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NEW MELONES PROJECT WATER RIGHTS DECISION

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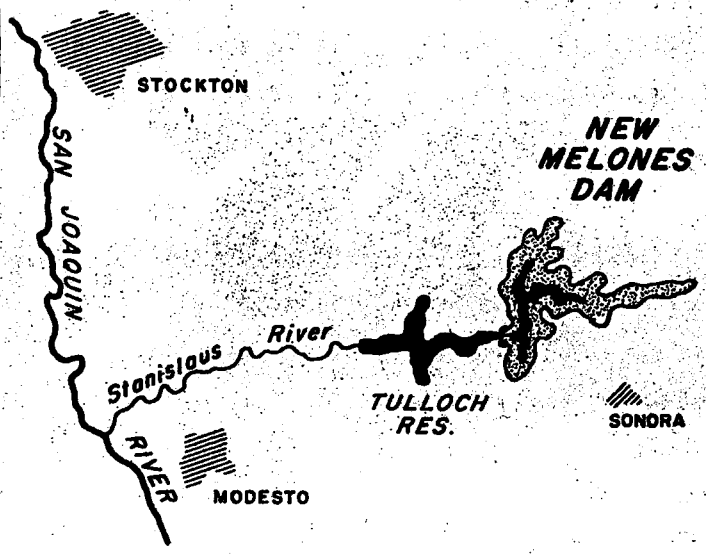

In the Matter of Applications 14858, 14859, 19303 and 19304 to Appropriate from the Stanislaus River in Calaveras and Tuolumne Counties.
U.S. Bureau of Reclamation, Petitioner and Applicant

DECISION 1422

April, 1973

STATE WATER RESOURCES CONTROL BOARD

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STATE WATER RESOURCES CONTROL BOARD

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DECISION GRANTING PETITION FOR ASSIGNMENT OF APPLICATIONS AND APPROVING APPLICATIONS IN PART

BY THE BOARD:

U. S. Bureau of Reclamation, hereinafter referred to as "Bureau" having filed a petition for assignment of Applications 14858* and 14859 and having filed Applications 19303 and 19304 for permits to appropriate unappropriated water; protests having been received; a public hearing having been held before the State Water Resources Control Board commencing on October 26, 1972; applicant, protestants and other persons having appeared and presented evidence; the evidence received at the hearing having been duly considered, the Board finds as follows:

Substance of the Applications

1. (a) Application 14858 is for a permit to appropriate 8,800 cubic feet per second (cfs) by direct diversion,

*Applications 14858 and 14859 were originally filed by the Department of Finance pursuant to Water Code Section 10500 and were subsequently transferred to the State Water Resources Control Board pursuant to Water Code Section 10504. The Bureau has filed a petition for assignment of these applications which petition includes proposed completed applications in its name as required by Water Code Section 10504 and board rule (California Administrative Code, Title 23, Section 800).

year-round, and 980,000 acre-feet per annum (afa) by storage to be collected from October 1 of each year to July 1 of the succeeding year for irrigation, domestic, municipal, industrial, fish culture, recreation and water quality purposes from the Stanislaus River in Calaveras and Tuolumne Counties.

(b) The foregoing information is identical in Application 14859 except that its purpose of use is power generation.

(c) Application 19303 is for a permit to appropriate 6,000 cfs by direct diversion and 2,400,000 afa by storage, both year-round, for power generation from Stanislaus River in Calaveras and Tuolumne Counties.

(d) Application 19304 is for a permit to appropriate 2,250 cfs by direct diversion and 2,400,000 afa by storage, both year-round, for irrigation, domestic, municipal, industrial, fish culture, recreation and water quality control purposes from the Stanislaus River in Calaveras and Tuolumne Counties.

The primary point of diversion under all four applications is at the proposed New Melones Dam which will be located within the SW¼ of SW¼ of Section 11, T1N, R13E, MDB&M, on the Calaveras County-Tuolumne County boundary line. A proposed Knights Ferry diversion dam which will be located downstream from New Melones Dam within the SW¼ of NE¼ of Section 21, T1S, R12E, MDB&M is also listed as a point of direct diversion under Applications 14858 and 19304.

Applicant's Project

2. The U. S. Corps of Engineers has under construction a multipurpose project, known as New Melones, on the Stanislaus River approximately 35 miles northeast of the City of Modesto. The principal feature of the project will be a dam to be constructed approximately three-quarters of a mile downstream from the present Melones Dam and reservoir which has a capacity of 112,000 acre-feet. The new reservoir will have a capacity of 2,400,000 acre-feet and will inundate the existing dam and reservoir. The New Melones project will be operated and maintained by the Bureau and it will be an integrated part of the Central Valley Project (CVP).

The proposed place of use for water conserved by the project, as amended by petition submitted November 16, 1972, includes all of Calaveras, Tuolumne, Stanislaus, San Joaquin and Contra Costa Counties along with the remainder of the CVP service area in San Joaquin and Santa Clara Valleys. The portions of this area which will actually be served with water have not been more specifically identified. The Bureau's economic analysis of the project assumes that some water will be used in the Kaweah River area within the San Joaquin Valley (Staff Exh. 12, p. 8). This would require the construction of conveyance facilities that have not as yet been authorized by Congress. The act of Congress authorizing the project requires that the Stanislaus River basin be given preference in the use of project water.

The project will provide flood protection to approximately 35,000 acres of highly developed agricultural land in the flood plain of the Stanislaus River and to the suburban areas of Ripon, Oakdale and Riverbank. In conjunction with other works it will provide flood protection to agricultural lands along the San Joaquin River and to agricultural lands within the Sacramento-San Joaquin Delta and to suburban areas south of the City of Stockton (RT 25).

The project also will provide water for water quality control and fish and wildlife preservation and enhancement along the Stanislaus River, lower San Joaquin River and possibly provide additional water for water quality control in the Delta (RT 27). Under the terms of an agreement with the California Regional Water Quality Control Board, Central Valley Region, the Bureau has agreed to release up to 70,000 acre-feet of the annual conservation yield of the reservoir to meet water quality objectives.

The project will have power facilities installed immediately below the dam which will consist of two 150 megawatt generators.

Protests to Applications

3. Protests to the applications were filed by numerous individuals, companies, reclamation districts, irrigation districts and other public agencies. Most of the protestants now have no objection to the project and some of the original protestants actually support it. Their principal concern is in the

manner in which the project will be operated, particularly in respect to protection of downstream rights, meeting water quality objectives, location of the areas to be served by the project and the purposes for which the water will be used.

Protestants Oakdale and South San Joaquin Irrigation Districts, Tuolumne County Water District No. 2 and Calaveras County Water District have withdrawn their protests to the applications following agreement with the Bureau (USBR Exh. 37; TCWD No. 2 Exh. 1). Any permits issued pursuant to subject applications should be made subject to these agreements.

Protestants Contra Costa County Water Agency, et al in their brief persist in the position taken during the hearing that Board action on the subject applications should be held in abeyance until the Bureau agrees to abide by any permit terms that may be contained in any permits issued pursuant to the applications. A motion to this effect made during the hearing was properly denied.

Protestants Delta Water Agency, Delta Water Users Association, San Joaquin County Flood Control and Water Conservation District, Banta Carbona Irrigation District, Stanislaus River Flood Control Association, Stockton-East Water District and McMullin Reclamation District, et al support the New Melones Project and are in substantial agreement as to special terms to be included in any permits that may be issued. Requested special permit terms are: a term limiting the entire yield of the project to use in Calaveras, Tuolumne, Stanislaus and San Joaquin Counties;

terms imposing more stringent standards for the protection of water quality in the lower San Joaquin River and Delta for an interim period, the Board retaining jurisdiction in the matter; a term retaining jurisdiction by the Board over fishery flows; a term retaining jurisdiction by the Board in respect to points of rediversion; and a term subjecting the permits to vested rights (a standard permit term). Also requested to be included is a term that would insure that landowners downstream from the dam will receive the flood control benefits for which the project was authorized and a term requiring the Bureau to promptly negotiate with users of water from the Stanislaus River concerning protection of their existing water rights, with the Board reserving jurisdiction over any permits until it does so; however, these are matters not within the Board's authority. Any permits issued will be subject to all prior rights and will not authorize any interference with such rights.

Protestant Department of Fish and Game has recommended greater releases of water for fishlife than those proposed by the Bureau. It also recommends the acquisition of the remaining riparian habitat along the lower portion of the Stanislaus River for the protection of wildlife; that steps be taken to mitigate destruction of wildlife within the reservoir area; and that the Board retain continuing jurisdiction in the matter of fish releases until further information is obtained (F & G Brief, p. 6).

Protestant Environmental Defense Fund contends the Bureau has failed to justify a project of the magnitude planned

and has failed to show that the water will be placed to beneficial use within a reasonable time. It recommends that the applications and petition for assignment of State filings be denied, particularly in view of the adverse effect the project will have on the environment of the area and on whitewater boating.

Protestant Sierra Club contends that there is no water available from the Stanislaus River and lower San Joaquin River for the out-of-basin uses as contemplated by the Bureau, and that the Bureau is not in a position to place the water covered by the permits to beneficial use within a reasonable period of time. It also recommends that the applications and petition for assignment of State filings be denied.

Water Supply

4. The watershed of the Stanislaus River above the proposed New Melones Dam varies in elevation from 1,088 feet to over 10,000 feet at the crest of the Sierra Nevada. The total drainage area is approximately 900 square miles. The annual rainfall averages approximately 27 inches at the damsite and 65 inches in the upper portion of the watershed.

The estimated unimpaired annual flow in the Stanislaus River at Melones Dam has been as low as 261,000 acre-feet and as high as 2,356,900 acre-feet (USBR Exh. 27). The average annual unimpaired flow is approximately 1,100,000 acre-feet (Staff Exh. 12, p. 34).

Oakdale and South San Joaquin Irrigation Districts divert most of the flow of the Stanislaus River other than flood

flows into their main canals at Goodwin Dam approximately 12 miles downstream from New Melones. As a result, the river is frequently dry immediately below Goodwin Dam during the summer months.

Water Requirements of Users Holding Prior Rights

5. Oakdale and South San Joaquin Irrigation Districts are the major holders of prior rights to the water from Stanislaus River. They constructed the present Melones Reservoir approximately 45 years ago and in 1957 they completed Tulloch, Donnells and Beardsley Reservoirs known as the Tri-Dam Project. Donnells and Beardsley Reservoirs are on the upper middle fork of the Stanislaus River and Tulloch Reservoir is located on the main stem of the river several miles below Melones Reservoir. The total capacity of the three reservoirs is 230,400 acre-feet. During the period of 1914-1970 the districts' diversions of water from the Stanislaus River under all claims of right have varied from approximately 204,000 acre-feet in 1924 to a high of 597,300 acre-feet in 1962 with an average annual diversion of 409,500 acre-feet. Under the agreement providing for the dismissal of the districts' protests, the Bureau will deliver all of the inflow of the New Melones Reservoir up to 654,000 acre-feet in each year for rediversion at Goodwin Dam in satisfaction of the districts' prior rights.

The ultimate annual demand for Stanislaus River water below Goodwin Dam has been calculated to be 74,500 acre-feet under active and dormant riparian rights, appropriative rights including all applications on file with the Board as of the

year 1972, and approximately 9,000 afa for undefined "other rights" (USBR Exhs. 33, 34). All of these uses are by direct diversion with a season that generally extends from March through October (USBR Exh. 19). The Bureau's proposed project could not harm these users during the July through October period as no water is available for the project during that period. Accretions to the river between Goodwin Dam and its mouth will be sufficient to cover rights in that area during the March through June period. A comparison of the records of a gaging station just below Goodwin Dam with a station near the mouth of the river for the months of March through June during the period 1963-1968 indicates an average accretion of 47,440 af (USBR Exhs. 12 and 15). The estimated average ultimate annual requirements of the downstream users during March through June is 35,118 acre-feet. (USBR Exh. 34).

The Stanislaus River watershed upstream from the site of the New Melones Dam includes portions of Alpine, Tuolumne and Calaveras Counties. Use of water from the Stanislaus River in Alpine County is mostly on U. S. Forest Service land and the anticipated demand for water in the county is included in a 2,000 afa allocation by the Bureau for use in the Stanislaus National Forest. Calaveras County Water District holds numerous permits to appropriate water for the development of the Stanislaus River basin. Tuolumne County Water District No. 2 also has undeveloped rights to water in the upper Stanislaus basin. The Bureau has estimated the actual yield of the upstream rights of both counties to be 312,000 afa by storage and 1,739 cfs by

direct diversion (USBR Exh. 31; RT 64). The agreements between the Bureau and Calaveras County, Calaveras County Water District and Tuolumne County Water District No. 2 provide that the Bureau will recognize the prior rights of the counties of origin to divert water from the upper basin as required for their needs. Provision is also made for the counties to contract for a water supply from the yield of New Melones (CC Exh. 1; TCWD Exh. 1).

Availability of Unappropriated Water

6. The Bureau's conclusion as to the extent that water in the Stanislaus River remains unappropriated is based upon its estimate of the unimpaired inflow to the New Melones site for a hydrologic cycle equivalent to the period 1923 through 1953. After deducting the quantity of water necessary for the above-described demands the annual average surplus is an estimated 335,000 acre-feet and varies from zero which occurs in nine years of the period of study to 1,980,000 acre-feet.

The Bureau's Exhibit 32a shows no unappropriated water during the month of October and that month should be eliminated from the diversion season specified in any permits to be issued. Diversion during the months of July through September is precluded by past decisions of the Board, and should also be excluded from the permits.

Unappropriated water is available to supply the Bureau, and, subject to suitable conditions, such water may be diverted and used in the manner proposed without causing any substantial injury to any lawful user of water.

Water Quality

7. The Stanislaus River contributes approximately 25 percent of the annual flow of the San Joaquin River as measured at the USGS gaging station "near Vernalis" and approximately 15 percent of the July through October flow (USBR Exh. 45). The gaging station is just below the confluence of the two rivers. Most of the summer flow in the lower San Joaquin River consists of irrigation return water. The total dissolved solids (TDS) exceed 500 parts per million (ppm) approximately 38 percent of the time during the irrigation season (USBR Exh. 42; RT 235). The Stanislaus River is an important source of dilution water required to reduce the TDS in the lower San Joaquin River to usable levels (Staff Exh. 11, pp. 13, 15, 27).

The Bureau under its agreement with the California Regional Water Quality Control Board, Central Valley Region, plans to release up to 70,000 acre-feet of water in any one year as required to maintain a mean monthly TDS concentration in the San Joaquin River below the mouth of the Stanislaus River at 500 ppm maximum, also to maintain at least five ppm of dissolved oxygen (DO) in the Stanislaus River (Staff Exh. 13). The Bureau estimates that the DO requirement can be met in 10 out of 11 years, assuming a 1975 level of development, with a water quality release averaging 15,520 afa. These releases will be in addition to the Bureau's planned fish releases which amount to 98,000 acre-feet in a normal year. Releases required to meet these water quality objectives would not exceed 70,000 acre-feet maximum until about year 2075 according to a report written by the U. S. Public Health Service (Staff Exh. 11, Table A-4, p. A-12).

However, the ability of the agreed-upon releases to accomplish the water quality objectives depends upon the assumption that the mean TDS concentration of water released from New Melones will be 50 ppm and that the relationship between flows and TDS at Vernalis established by the U. S. Public Health Service (Staff Exh. 11) will continue. These assumptions may not be valid. TDS levels up to 175 ppm have been recorded prior to the construction of the Tri-Dam Project. Also, evaporation at New Melones Reservoir and return flows from future developments upstream could increase salt levels. Only meager data has been presented by the Bureau concerning the flow versus TDS concentrations in the earlier years. There is little basis for concluding that the flow versus TDS relationship at Vernalis is stable on a long-term basis. Also, a problem in predicting the effect of releases of project water on water quality is the failure of the Bureau to specifically designate the place and method of using the conservation yield of the project.

There was considerable evidence presented at the hearing as to what are proper water quality objectives. The Department of Fish and Game has requested a minimum DO of 7 ppm to protect the salmon fishery (RT 526). The Board's Interim Water Quality Control Plan, San Joaquin Basin 5C, specifies that as a result of waste discharges the DO in the Stanislaus River should not fall below 85 percent of the saturation value, which is more restrictive than the DO standard of 5 ppm agreed upon by the Bureau. Protestants Delta Water Agency and Banta-Carbona

Irrigation District recommend that the maximum total dissolved solids at Vernalis be 450 ppm at a 14-day running average (RT 911). If these objectives had been met during the years 1950 through 1969 the Bureau's proposed limit of 70,000 afa would have been exceeded in ten out of the twenty years. (DWA Exh. 24).

In view of the uncertainty inherent in the problem of proper releases to protect water quality, any permits issued pursuant to subject applications should contain an interim term until further studies are made requiring releases of conserved water from New Melones which will maintain a mean monthly TDS concentration in the San Joaquin River at Vernalis of 500 ppm or less and a DO concentration in the Stanislaus River as specified in the Interim Water Quality Control Plan. The Board should reserve jurisdiction over the permits for the purpose of revising water release requirements for water quality objectives.

Consumptive Use of Project Water

8. The Bureau has described the following areas within which the conservation yield of the New Melones Project may be used for irrigation or other consumptive purposes; the local service area consisting of Tuolumne, Calaveras, San Joaquin and Stanislaus Counties; southern San Joaquin Valley via the proposed East Side Canal or a Cross Valley Canal; San Felipe division of the CVP; San Luis unit of the CVP; the area served by the Delta Mendota Canal; the Montezuma Hills Unit of the CVP; and the Suisun Marsh area.

The entire service area which the Bureau has designated as the place of use includes over 11,000,000 acres of land.

There is a future need for additional water supplies in one or more of the above areas. However, the Bureau has presented no specific plan for applying project water to beneficial use for consumptive purposes at any particular location. Furthermore, the record shows that the CVP has substantial quantities of water that are not being used and are not under contract. The Bureau's own records indicate that without the yield of the New Melones Reservoir the Bureau can meet the estimated buildup of demands under present contracts for a long period of years (USBR Exh. 46 with supplements).

While the Bureau may not be "up to its ears in water" as suggested by Protestant Environmental Defense Fund (EDF Brief, p.5), there certainly has been no demonstrated need for the additional water supplies developed by this project, outside of the local area. Two aspects of this part of the Bureau's case as to the need for water are disturbing; although this decision is in no way dependent upon the information in question, our concerns will be mentioned.

The effort of the Bureau to obfuscate the effect on the applicant of this Board's Decision 1379 is one of them. The Bureau has stated that its share of the additional Delta outflow required to meet the requirements of Decision 1379 would be 2.2 million afa (RT 186). It has also stated that this amount would be reduced to 1.6 million afa with the Peripheral Canal only, and 1.1 million afa with both the Peripheral Canal and Delta Overland Facilities (USBR Exh. 46). It is our understanding that export of water from the Delta during minimum flow periods in the full amount

contemplated by the State and Federal Projects cannot be accomplished without the Peripheral Canal or equivalent facilities (DWR Exh. 502; Staff Exh. 502B, Delta Hearing). Therefore, the significance of the oft-mentioned 2.2 million afa is not apparent.

We are also concerned that the increase in uncommitted yield of the CVP, due to less than expected demand of Sacramento River users, was disclosed more or less as extraneous information, rather than as an integral part of the planning data (RT 745 et. seq.).

By failing to present evidence of a specific plan to use the water conserved by the New Melones Project for consumptive purposes, the Bureau has failed in spirit if not in substance to meet the statutory requirements for approval of a permit to appropriate water for such purposes. While this Board, in the past, has consistently recognized the need to operate facilities of the Central Valley Project in an integrated manner (see Decisions 893, 990, 1356), the law requires the Board to examine each application and determine that the water to be appropriated will be placed to beneficial use (Water Code Sec. 1240). In addition, the specific intended use must be evaluated and found to be reasonable, beneficial and in the public interest before a permit can issue. The Board undertakes a balancing of competing demands and policy considerations and has broad discretion (Water Code Sec. 1257, Temescal Water Co. v. Dept. of Public Works, 44 Cal. 2d 90, 280 P. 2d 1).

The record contains substantial evidence that the full conservation yield of the New Melones Project, and more, will eventually be needed in Tuolumne, Calaveras, San Joaquin and Stanislaus Counties (RT 145-147, 1131). These four counties include substantial areas in the Stanislaus River basin and are considered by the Bureau to be entitled to preference in the use of project water, based on the provisions of Public Law 87-874 and the California County of Origin Law (Water Code Sec. 10505) (RT 144). The Board agrees, as explained later in this decision.

The limited unappropriated water resource of the State should not be committed to an applicant in the absence of a showing of his actual need for the water within a reasonable time in the future. When the evidence indicates, as it does here, that an applicant already has a right to sufficient water to meet his needs for beneficial use within the foreseeable future, rights to additional water should be withheld and that water should be reserved for other beneficial uses. In this case, existing surplus supplies that are available to the Bureau should be utilized before storage is allowed in New Melones Reservoir to satisfy demand for more water in service areas outside of the four basin counties.

Although the full conservation yield of the project will be required for future development of the four basin counties, no facilities have been planned up to now to serve

project water in these counties and no contracts have been negotiated for such service. The record is not clear how soon water user agencies will be ready to execute any such contracts.

The lack of evidence that New Melones Project water will be needed for consumptive use outside the four basin counties for many years to come, if ever, or that it will be used within those counties at any definite time in the future, raises substantial doubt whether permits should be issued to impound more water in New Melones Reservoir, at least at this time, than is needed for satisfaction of prior rights and non-consumptive purposes - protection and enhancement of fish and wildlife, water quality, recreation and generation of power.*

To help resolve this doubt the Board must consider any adverse consequences of such impoundment. The proposed reservoir would inundate approximately 13 miles of river upstream from the existing Melones Reservoir, including approximately 9 miles above Parrotts Ferry Bridge now being used for whitewater recreation. Any storage of water above the levels of the existing Melones Reservoir will conflict with use of the upper reach for whitewater boating, stream fishing, and other stream-related activities.

Protestant Environmental Defense Fund estimates that in the year 1971 use of the river for whitewater recreation amounted to over 23,000 visitor days and that such use may eventually increase to 90,000 visitor days per year (EDF Exh. 1; RT 1059). It has been estimated that visitors using the services

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*Permits to impound water for flood control are not required and were not requested.

of commercial river runners spent approximately $730,500 in 1971. The project's recreational features would not adequately substitute for the present recreational uses of the river in the upstream reach. A study by the Water Resources Council indicates that the New Melones site does not lie within one of the regions which will require additional reservoir recreation areas by the year 2020 (EDF Exh. 7). There are numerous other reservoirs already in the same region (EDF Exh. 6); further, a lake fishery is not adequate replacement for a stream fishery, insofar as many users are concerned. While stream fishing downstream from the reservoir would be enhanced, it would be practically eliminated in the area to be inundated, together with other stream-related activities and wildlife habitat. Although there would still be opportunity for stream-related activities above Camp Nine, that area is less accessible and would not readily absorb users displaced from the lower reach.

In view of the preponderance of the adverse consequences of maintaining a reservoir of the size proposed by the Bureau, the public interest requires that any permits issued pursuant to Applications 14858 and 19304 prohibit the impoundment of water in New Melones Reservoir for consumptive purposes until further order of the Board following a showing that the benefits that will accrue from a specific proposed use will outweigh any damage that would result to fish, wildlife and recreation in the watershed above New Melones Dam and that the permittee has firm commitments to deliver water for such purposes.

Because of the lack of a showing of need for water from the New Melones Project outside the counties of Calaveras, Tuolumne, Stanislaus and San Joaquin, the permits should restrict the place of use of water for consumptive purposes to those counties, but should provide that a petition to include other specific areas will be considered by the Board upon a showing that water from other CVP sources is not available to serve such areas. The permits should further provide that any use of water for consumptive purposes outside the four basin counties shall be subordinate to beneficial use within said counties and shall terminate when contracts are executed and the water is needed within said counties. Such a provision is necessary to conform to the preference given to use within the Stanislaus River Basin by the authorizing act of Congress (P.L. 87-874), and a similar preference given to the counties of origin and to the watershed of origin and areas immediately adjacent thereto by state law (see Water Code Secs. 10505 and 11460).

Even without storage of water for consumptive use, a substantial part of the 9-mile reach of river channel above Parrotts Ferry Bridge will be inundated at times. A reservoir of 1,100,000 acre-feet, the approximate size estimated to be required to provide for prior rights, flood control, and for water for the previously discussed non-consumptive uses, would inundate all but the upper few miles of this reach. However, 450,000 acre-feet of the 1,100,000 acre-feet is required for flood control. There would be parts of all years, and some entire years, when the flood space would be empty. With the flood space empty, only about 2½ miles of the nine-mile reach would be inundated. Further drawdown into the conservation storage range, which would be the usual summer

occurrence, would make even more of the white water reach available.

It is apparent that intermittent inundation of the white-water reach would degrade the appearance of the stream to some extent. However, it should not be necessary to maintain high water levels for long periods. The canyon is steep sided and extensive mud flats should not form. On the whole, degradation of the esthetic values is expected to be minimal.

Releases of Project Water for Preservation and Enhancement of Fishlife

9. Applications 14858 and 19304 list "fish culture" as a purpose. The Bureau proposes to release water from New Melones Reservoir for the preservation and enhancement of fishlife, rather than actually engaging in the raising of fish, and the permits should be issued accordingly.

The value of the Stanislaus River as a salmon fishery resource has been estimated to be $300,000 per year (RT 52).

Revised Department of Fish and Game recommendations now call for releases of 262,000 afa from New Melones Reservoir for preservation and enhancement of the fishery in the Stanislaus River and an additional 50,000 afa for the same purposes in the Delta in a normal year. The drastic revision upward is due, in part, to a belief on the part of the Department that it is the ability of the spring flows to flush juvenile salmon to the ocean which determines the success of the spawning run two and one-half years later when the same salmon return to the river.

There are a number of factors besides flows which affect the salmon run in the Stanislaus River. Further study of the matter is needed, which should include such factors as the feasibility of providing a fish hatchery instead of large river flows.

Any permits issued pursuant to Applications 14858 and 19304 should contain terms requiring the release of up to 98,000 afa for maintenance of fish and wildlife as planned by the Bureau to be released at a rate and during periods specified by the Department of Fish and Game. Jurisdiction should be reserved by the Board to later revise the releases for preservation and enhancement of fish and wildlife upon reviewing the results of further studies, as mentioned above. Such studies were proposed by the Bureau and agreed to by the Department of Fish and Game. The joint investigation should include an attempt to determine the optimum balance between maximizing fish and wildlife benefits while minimizing reservoir storage levels, during the period prior to storage of water for consumptive uses.

Dry Year Criteria

10. Formal dry year criteria for the benefit of consumptive uses will not be specified at this time since the Board is making no allocation of water for irrigation, domestic, municipal and industrial uses. However, the Board will reserve jurisdiction until the conservation yield is fully allocated to provide such dry year criteria as appear warranted after further hearing.

Hydroelectric Power Development

11. Inasmuch as there is considerable question as to the need for appropriation of water in the proposed quantities for purposes other than the generation of power, it is necessary to determine if the project's power benefit alone justifies storage in addition to that presently needed for other purposes.

Previous mention has been made of the fact that any increase in storage conflicts with use of the upper river for whitewater recreation, stream fishing and wildlife. If as the demand for water for consumptive uses increases and storage for those uses is authorized, storage for power purposes will also be considered. The immediate question, therefore, is whether the need for maintaining the present regimen of the stream outweighs the need for an additional increment of generating capacity during the interim period.

The Bureau calculates the annual benefits of the power function of the proposed project to be over five and one-half million dollars. Restriction of storage for power purposes to the amount required for satisfaction of prior rights and flood control plus the amount allowed for fish and wildlife and water quality control would reduce the capacity of the powerplant from 300 megawatts, with an annual electrical energy production of 430,000 megawatt-hours, to some lesser but undetermined production. The opportunity to contribute to the solution of the present power supply problems should not be overlooked. However, the project was not proposed as a means of alleviating the power shortage and the Bureau did not offer evidence to show that full approval of its power applications would decrease the need for development of other sources of power.

Although maintenance of the upstream reach of the river in its present state solely for recreational uses cannot be justified strictly on an economic basis. The recreational uses in question have a value beyond that described by dollar resources only.

Opportunities for lake fishing are relatively abundant in California and stream fishing does not appear to be critically lacking. However, the tendency of increased levels of development is to replace stream fisheries with lakes. Therefore, when a choice must be made between two alternates which will result in different types of fisheries, extra weight should be attached to the value of a stream fishery.

The situation with respect to whitewater boating is analagous to that of the fisheries. While the opportunities for flat water boating are abundant, streams suitable for whitewater boating are extremely scarce (RT 1061); also, the Stanislaus may be the second most heavily used river in the nation for that purpose in actual number of visitors per year (RT 1062). In fact, the Bureau has contended that overuse of the river may become a problem.

If the Bureau eventually substantiates the need for storage for consumptive use purposes out-of-basin (such as in the San Luis service area), large quantities of power will be required to deliver the water. At such time, development of the full power potential of New Melones should be considered to offset the increased pumping demand insofar as possible. In the meantime, any power developed at New Melones in excess of the losses in production expected at the existing Melones and Tulloch Powerhouses will be a net gain to the pool of available power. If substantial basin exports are allowed in the future, the balance may shift to a net loss, even with increased production at New Melones.

In view of the foregoing, the Board finds that the reach of river in question is a unique asset to the state and the nation. Until the need for water for consumptive purposes dictates approval of increased storage, the public interest requires that storage for power purposes also be kept at reduced levels. Permits issued pursuant to Applications 14859 and 19303 for power purposes should be limited to the amount of conservation storage authorized under the permits issued pursuant to Applications 14858 and 19304. Direct diversion under Applications 14859 and 19303 for power purposes should be limited to 6,000 cfs which will be the capacity of the proposed penstocks.

Assignment of State Applications 14858 and 14859 Held by the Board

12. The Board may assign any applications filed in accordance with Water Code Section 10500 and held by the Board when the assignment is for the purpose of development not in conflict with a general or coordinated plan looking toward the development, utilization, or conservation of the water resources of the State or with water quality objectives established pursuant to law (Water Code Sec. 10504). Further, no such assignment shall be made that will deprive the county in which the water covered by the application originates of any such water necessary for the development of the county (Water Code Sec. 10505).

The Bureau's project is not in conflict with any such general plan looking toward the development, utilization or conservation of the water resources of the State or with water quality objectives. The California Water Plan provides for the enlargement of existing Melones Reservoir to the capacity of 1,100,000 acre-feet (DWR Bulletin 3, p. 130). The use of a portion of the conservation yield of New Melones Reservoir for water quality control is in keeping with water quality objectives for the lower San Joaquin River. Assignment of the applications should be subject, in conformity with Section 10505 of the Water Code, to any and all rights of any county in which the water sought to be appropriated originates to the extent that any such water may be necessary for the development of such county. As so conditioned, the assignment will not deprive any such county of any water necessary for its development. Any permits issued pursuant to the applications should contain a similar term.

The counties of origin are further protected by Public Law 87-874. It provides that the needs of the Stanislaus River basin have priority in allocating project water.

The Board's Jurisdiction

13. The regional solicitor, who is the Bureau's legal representative in this proceeding, reiterates the official position that has been advanced by him in previous proceedings before this Board, that we have no jurisdiction to impose any conditions or limitations upon the Bureau's permits. He argues that the Board's function is "ministerial"; that having determined that unappropriated water exists, a permit for the unappropriated water then follows "as a matter of course" (USBR Opening Brief, p. 10).

Such an interpretation of the Board's authority is not supported by either statutory or case law and is not even consistent with other portions of the solicitor's brief or with the Bureau's conduct with respect to previous applications that have been acted upon by the Board and its predecessors. The solicitor himself proposes a special permit term requiring the Bureau to conduct certain studies related to the fishery in the Stanislaus River (USBR Opening Brief, p. 3).

Rather than an extended legal discussion at this time we feel it is sufficient to reaffirm the views expressed in previous decisions concerning the need for the Bureau to comply with state law when it applies to the state for a right to appropriate water of the state. See Decision 990 approving applications of the Bureau for the CVP and Decision 1379 exercising jurisdiction reserved in Decision 990.

Summary

There is unappropriated water available to satisfy the demands of the project as proposed. However, the Bureau has no definite plan as to when or at what specific locations project water will be used for consumptive purposes outside the four basin counties, and it has sufficient surplus water from other sources to meet future increased demands outside these counties for a long period of years. Permits should not be issued for use of water outside these counties at this time.

The public interest requires that the use of the Stanislaus River for whitewater boating, stream fishing and wildlife habitat be protected to the extent that water is not needed fo

other beneficial uses. Therefore, although there is a demonstrated need for the full yield of the project in the four basin counties at some time in the future, but for which no contracts have been negotiated, and in view of the adverse effect the proposed reservoir will have upon these recreational uses, impoundment of water to satisfy that need should not be permitted at this time. Instead, the Board should retain jurisdiction over the permits for the purpose of approving incremental appropriations for consumptive use up to the quantities covered by the applications when the need for the water is substantiated.

Appropriations by storage should be allowed of sufficient water to provide for the preservation and enhancement of fishlife up to 98,000 afa. Storage should also be allowed to meet TDS objectives of 500 ppm and DO objectives as required by the Interim Water Quality Control Plan. The Board should retain jurisdiction for the purpose of conforming the permits to demonstrated needs for water for such purposes. Storage of water should also be allowed to replace water stored in the existing Melones Reservoir which will be inundated. The season of diversion to storage should conform to the availability of unappropriated water; namely, November through June.

Beneficial use of project water can be made for the generation of power. However, preservation of the existing upstream reach of the river for recreation values conflicts with increased storage for power purposes. Therefore, storage for power generation should be approved, but limited to the amount authorized for other project purposes.

By dedicating the initial project yield to demonstrated needs for flows for water quality control and for fish and wildlife preservation and enhancement and allowing use of these flows for power generation, and by deferring significant impairment of upstream recreational values until a need for other uses is demonstrated, the Board's decision assures the maximum public benefit and maximum utilization of the available resources in the public interest.

From the foregoing findings, the Board concludes that Applications 14858 and 14859 should be assigned to the Bureau; that they and Applications 19303 and 19304 should be approved in part and that permits should be issued to the Bureau subject to the limitations and conditions set forth in the order following:

ORDER

IT IS HEREBY ORDERED that Applications 14858 and 14859 be, and they are, assigned to the United States Bureau of Reclamation, subject, in conformity with Section 10505 of the Water Code, to any and all rights of any county in which the water sought to be appropriated originates to the extent that any such water may be necessary for the development of such county.

IT IS FURTHER ORDERED that Applications 14858, 14859, 19303 and 19304 be approved in part, and that permits be issued to the United States Bureau of Reclamation subject to the following conditions and limitations:

1-a. The water appropriated under the permit issued pursuant to Application 14858 shall be limited to the quantity which can be beneficially used and shall not exceed 980,000 acre-feet per annum by storage to be collected from November 1 of each year to June 30 of the succeeding year. Until further order of the State Water Resources Control Board, the water shall be used only for preservation and enhancement of fish and wildlife, recreation and water quality control purposes.

1-b. The water appropriated under the permit issued pursuant to Application 14859 shall be limited to the quantity which can be beneficially used and shall not exceed 6,000 cubic feet per second by direct diversion to be diverted from January 1 to December 31 of each year and 980,000 acre-feet per annum by storage to be collected from November 1 of each year to June 30 of the succeeding year to be used for power purposes.

1-c. The water appropriated under the permit issued pursuant to Application 19303 shall be limited to the quantity which can be beneficially used and shall not exceed 1,420,000 acre-feet per annum to be collected from November 1 of each year to June 30 of the succeeding year to be used for power purposes.

1-d. The water appropriated under the permit issued pursuant to Application 19304 shall be limited to the quantity which can be beneficially used and shall not exceed 1,420,000 acre-feet per annum by storage to be collected from November 1 of each year to June 30 of the succeeding year. Until further order of the State Water Resources Control Board, the water shall be used only for preservation and enhancement of fish and wildlife, recreation and water quality control purposes.

2. Until further order of the Board, permittee shall impound in New Melones Reservoir only such water as is necessary to provide (a) not in excess of 98,000 acre-feet per annum for the preservation and enhancement of fish and wildlife to be released at a rate specified by the California Department of Fish and Game, plus (b) such additional water as is necessary to maintain the water quality conditions set forth in paragraph 5. The above amounts are in addition to water stored for satisfaction of prior rights at existing Melones Reservoir and for flood control. No additional impoundment shall be allowed for power and recreational purposes. Further order of the Board shall be preceded by a showing that the benefits that will accrue from a specific proposed use will outweigh any damage that would result to fish, wildlife and recreation in the watershed above New Melones Dam and that the permittee has firm commitments to deliver water for such other purposes. The Board reserves jurisdiction for the purpose of establishing dry year criteria at the time such impoundment is approved.

3. Before any water is impounded in New Melones Reservoir, permittee shall file with the Board a reservoir operation study showing the water level elevations required to provide the yield specified in paragraph 2. The study shall include details of the permittee's proposed reservoir clearing plan to show the manner in which clearing will progress as additional storage is authorized. A reservoir operation schedule

shall be submitted by the permittee which shall be subject to approval of the Board. The study shall be updated at least once every five years until further order of the Board.

4. Permits issued pursuant to Applications 14858 and 19304 shall authorize the use of water for consumptive purposes only in the counties of Stanislaus, Calaveras, Tuolumne and San Joaquin. A petition to amend the permits to include other specific areas will be considered by the Board upon a showing that water from other CVP sources is not available to serve such areas. Any use of water for consumptive purposes outside the counties of Stanislaus, Calaveras, Tuolumne and San Joaquin that may be authorized later shall be subordinate to beneficial use within said counties and shall terminate when contracts are executed and the water is needed for beneficial use within said counties.

5. Releases of conserved water from New Melones Reservoir for water quality control purposes shall be scheduled so as to maintain a mean monthly total dissolved solids concentration in the San Joaquin River at Vernalis of 500 parts per million or less and a dissolved oxygen concentration in the Stanislaus River as specified in the Water Quality Control Plan (Interim), San Joaquin River Basin 5C, State Water Resources Control Board, June 1971.

In the event that the Water Quality Control Plan (Interim) is amended or superseded, the foregoing water quality objectives shall be modified to conform to then current criteria.

6. The State Water Resources Control Board reserves jurisdiction over these permits for the purpose of revising water release requirements for water quality objectives and fish releases and for establishing dry year criteria pursuant to studies to be conducted by the permittee and other parties in an effort to better define water needs.

7. Permittee shall file with the Board at least biennially a report of water diversions and use along the Stanislaus River and San Joaquin River between New Melones Dam and the Vernalis gage which will show any increased diversions subsequent to the beginning of releases of water under this permit, which diversions may be encroaching on the water supply provided for preservation and enhancement of fish and wildlife and for water quality control, and will show what steps, if any, permittee is taking to prevent any such encroachment.

8. Permittee shall file with the Board an annual report showing (a) daily storage level in New Melones Reservoir, (b) daily record of total dissolved solids at Vernalis, and (c) daily record of minimum dissolved oxygen level for the day at Ripon or at an alternate location approved by the Board.

9. The maximum quantities stated herein may be reduced in the license if investigation warrants.

10. Construction work shall be completed on or before December 1, 1980.

11. Complete application of water to the uses authorized by the permit shall be made on or before December 1, 1990.

12. Progress reports shall be submitted promptly by permittee when requested by the State Water Resources Control Board until license is issued.

13. All rights and privileges under this permit, including method of diversion, method of use, and quantity of water diverted, are subject to the continuing authority of the State Water Resources Control Board in accordance with law and in the interest of the public welfare to prevent waste, unreasonable use, unreasonable method of use, or unreasonable method of diversion of said water.

This continuing authority of the Board may be exercised by imposing specific requirements over and above those contained in this permit with a view to minimizing waste of water and to meeting the reasonable water requirements of permittee without unreasonable draft on the source. Permittee may be required to implement such programs as (1) reusing or reclaiming the water allocated; (2) restricting diversions so as to eliminate agricultural tailwater or to reduce return flow; (3) suppressing evaporation losses from water surfaces; (4) controlling phreatophytic growth; and (5) installing, maintaining, and operating efficient water measuring devices to assure compliance with the quantity limitations of this permit and to determine accurately water use as against reasonable water requirements for the authorized project. No action will be taken pursuant to this paragraph unless the Board determines, after notice to affected parties and opportunity for hearing, that such specific requirements are physically and financially feasible and are appropriate to the particular situation.

14. This permit does not authorize collection of water to storage outside of the specified season to offset evaporation and seepage losses or for any other purpose.

15. Permittee shall allow representatives of the State Water Resources Control Board and other parties, as may be authorized from time to time by said Board, reasonable access to project works to determine compliance with the terms of this permit.

16. In compliance with Section 5943 of the Fish and Game Code, permittee shall accord to the public, for the purpose of fishing, reasonable right of access to the waters impounded by the dam under this permit during the open season for the taking of fish subject to the regulations of the Fish and Game Commission.

17. Permittee shall install and maintain an outlet pipe of adequate capacity in his dam as near as practicable to the bottom of the natural stream channel, or provide other means satisfactory to the State Water Resources Control Board, in order that water entering the reservoir which is not authorized for appropriation under this permit may be released.

18. In accordance with the requirements of Water Code Section 1393, permittee shall clear the site of the reservoir of all structures, trees, and other vegetation which would interfere with the use of the reservoir for water storage and recreational purposes. This provision, however, shall not preclude the permittee from retaining vegetation cover in selected areas as required for the protection of wildlife. Clearing operations shall be coordinated with authorized increases in storage levels.

19. Rights under this permit are, and shall be, subject to existing rights determined by the Stanislaus River Adjudication Decree of Superior Court of San Joaquin County dated November 14, 1929, Action No. 16873 with Supplemental Decrees dated February 24, 1930; March 8, 1934; May 8, 1935 and November 29, 1960, insofar as said adjudicated rights are maintained, and such other rights as may presently exist.

20. The quantity of water diverted under this permit and under any license issued pursuant thereto is subject to modification by the State Water Resources Control Board if, after notice to the permittee and an opportunity for hearing, the Board finds that such modification is necessary to meet water quality objectives in water quality control plans which have been or hereafter may be established or modified pursuant to Division 7 of the Water Code. No action will be taken pursuant to this paragraph unless the Board finds that (1) adequate waste discharge requirements have been prescribed and are in effect with respect to all waste discharges which have any substantial effect upon water quality in the area involved, and (2) the water quality objectives cannot be achieved solely through the control of waste discharges.

21. In order to prevent degradation of the quality of water during and after construction of the project, permittee shall file immediately a report pursuant to Water Code Section 13260 and shall comply with any waste discharge requirements imposed by the California Regional Water Quality Control Board, Central Valley Region, or by the State Water Resources Control Board.

22. Before making any change in the project determined by the State Water Resources Control Board to be substantial, permittee shall submit such change to the Board for its approval in compliance with Water Code Section 10504.5(a).

23. This permit shall be subject to appropriation by storage upstream from New Melones Reservoir for stockwatering and recreational purposes, provided the individual capacities of reservoirs for such purposes do not exceed 10 acre-feet and the reservoirs are kept free of phreatophytes.

24. This permit shall be subject to the following agreements between the permittee and other parties:

(a) The "Agreement and Stipulation" dated October 24, 1972 and executed by the permittee, Oakdale Irrigation District and South San Joaquin Irrigation District.

(b) The agreement between the permittee and Tuolumne County Water District No. 2 dated November 29, 1972.

(c) The agreement dated July 31, 1972 between permittee and Calaveras County Water District.

Reference to the above three agreements shall not be construed as a finding by the State Water Resources Control Board with respect to the rights of any of the parties involved.

25. This permit does not authorize the use of any water outside the counties of origin which is necessary for the development of the counties.

IT IS FURTHER ORDERED that the hearing on this matter will be reconvened not later than July 1, 1986 for the purpose of considering the status of the items of reserved jurisdiction.

Dated: April 4, 1973

W. W. Adams, Chairman

Ronald B. Robie, Vice Chairman

E. F. Dibble, Member

Roy E. Dodson, Member

Mrs. Carl H. (Jean) Auer, Member