STATE OF CALIFORNIA
STATE WATER RIGHTS BOARD

In the Matter of Applications 11389, 15975, 15976, and 15977 of County of Yolo to Appropriate from Cache Creek and North Fork Cache Creek in Yolo County	Decision D 991 ADOPTED MAR 6 '61

DECISION APPROVING APPLICATIONS IN PART

Cache Creek begins at the southeasterly end of Clear Lake within Section 34, T13N, R7W, MDB&M, and flows in a general easterly direction about four miles to Clear Lake Dam of Clear Lake Water Company. Under natural conditions Cache Creek provided an outlet for runoff discharging into Clear Lake. The dam controls a drainage area of 528 square miles including the 65 square-mile area of Clear Lake. It creates usable storage capacity in Clear Lake for water of Clear Lake Water Company and also maintains lake water levels in compliance with court decrees.

From Clear Lake Dam, Cache Creek meanders in a northeasterly direction some six miles where it is joined by North Fork Cache Creek from the north. Cache Creek then takes an easterly and slightly southerly course a distance of about 13 miles to Rumsey Dam of the Rumsey Water Users' Association near Rumsey. Bear Creek, a major tributary, enters Cache Creek from the north about 4 miles above Rumsey Dam.

From Rumsey Dam the creek continues in a southeasterly direction about 16 miles to the Capay Dam of Clear Lake Water Company. This dam is used to divert the water supply of Clear Lake Water Company, both natural flow and Clear Lake releases to the Company's customers in Yolo County both north and south of Cache Creek. The Company also diverts water at Moore Dam which is about 12 miles downstream from Capay Dam. Water diverted at Moore Dam is in large part return flow from Capay Dam diversions.

From Capay Dam, Cache Creek adopts an easterly course a straight-line distance of about 22 miles to the Yolo By-Pass.

Applicant's Project

Application 11389 was filed on May 3, 1946, and, as amended, is for a permit to appropriate 1,000 cubic feet per second by direct diversion to be diverted from January 1 to December 31 of each year at existing Rumsey, Capay, and Moore Dams on Cache Creek in Yolo County, and 250,000 acre-feet per annum by storage to be collected during the same period in proposed Indian Valley Reservoir on North Fork Cache Creek. The water is to be used for flood control, domestic, and recreational purposes and the irrigation of 88,100 acres within Yolo County.

Applications 15975, 15976, and 15977 were filed on August 2, 1954, and, as amended, are for permits to appropriate, under each application, 1,000 cubic feet per second by direct diversion to be diverted from January 1 to December 31 of each

year and 1,480,000 acre-feet per annum by storage to be collected during the same period. Appropriation to storage, in acre-feet per annum, under each of the three applications is to be accomplished as follows: 400,000 in aforementioned Indian Valley Reservoir and 780,000, 260,000, and 40,000 in proposed Wilson Valley, Blue Ridge, and Esparto Reservoirs, respectively, on Cache Creek in Yolo County. Direct diversion under each of these three applications is to be made at the existing Rumsey, Capay, and Moore Dams and proposed Esparto Dam on Cache Creek in Yolo County.

Application 15975 is for flood control, recreational, and incidental domestic purposes and the irrigation of 500,000 acres, net, within Yolo County. Application 15976 is for municipal, flood control, recreational, and incidental domestic purposes. Application 15977 is for power to be developed at the sites of the proposed Indian Valley, Wilson Valley, Blue Ridge and Esparto Dams.

Indian Valley Dam is to be located 6 miles upstream from the Cache Creek-North Fork Cache Creek confluence. Wilson Valley and Blue Ridge Dams will be located 3 and 12 miles downstream, respectively, from the aforementioned confluence.

Water stored in these reservoirs will be released down Cache Creek for rediversion at Rumsey, Capay, and Moore Dams for irrigation and municipal purposes. Esparto Reservoir, with a capacity of 10,000 acre-feet, is to be created by the construction of Esparto Dam one mile downstream from Capay Dam and will be used to reregulate flows released from the upper reservoirs. Frequent

filling and emptying of Esparto Reservoir under project operations may result in the collection to storage therein of up to 40,000 acre-feet of water per annum. Capay Dam will cease to be used when Esparto Reservoir is constructed.

Irrigation water provided by the project will supplement existing diversions by the Rumsey Water Users Association in Cache Creek Valley downstream from Rumsey and will also supplement present diversions made at Capay and Moore Dams for customers of Clear Lake Water Company. Presently unirrigated lands in these areas and other areas of Yolo County will be supplied water from the project. Coordinated use of surface and ground water supplies is contemplated. Water will also be used for municipal purposes at various municipalities in Yolo County.

Hydrographic Units 60, 65, and 66 as depicted by the State Department of Water Resources in Bulletin No. 58, "Northeastern Counties Investigation", Sheet 17 of 17, Plate IX, are generally coextensive with the areas of Yolo County that are to receive irrigation water from the project. Present water utilization in these units combined is estimated to be 354,000 acre-feet per annum. Estimated ultimate water requirements for the same area are 604,900 acre-feet per annum. Thus a supplemental supply of about 250,000 acre-feet per annum will be required in the project area to meet ultimate demands. It follows that a need for water exists or will arise and that the proposed use is beneficial.

Water Supply

The flows of Cache Creek and North Fork Cache Creek have been recorded by gaging stations at the following locations: "Cache Creek near Lower Lake", located 500 feet downstream from Clear Lake Dam, measures the runoff from a drainage area of 528 square miles; "North Fork Cache Creek near Lower Lake", located five miles upstream from the confluence of North Fork Cache Creek and Cache Creek, measures the runoff from 198 square miles of drainage area; "Bear Creek near Rumsey", located about two miles above the confluence of Bear and Cache Creeks; "Cache Creek above Rumsey", located two miles above Rumsey Dam; "Cache Creek near Capay", located 1.8 miles upstream from Capay Dam, measures the runoff from a drainage area of 1052 square miles; and "Cache Creek at Yolo", located six miles downstream from Moore Dam, measures the runoff from 1137 square miles of drainage area.

The monthly flows in acre-feet at the gaging station farthest downstream, "Cache Creek at Yolo", for the period from October 1928 through September 1959 are set forth in Table I herein. An examination of the records of the upper gaging stations and the watershed area tributary to each discloses that well over half of the flow "at Yolo" originates on Cache Creek and North Fork Cache Creek above the confluence of the two. Table I shows that nearly all of the flow "at Yolo" occurs during the period of heavy winter runoff and that the average annual flow past that station amounted to 335,000 acre-feet for the 31-year period of record.

TABLE I

Stream Flow of Cache Creek at Yolo
October, 1928 through September, 1959
(acre-feet)

Season	October	November	December	January	February	March	April	May	June	July	August	September	Total
1928-29	0	0	1,140	1,570	13,500	2,520	20	0	0	0	0	0	18,700
1929-30	0	0	27,700	23,200	22,400	40,700	6,070	0	0	0	0	0	120,000
31	0	0	0	3,600	125	0	0	0	0	0	0	0	3,720
32	0	0	42,600	21,800	9,950	1,410	0	0	0	0	0	0	75,800
33	0	0	0	7,010	3,970	7,500	815	0	0	0	0	0	19,300
34	0	0	14,100	12,100	14,200	4,880	94	0	0	0	0	0	45,400
1934-35	0	2,410	379	57,060	9,610	63,430	82,420	6,920	288	0	0	0	222,500
36	0	0	0	29,110	184,300	94,040	27,870	270	136	0	0	0	335,700
37	0	0	0	0	64,620	59,820	24,340	405	0	0	0	0	149,200
38	0	8,980	132,700	24,350	450,000	381,000	159,100	15,490	20	0	0	0	1,172,000
39	0	28	532	1,460	3,490	2,490	0	0	0	0	0	0	8,000
1939-40	0	0	0	45,550	165,600	210,600	124,100	12,210	379	0	0	0	558,400
41	0	0	116,100	333,500	346,400	303,500	300,300	29,160	469	0	0	0	1,429,000
42	0	0	72,750	184,600	371,300	78,960	132,300	52,620	1,130	0	0	0	893,700
43	0	658	16,500	150,500	104,800	34,500	20,910	13,620	19	0	0	0	341,500
44	0	0	0	3,170	22,870	41,710	3,040	51	0	0	0	0	70,840
1944-45	0	803	6,730	4,260	49,580	17,230	7,360	0	0	0	0	0	85,960
46	0	4,340	93,070	78,100	10,030	7,930	3,850	0	0	0	0	0	197,300
47	0	0	2,420	0	10,280	17,520	3,580	0	0	0	0	0	33,800
48	0	0	0	1,380	0	4,460	26,910	3,990	0	0	0	0	36,740
49	0	0	0	0	8,890	76,500	5,100	0	0	0	0	0	90,490
1949-50	0	0	0	12,410	37,600	9,840	5,510	0	0	0	0	0	65,360
51	85	13,290	60,900	101,300	111,800	51,420	3,400	0	0	0	0	0	342,200
52	0	0	64,240	267,600	228,500	133,700	34,890	270	0	0	0	0	729,200
53	0	0	70,590	258,300	49,670	27,900	15,340	7,570	0	0	0	0	429,400
54	0	0	0	44,620	38,480	96,550	72,790	1,020	0	0	0	0	253,500
1954-55	0	801	11,160	5,960	4,450	3,190	0	0	0	0	0	0	25,560
56	0	0	180,900	347,300	328,300	174,500	9,890	10,420	0	0	0	0	1,051,000
57	0	0	0	2,600	30,830	23,290	6,090	19,180	480	0	0	0	82,470
58	2,750	0	13,980	76,710	514,400	355,500	378,000	6,670	0	0	0	0	1,348,000
59	0	0	0	15,980	113,700	9,790	1,430	0	0	0	0	0	139,600

Nearly all of the winter runoff discharging into Yolo By-Pass and continuing to the Sacramento-San Joaquin Delta ultimately wastes into Suisun Bay. To the extent that water wastes into Suisun Bay it is unappropriated. A substantial portion of the average annual flow of 335,000 acre-feet "at Yolo" falls into this category. There was no flow past the "at Yolo" station during the months of July, August and September in the 31-year period covered in Table I. It follows that there is no unappropriated water during those months and that the applications should be denied insofar as they relate to appropriations during that portion of the year.

Protests

Lake County Flood Control and Water Conservation District, California Department of Fish and Game, Rumsey Water Users' Association, Colusa Land Company, and certain individuals filed protests to the applications. In general, the protestants are favorable to the project and to the granting of permits to the applicant, provided suitable terms, as hereinafter discussed, are included therein to protect their rights.

Hearing

Applications 11389, 15975, 15976, and 15977 were completed and advertised in accordance with the provisions of the Water Code and applicable rules and regulations, and a public

before Kent Silverthorne, Chairman of the State Water Rights Board (hereinafter referred to as "the Board"). The applicant, protestants, and other interested parties were duly notified of the hearing.

Disposition of Protests

Yolo County and Yolo County Flood Control District entered into an agreement on May 17, 1960, with Lake County and Lake County Flood Control and Water Conservation District wherein the latter parties agreed to issuance of permits pursuant to Applications 15975, 15976, and 15977 subject to depletions of stream flow by future appropriations of water in Lake County as set forth in the agreement. Permits issued pursuant to these applications will be so conditioned. Application 11389 was not protested by the Lake County parties.

The protest of California Department of Fish and Game was withdrawn under the terms of an agreement of May 16, 1960, entered into between the applicant and that agency, the terms of which will be included in the permits issued.

The protest of the Rumsey Water Users' Association is based on an apprehension that the construction of the applicant's project may interfere with its right to divert from Cache Creek through the Rumsey Ditch which it asserts was acquired prior to to 1914. The applicant, in order to protect any such right and the prior vested rights asserted by other protestants, has proposed that terms and conditions be included in the permits similar to those contained in the permits issued to the United

States Bureau of Reclamation to appropriate from Putah Creek pursuant to the Board's Decision D 869. The terms and conditions in those permits provide that the Board retain jurisdiction for the purpose of determining proper releases of water for downstream use and the recharge of ground water; that permittee collect and supply basic hydrologic data upon which to make a determination of proper releases; and that prior to the end of a 15-year trial period, the Board enter further order concerning these releases. Permits issued to the applicants will contain terms of this nature.

Objections raised by protestants which will not be satisfied by the permit conditions above mentioned relate to matters not within the jurisdiction of the Board.

Conclusions

The evidence indicates, and the Board finds, that unappropriated water exists in Cache Creek and North Fork Cache Creek with sufficient frequency during the months of January through June and October through December to justify approval of Applications 11389, 15975, 15976, and 15977, insofar as they relate to appropriations during those months; that such water may be taken and used as proposed, subject to the terms and conditions set forth in the following order, without substantial interference with the exercise of prior vested rights; that the intended uses under said applications are beneficial; and that the appropriations proposed by said applications, subject to

the aforesaid terms and conditions, will best develop, conserve, and utilize in the public interest the waters sought to be appropriated.

The evidence indicates, and the Board further finds, that unappropriated water rarely, if ever, exists in Cache Creek and North Fork Cache Creek during the months of July, August and September and that Applications 11389, 15975, 15976, and 15977 should be denied insofar as they relate to appropriations during those months.

ORDER

Applications 11389, 15975, 15976, and 15977 to appropriate unappropriated water having been filed with the former Division of Water Resources, jurisdiction of the administration of water rights including said applications having been subsequently transferred to the State Water Rights Board, a public hearing having been held by the Board, and the Board having considered all of the evidence received at the hearing and now being fully informed in the premises;

IT IS HEREBY ORDERED that Applications 11389, 15975, 15976, and 15977 be, and the same are, approved in part, and that permits be issued to the applicant subject to vested rights and to the following terms and conditions:

1. The amount of water to be appropriated under permit issued pursuant to Application 11389 for irrigation, flood control, domestic, and recreational purposes shall be limited to the amount which can be beneficially used and shall not

exceed 1,000 cubic feet per second by direct diversion to be diverted from about October 1 of each year to about June 30 of the succeeding year and 250,000 acre-feet per annum by storage to be collected between about October 1 of each year and about June 30 of the succeeding year.

2. The amount of water to be appropriated under permit issued pursuant to Application 15975 for irrigation, flood control, recreational, and incidental domestic purposes shall be limited to the amount which can be beneficially used and shall not exceed 1,000 cubic feet per second by direct diversion to be diverted from about October 1 of each year to about June 30 of the succeeding year and 1,480,000 acre-feet per annum by storage to be collected between about October 1 of each year and about June 30 of the succeeding year.

3. The amount of water to be appropriated under permit issued pursuant to Application 15976 for municipal, flood control, recreational, and incidental domestic purposes shall be limited to the amount which can be beneficially used and shall not exceed 1,000 cubic feet per second by direct diversion to be diverted from about October 1 of each year to about June 30 of the succeeding year and 1,480,000 acre-feet per annum to be collected between about October 1 of each year and about June 30 of the succeeding year.

4. The amount of water to be appropriated under permit issued pursuant to Application 15977 for power purposes shall be limited to the amount which can be beneficially used and shall not exceed 1,000 cubic feet per second by direct

diversion to be diverted from about October 1 to about June 30 of the succeeding year and 1,480,000 acre-feet per annum by storage to be collected between about October 1 of each year and about June 30 of the succeeding year.

5. The total amount of water to be appropriated under permits issued pursuant to Applications 11389, 15975, 15976, and 15977 shall not exceed 1,000 cubic feet per second by direct diversion and 1,480,000 acre-feet per annum by storage.

6. The maximum amounts herein stated may be reduced in the licenses if investigation warrants.

7. Construction work shall commence on or before July 1, 1962, and shall thereafter be prosecuted with reasonable diligence, and if not so commenced and prosecuted, the permits may be revoked.

8. Construction work shall be completed on or before January 1, 1970.

9. Complete application of water to the proposed beneficial uses shall be made on or before December 1, 1975.

10. Progress reports shall be filed promptly by permittee on forms which will be provided annually by the State Water Rights Board.

11. All rights and privileges under these permits including method of diversion, method of use, and quantity of water diverted are subject to the continuing authority of the State Water Rights 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.

12. Permittee shall release water into North Fork Cache Creek and Cache Creek channel from its storage reservoirs and past its downstream diversion dams in such amounts and at such times and rates as will be sufficient, together with inflow from downstream tributary sources, to supply downstream diversions of the surface flow under vested prior rights to the extent water would have been available for such diversions from unregulated flow under conditions existing prior to the construction of the project under these permits, and sufficient to maintain percolation of water from the stream channel as such percolation would occur from unregulated flow under such prior conditions in order that operation of the project shall not reduce natural recharge of ground water from Cache Creek as would occur under such prior conditions.

13. Until further order of the Board, permittee shall make or cause to be made or shall continue or cause to be continued suitable field investigations, measurements, and studies and shall install or continue or cause to be continued necessary measuring facilities to determine the amount, timing, and rate of releases of water into the natural channel of North Fork Cache Creek and Cache Creek that are required of permittee in order to fully comply with the provisions of the preceding paragraph. Such investigations, measurements, and studies shall include but shall not be limited to the following:

(a) Measurement of daily water surface evaporation and precipitation at or near the upper end of Indian Valley Reservoir site and at or near Blue Ridge Dam site.

(b) Computation of daily inflow to Indian Valley, Wilson Valley, Blue Ridge, and Esparto Reservoirs by proper computations of changes in storage.

(c) Installation, maintenance, and operation of the necessary water measuring devices to obtain records of daily discharge through and/or over Indian Valley, Blue Ridge, Rumsey, Capay, Esparto, and Moore Dams, as well as continue, or have continued, stream gaging stations to obtain continuous record and report on daily basis the discharge of:

Cache Creek near Lower Lake

North Fork Cache Creek near Lower Lake

Bear Creek near Rumsey

Cache Creek above Rumsey

Cache Creek near Capay

Cache Creek at Yolo

Provided that the gaging station on North Fork Cache Creek near Lower Lake may be discontinued when Wilson Valley Reservoir becomes operative; further provided that the gaging station on Bear Creek near Rumsey shall be moved upstream so far as is necessary to prevent its inundation when Blue Ridge Reservoir becomes operative; further provided that the gaging station on Cache Creek above Rumsey may be discontinued when Blue Ridge Reservoir becomes operative;

and further provided that the gaging station on Cache Creek near Capay may be discontinued when Esparto Reservoir becomes operative.

(d) Preparation of suitable ground water contour maps for the spring of each year and the fall of each year to cover the following described portions of Hydrographic Units 60 and 66 as those units are depicted on Sheet 17 of 17, Plate 4 of Bulletin No. 58 of the State Department of Water Resources dated December 1957, "Northeastern Counties Investigation".

> All of Hydrographic Unit 60 situated southerly of the south line of T11N, MDB&M.
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> All of Hydrographic Unit 66 excepting that portion situated easterly of the east line of R2E, MDB&M, and also excepting the portion situated northerly of the north line of T10N, MDB&M.

(e) Sufficient spot measurements of the diversions through the Rumsey Ditch and of return flow through the Rumsey Ditch Spillway to enable determination of monthly records of use by the Rumsey Water Users' Association.

(f) Installation and continued maintenance of measuring stations and obtain daily records of diversion at and from Capay and Moore Dams and from Esparto Reservoir.

(g) When Indian Valley, Wilson Valley, and Blue Ridge Reservoirs, or any of them, becomes

operative, install continuous water stage recorders at one well on the north side of Cache Creek and at two wells on the south side of Cache Creek within one-half mile of Cache Creek at sites to be selected by the Board and maintain records thereof.

(h) Make periodic surveys of Cache Creek channel in order to determine consumptive use by native vegetation.

(i) Make biennial crop surveys of those portions of Hydrographic Units 60 and 66 as are to be covered by ground water maps as described under subparagraph (d) of this paragraph, to enable determination of changes in crop pattern.

(j) Make semi-annual water quality analyses of surface and ground water at locations approved by Board.

(k) Estimate augmentation each water year of underground supply below Capay Dam from Cache Creek, together with supporting data.

Permittee shall make its records of such investigations and measurements available for inspection by the Board and shall allow authorized representatives of the Board reasonable access to its project works and properties for the purpose of gathering information and data.

14. The Board may, either upon the request of any party or on its own motion, and shall, prior to the expiration

of a 15-year trial period after commencement of storage of water under these permits, hear, review, and make such further orders as may be required concerning proper releases of water for downstream use and recharge of ground water, and concerning the investigations, measurements, and studies to be conducted by permittee, until a final determination and order can be made concerning the amounts, timing, and rates of releases of water from the storage reservoirs and past the diversion dams in satisfaction of downstream rights, and the Board retains continuing jurisdiction for such purposes during said 15-year trial period.

15. (a) Permittee shall release or bypass water over or through Wilson Valley Dam for the protection, propagation, and preservation of fish and wild life so as to provide at all times a minimum of 10 cubic feet per second at all points between Wilson Valley Dam and Capay Dam; said quantity of water shall be maintained irrespective of existing diversions upstream from Capay Dam.

(b) If the proposed Indian Valley Dam is constructed and the proposed Wilson Valley Dam is not constructed, permittee shall at all times pass over or through Indian Valley Dam for the protection, propagation, and preservation of fish and wild life 10 cubic feet per second or the natural flow at the Indian Valley Dam site, whichever is the lesser.

16. Permits issued pursuant to Applications 15975, 15976, and 15977 are subject to depletions of stream flow by future appropriations of water for use in Lake County as set forth in Article 2 of "Agreement for Settlement of Water Rights

Dispute" between County of Lake and Lake County Flood Control and Water Conservation District and the County of Yolo and Yolo County Flood Control and Water Conservation District, dated May 17, 1960, filed of record with the State Water Rights Board as applicant's Exhibit No. 1 at the hearing of said applications.

17. In accordance with Water Code Section 1393, permittee shall clear the site of the proposed reservoirs of all structures, trees and vegetation which would interfere with the use of the reservoirs for water storage and recreational purposes.

18. Separate applications for the approval of plans and specifications for construction of the dams described in these approved water right applications shall be filed with and approved by the Department of Water Resources prior to commencement of construction of said dams.

Insofar as Applications 11389, 15975, 15976, 15977 propose appropriation of water by storage and by direct diversion from Cache Creek and North Fork Cache Creek during the months of July, August, and September, they are denied.

Adopted as the decision and order of the State Water Rights Board at a meeting duly called and held at Sacramento, California, on the day of , 1961.

Kent Silverthorne, Chairman

W. P. Rowe, Member

Ralph J. McGill, Member