for recreation and preservation and enhancement of fish and wildlife are beneficial uses (Sec. 1243) and the amounts of water

needed to remain in the source for protection of beneficial uses are to be taken into account (Secs. 1243, 1243.5). The Board is to consider the relative benefit to be derived from all beneficial uses (Sec. 1257) and to make its decisions in the public interest (Secs. 1253 and 1257).

3. Decision 1400 fails to protect the environment of eastern San Joaquin County and the Stockton metropolitan area by not providing urgently needed supplemental water and fails to allow to the Folsom South Canal service area that supplemental water needed immediately to sustain its fully developed, agriculturally oriented economy.

Water to the service area can be provided only by physical facilities and a contract with USBR for water supply through those facilities. The fact that users in that area failed to contract with USBR during a long period of years prior to Decision 1400 suggests that the need is less urgent than the petition indicates. It is a fact that the first reach of the canal is already being built, but the remainder of the canal will not be constructed until contracts for water supply are negotiated. In any event, the evidence indicates that many years will

elapse prior to full use of water under upstream rights and existing project contracts, so that interim supplies are available to adequately supply any urgent needs until a Hood-Clay connection or other recovery plant can be planned and constructed. Decision 1400 will be, and is intended to be, a factor which both the USBR and potential contractors for water service need to consider in making plans and arriving at contracts.

4. The Board did not take into account the historical development and proposed use of American River water for Folsom South Canal service area. The San Joaquin County parties will now be compelled to look elsewhere for a water source, which would be contrary to historical and present planning and direction including that from the Board and its predecessors in Decisions 858, 893 and 1356 and would be contrary to the intent of federal authorizing legislation.

The proposed use of American River water was considered by the Board and is discussed in Decision 1400. The decision does not force the San Joaquin County parties to look elsewhere for a water source, although it may result in planning to include rediversion for at least part of their American River supplies from a different location than Folsom

South Canal and through other facilities such as a Hood-Clay connection. Decision 858 in July 1956 by the former State Engineer included in its findings a statement that additional sources of supply for North San Joaquin Water Conservation District and EBMUD would be available from the Folsom South Canal or the Feather River Project and other sources. The decision pointed out that water to the North San Joaquin Water Conservation District could be made available by pumping from Delta channels into canals of Woodbridge Irrigation District. As stated in the response to item 1 of this petition, allocations made in Decision 893 approving USBR permits for Folsom project are not conditioned by Decision 1400. The Board believes the intent of Federal authorizing legislation to be that water rights for the Auburn-Folsom South project are subject to decisions made by the Board pursuant to State law governing appropriation of water including the reservation of jurisdiction in Decision 1356 and Decision 1400.

5. Through Decision 1400 the Board has thwarted consummation of the diligent and continuing efforts made by the

San Joaquin County parties to obtain American River water.

The response to item 3 of this petition is also applicable to this item.

6. The decision is deficient because it does not discuss several aspects of the upstream hydroelectric developments of SMUD and Placer County Water Agency (PCWA) including regulation of power releases in Auburn and Folsom Reservoirs. The petitioners imply in their assertion that USBR by contract has acquired rights for diversion to Folsom South service area of storage releases from upstream hydroelectric projects of SMUD and PCWA even though diversion during those times is denied in the Bureau's permits.

The permits granted to SMUD, PCWA and City of Sacramento (assignee for consumptive use purposes of the water right applications of SMUD) do not include as part of their diversion facilities or place of use, the projects of USBR. An appropriator of water who collects water to storage does not acquire ownership of the water but only the right to use it. Water appropriated under the Board's jurisdiction, once used for the purpose for which appropriated and returned to a stream, is again subject to the Board's jurisdiction, and cannot be sold or contracted for use at a place not approved by the Board and made part of

the water right concerned. USBR Exhibits 29 and 29A show that USBR, in its water rights studies, has not assumed availability to its project of upstream power releases at times outside the diversion season allowed in its permits. Alterations of time of occurrence of the power releases would not affect the quantity of storage releases required from Auburn Reservoir under Decision 1400 unless the releases were shifted to the winter or spring seasons. The possibility that the power operations would require depletion of storage during the seasons of greatest stream-flow is too remote to warrant consideration. The increasing consumptive use by PCWA was considered in the decision in accordance with the allocation between PCWA rights and USBR project water in the contract between USBR and PCWA, and as shown in the USBR Exhibit 29B.

7. To encourage implementation of the only reasonable solution to the problem of minimum flows in the American River, a permit term is proposed.

The proposed term is not in accord with the Board's intent as expressed in Decision 1400. The term proposed would destroy the effect of

Decision 1400 since it would limit the releases at Nimbus Dam to the quantity of water conserved by Auburn Reservoir not to exceed the increment of safe yield added to the Central Valley Project by operation of the reservoir. The term does not make allowance for the fact that most of the flow required under Decision 1400 will be furnished by direct flows and not by releases from storage.

Contentions of the U. S. Bureau of Reclamation

1. The Board exceeded its alleged reservation of jurisdiction in that compliance with terms and conditions in Decision 1400 would require use of water conserved in Folsom Reservoir, which water was the subject of permits granted in Decision 893 over which the Board did not retain jurisdiction and which were not the subject of this hearing.

The response to item 1 of the petition of the San Joaquin County parties is applicable to this item as well.

2. The Board exceeded its alleged reservation of jurisdiction in that compliance with the terms and conditions in Decision 1400 would require release of stored water from Auburn and Folsom Reservoirs.

The statutory power of the Board to condition permits to require reasonable releases from storage so as to best develop, conserve and

utilize in the public interest the water sought to be appropriated was discussed in Decision 1379. The Board is satisfied that Decision 1400 is in accord with those conclusions.

3. The Board did not correctly consider the impact of the decision on the water uses for which Congress authorized the facilities.

The Board fully considered this matter in arriving at its decision.

4. The Board erred in its analysis and determination of "Additional Nimbus release under present U.S.B.R. commitments and restrictions" as set forth on Plate 1 attached to the decision.

The allegation contains no specifics as to the extent or nature of the supposed error. In any event, Plate 1 is attached to the decision for illustrative purposes. Variation in the details thereof would not affect the bases for the findings and order of Decision 1400.

5. Operation of the Auburn Reservoir facilities in the manner prescribed by Decision 1400 would be contrary to the optimum use of the reservoir requiring carry-over storage as was provided for in the plan presented to and approved by Congress.

The Board believes that the flows required by Decision 1400 are not contrary to optimum use of Auburn Reservoir, and that those flows provide for and promote a high degree of multiple use of water resources.

6. The Board in its decision is making an allocation of water from a federally authorized, funded, and constructed project, which allocation is solely within the province of Congress or its delegated agent.

The findings and order of Decision 1400 are in accord with the intent of Congress that water rights for the Auburn-Folsom South project be acquired in accordance with State law.

7. The decision is not supported by the evidence and is contrary to State and Federal law.

The evidence fully supports the findings and order of the decision. The decision is in accord with the applicable statutes of the State of California and the legislation authorizing the Auburn-Folsom South Canal project.

Contentions of Omochumne-Hartnell Water District

The petition of OHWD merely adopted the objections of USBR and is therefore not considered separately.

Contentions of Sacramento Municipal Utility District

1. If no contracts providing for the delivery of project water for irrigation are entered into, it might be argued that conditions 2 and 3 preclude reductions of either fish and wildlife or recreation flows under any circumstances, even if the maintenance of such flows would require drastic reductions in deliveries under the SMUD contract. The District suggests that condition 2 be clarified by the addition of the following sentence: "If no deliveries of project water are being made for irrigation, reductions below these ordered amounts may be made to the extent necessary to prevent the imposition of deficiencies in project water delivered under contracts entered into prior to the date of this order."

The situation for which the District expresses concern can exist only upon the occurrence of all four of the following conditions: (1) no contracts for project water for irrigation use in Folsom South service area; (2) high level of development of water deliveries from American River, both above and below Nimbus Dam; (3) no Hood-Clay connection; and (4) a dry cycle of severity of that of 1928-1934.

There is no indication in the record of any probability that the entire 875,000 afa which the USBR assumes to be the firm supply diverted to the Folsom South service area would be used for municipal and industrial purposes.

The simultaneous occurrence of the other three conditions is also unlikely. Therefore, a revision of the wording of conditions 2 and 3 appears unnecessary. In any event, the reservation of jurisdiction contained in the order allows for future revision of conditions 2 and 3, if necessary.

2. The District suggests deletion of the words "for irrigation" in condition 3 of the order, because it might be argued that the present wording of the condition precludes reduction of recreation flows to prevent the imposition of deficiencies in project water delivered for purposes other than irrigation, and, therefore, that even if contracts for the delivery of irrigation water are entered into, neither irrigation nor recreation flows may be reduced until municipal deliveries have been eliminated.

The District's concern is unwarranted. It is not the intent of Decision 1400 to interfere with the contractual arrangements between USBR and contractors for delivery of project water. SMUD's contract with USBR

requires that in a year in which there is a shortage in the quantity of water available to customers of the Central Valley Project, the quantities supplied to municipal and industrial users shall not be reduced until the reduction assigned to agricultural water users amounts to 25 percent of the agricultural contractual commitments for that year.

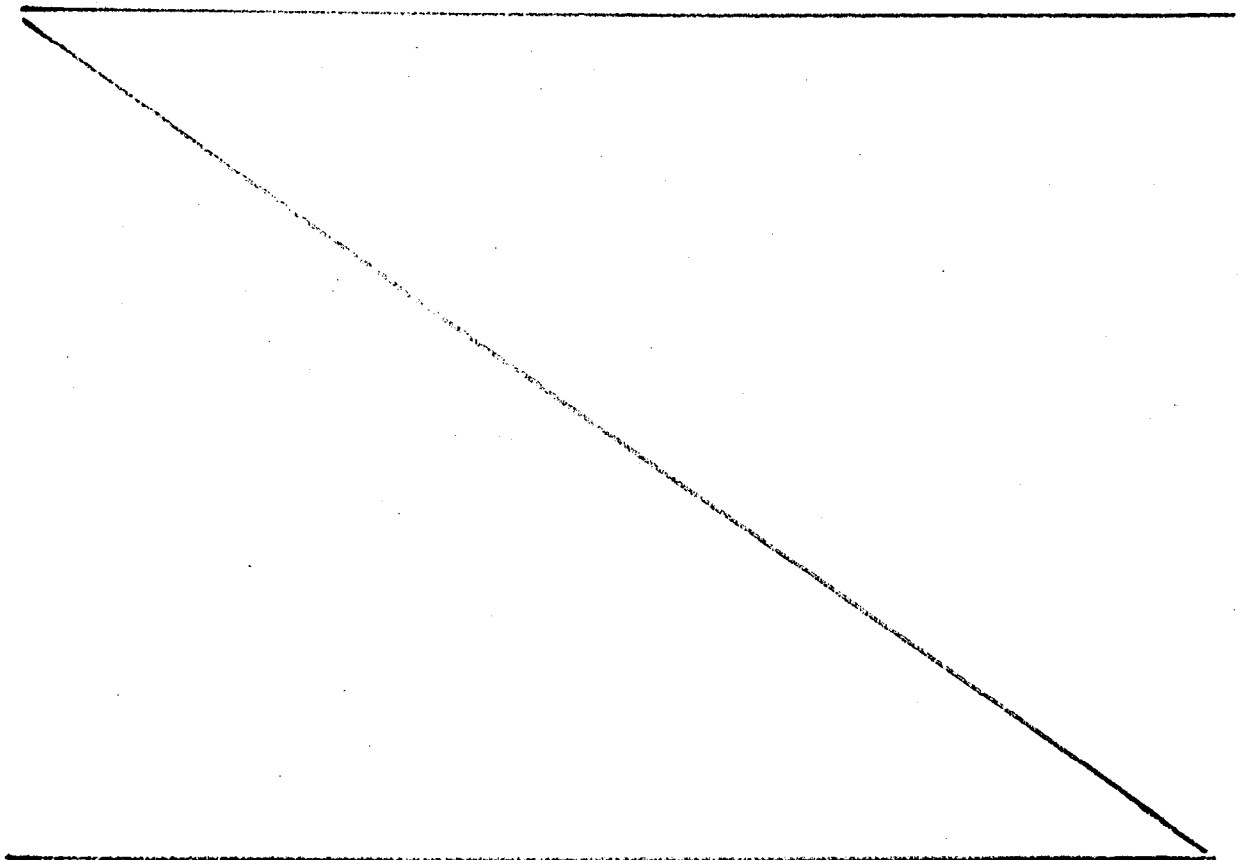
Contentions of East Bay Municipal Utility District

Implicit in the elimination of conditions 2 and 3 after the construction of a Hood-Clay connection is the assumption that critical dry year requirements between Nimbus and Cosumnes River can be met under the reduced release requirements of Decision 1400. In order to avoid confusion concerning the ability of the Bureau of Reclamation to contract for water supplies on the Nimbus-Cosumnes reach of the canal, the Board is urged to add the following to condition 4: "...; provided, however, that reductions may be made to the extent necessary to prevent the imposition of deficiencies in project water delivered from that portion of the Folsom-South Canal which cannot be supplied through a Hood-Clay connection."

Condition 4 of Decision 1400 modifies but does not and is not intended to eliminate the provisions of conditions 2 and 3.

Decision 1400 does not affect the status

of East Bay Municipal Utility District in relation to other contractors for project water supply as set forth in its contract with USBR. The decision is not intended to prevent sharing of deficiencies in times of shortage of project water supply in accordance with their contracts by contractors for project water whose delivery points are upstream on Folsom South Canal from its junction with a Hood-Clay connection.



Adopted as the order of the State Water Resources
Control Board at a meeting duly called and held at San Diego,
California.

Dated: June 1, 1972

W. W. ADAMS
W. W. Adams, Chairman

E. F. DIBBLE
E. F. Dibble, Vice Chairman

RONALD B. ROBIE
Ronald B. Robie, Member

ROY E. DODSON
Roy E. Dodson, Member

MRS. CARL H. (JEAN) AUER
Mrs. Carl H. (Jean) Auer, Member

CALIFORNIA

Resources Agency

STATE WATER RESOURCES CONTROL BOARD

1416 Ninth Street, Sacramento 95814
California

DIVISION OF WATER RIGHTS

- 1. COASTAL REGION**
- 2. NORTHERN REGION**
- 3. CENTRAL REGION**

LOS ANGELES OFFICE
Room 9038, 107 S. Broadway
Los Angeles, California 90012

