In the Matter of Application 22980 of Western Lake Properties, Inc., to Appropriate from Big Creek in Tuolumne County

DECISION APPROVING APPLICATION

Western Lake Properties, Inc., having filed Application 22980 for a permit to appropriate unappropriated water; protests having been received; a public hearing having been held before the State Water Resources Control Board on July 30, 1968; applicant and protestants having appeared and presented evidence; the evidence received at the hearing having been duly considered, the Board finds as follows:

1. Application 22980 is for a permit to appropriate 9,000 acre-feet per annum by storage in two reservoirs from October 1 of each year to May 31 of the succeeding year for irrigation and recreational purposes from Big Creek, tributary to Tuolumne River in Tuolumne County. The points of diversion are to be located in Sections 14, 15, and 23, in T1S, R16E, MDB&M.
2. The applicant plans to develop a 2,400-acre subdivision with approximately 3,000 residential lots. A reservoir with a capacity of 8,100 acre-feet will be used for recreation and to supply water for irrigating a golf course and park area totaling 150 acres; a smaller reservoir with a capacity of 900 acre-feet, immediately upstream, will store water to maintain the level of the larger reservoir. Nine thousand acre-feet will be required to initially fill the reservoirs, and the annual requirement thereafter will be the quantity necessary to replace water withdrawn for irrigation and lost by evaporation and seepage.

3. The Tuolumne River has been developed over a period of many years by the City and County of San Francisco, the Turlock, Modesto and Waterford irrigation districts, and others. San Francisco's Hetch-Hetchy Project stores and diverts water on the upper reaches of the river. Turlock and Modesto Irrigation Districts (hereinafter referred to as "the districts") store water by means of Don Pedro Dam, many miles downstream, and divert water by means of La Grange Dam, a few miles below Don Pedro, for their own use and to supply Waterford Irrigation District. The districts are constructing New Don Pedro Dam near the site of the present dam, which will create a reservoir with a capacity
in excess of 2,000,000 acre-feet. Big Creek is a minor tributary which joins the Tuolumne River approximately 28 miles above Don Pedro Dam and below the diversions of San Francisco.

4. The districts protest the application on the grounds that the applicant's project will reduce the supply of water to the New Don Pedro Reservoir and that the districts can use and are entitled to all the water that will flow into the New Don Pedro Reservoir except in rare years of extremely high runoff when water will spill or be released to provide flood control storage space without being used for either irrigation or the generation of power.

Applicant contends that its project when fully developed will not deplete the flow of Big Creek. Applicant also contends that it should be granted a permit upon condition that it reimburse the districts for any loss of power revenue that the districts might experience. This latter contention is acceptable only if the districts agree as the Board has no power to impose additional burdens upon the owner of a water right permit by requiring him to accept money from a junior appropriator in lieu of the water to which he is entitled. This is true even though the junior appropriator would put the water to a
higher use. The power of eminent domain can be enforced only by a court and then only in the manner and for the purposes provided by law.

In some instances the Board and its predecessors have imposed conditions in the public interest, reserving water for future development upstream when acting on an application to appropriate substantially all the runoff of a watershed, particularly when the application is for power use. However, no such conditions were placed in the permits issued to the districts for the New Don Pedro Project.

5. In a proper case, the Board can approve an application to divert from a source with no firm yield remaining above diversions authorized in existing permits, when there is a reasonable expectation that variations in either the supply or the needs of prior rights will leave unappropriated water in the source in some months or some years, which water the applicant will be able to use whenever it occurs. However, the subsequent permit is always subject to prior vested rights which cannot be infringed upon except with the consent of the owners.

6. The net effect of the construction and operation of applicant's subdivision project on the flow of Big Creek can be determined by the method used in
applicant's Exhibit 12, which shows that the project's annual requirement will be offset or supplied, in whole or in part, by reduced evapotranspiration resulting from clearing native vegetation from the reservoir areas, streets, homesites and driveways, and by return flow from water applied to irrigation and urban use in the subdivision. Credit for return flow from urban use, objected to by the districts, is proper as it is the result of the applicant's plan to purchase water for domestic use from Groveland Community Services District which in turn would purchase it from San Francisco. Although the water originates in the Tuolumne River, San Francisco diverts it under rights which are prior to the rights of the districts to store water for the New Don Pedro Project.

7. Before the districts commence storing water in New Don Pedro Reservoir, which is scheduled for 1971, there will be water surplus to the needs of protestants sufficient to permit the applicant to fill its reservoirs initially, unless unusually dry conditions prevail (applicant's Exh. 8). When the reservoirs have been filled, applicant's annual water use will be slightly in excess of 1,200 acre-feet, including about 700 acre-feet lost by evaporation and seepage and 525 acre-feet used for irrigation.
After operation of the New Don Pedro Dam and Reservoir commences, water surplus to the needs under all prior vested rights will be available in some years. The study made by the Bechtel Corporation, relied upon by both the applicant and protestants, indicates that there will be surplus water in 6 years out of 42 when San Francisco's diversions increase to 400,000,000 gallons daily, which is the estimated quantity required at the year 2015 level of development (Turlock and Modesto irrigation districts' Exhs. A-1 and A-2). The frequency will be higher until San Francisco's diversions reach that quantity. Although contending that operation of its project will augment rather than deplete the runoff of Big Creek (applicant's Exh. 12, attached hereto as Exhibit A), applicant offers to release stored or imported water from its reservoirs in any year its operations result in a net depletion which infringes on protestants' rights. There will be a period of several years before applicant's project reaches the stage of development where there will be no depletion, according to applicant's estimate and assumptions. There may be years when the operations of applicant's project are at variance with assumptions used in Exhibit 12 and a net depletion will occur, including years when it may be necessary to refill applicant's reservoirs when emptied for maintenance or repair. Despite
the uncertainty of how frequently the applicant's operations will deplete the flow of Big Creek and how frequently there will be any flow surplus to the needs of all prior downstream rights, the applicant is entitled to appropriate unappropriated water when it is available. It will be able to put such water to beneficial use by supplementing its water supply, when necessary, by water purchased from an alternate source.

8. Protestant Crook testified that Big Creek replenishes groundwater along the sides of the creek bed as it passes through his property and he wants this supply maintained for subirrigation of his riparian pasture land. The area of concern is about 1,000 feet long and 25 to 30 feet wide, or about three-fourths of an acre in extent. Water in the creek bed also forms pools in the summer when the creek ceases to flow and these are used to water as much as 400 head of cattle at times.

Protestant Crook also wants to be assured that his riparian rights are recognized. He fears that in the future some less responsible agency will assume control of applicant's development which will fail to bypass water needed for use on his ranch.

He asked for a release of one acre-foot per month during each and every month of the year when natural flow is available (RT 232-239).
On a basis of 1 cubic foot per second per 80 acres, Mr. Crook would require a steady flow of about 4-1/2 gallons per minute to irrigate three-fourths of an acre of pasture land. Commercial livestock usually consume about 15 gallons per day per head or 6,000 gallons per day for 400 head. On a steady flow basis, this would be equivalent to slightly over 4 gallons per minute. On the basis of his testimony, then, Mr. Crook would require a steady flow of about 9 gallons per minute. He has asked for 1 acre-foot per month, which is equivalent to slightly over 7-1/2 gallons per minute steady flow.

Apparently Mr. Crook’s estimate of his own needs is quite reasonable. The natural surface flow of Big Creek ceases during the summer months, but applicant should be required to maintain a flow of 7-1/2 gallons per minute or the natural flow, if less, at Mr. Crook’s ranch, which is located two miles downstream.

Applicant’s permit will be subject to prior vested rights and Mr. Crook could request bypass or release of a larger share of the natural flow of Big Creek, if needed. However, a special permit term will provide as follows:

Permittee shall maintain a flow of 8 gallons per minute or the natural flow of Big Creek, if less, in the channel of Big Creek at the upstream property line of the Crook Ranch.
9. San Francisco, which also protested the application, could suffer injury only if it were required to release water to the districts to make up for depletion of flow by the applicant. Since the permit will be conditioned so as to prevent any injury to the districts, no special permit term need be included to protect San Francisco.

10. Protestant Waterford Irrigation District has direct diversion rights which are prior to the rights of Turlock and Modesto irrigation districts to store water in New Don Pedro Reservoir. Evidence was introduced that there has always been more water flowing downstream at La Grange Dam, below Waterford Irrigation District's diversion, than was flowing in Big Creek, so any storage in applicant's Big Creek reservoirs under present conditions would not deprive Waterford Irrigation District of any water required to satisfy its needs. Permit conditions protecting the rights of Turlock and Modesto irrigation districts for the New Don Pedro Project will necessarily protect all prior rights, including those of Waterford Irrigation District, in the future.

11. Unappropriated water is available to supply the applicant, and, subject to suitable conditions, such water may be diverted and used in the manner proposed without causing substantial injury to any lawful user of water.
12. The intended uses are beneficial.

From the foregoing findings, the Board concludes that Application 22980 should be approved and that a permit should be issued to the applicant subject to the limitations and conditions set forth in the order following.

ORDER

IT IS HEREBY ORDERED that Application 22980 be, and it is, approved, and that a permit be issued to the applicant subject to vested rights and to the following limitations and conditions:

1. The water appropriated shall be limited to the quantity which can be beneficially used and shall not exceed 9,000 acre-feet per annum by storage to be collected from about October 1 of each year to about May 31 of each succeeding year.

2. After the initial filling of the storage reservoirs, permittee's right under this permit extends only to the quantity of water necessary to keep the reservoirs full by replacing water beneficially used for irrigating its golf course and park area and water lost by evaporation and seepage, and to refill the reservoirs if they are emptied for necessary maintenance or repair.
3. Permittee shall submit annually to the State Water Resources Control Board, with copies to Turlock and Modesto irrigation districts, on or before December 1, a report to reflect actual rainfall, runoff, water consumption, and water salvage conditions during the water year ending September 30. Each report shall list the amount of water purchased, the amount of flow into permittee's upper reservoir and out of its lower reservoir, and shall adhere to the assumptions and form contained in applicant's Exhibit 12 submitted at the hearing on Application 22980 and attached hereto as Exhibit A, or such other assumption as may later be determined to be more accurate.

4. The data to be reported on annually as required by the next preceding paragraph will constitute the basis of determining invasion of the rights of Turlock and Modesto irrigation districts. If permittee's operations result in a net loss to the flow of Big Creek into Tuolumne River for the water year and all of the flow of the Tuolumne River available to the districts during the water year has been diverted or stored by the districts pursuant to valid rights or released to comply with minimum fish-flow requirements, an invasion of the districts' rights will be deemed to have occurred. No invasion will be deemed to have occurred if at any time during the water year covered by the report water spilled or was released from New Don Pedro Reservoir to
provide flood control storage space and which was not used to generate power or was not diverted by the districts for beneficial use pursuant to valid rights or released from La Grange Dam to provide minimum required fish flows. In any year when invasion of the rights of said districts is deemed to have occurred, permittee shall, unless the districts agree otherwise, make up the net loss by releasing water from storage or supplying water by purchase from Groveland Community Services District.

5. Permittee shall install and maintain an outlet pipe in each of its dams as near as practicable to the bottom of the natural stream channel, of adequate capacity to comply with the preceding paragraph and with paragraph No. 7.

6. Permittee shall install and maintain suitable measuring devices (a) upstream from the high water elevation of its upper reservoir and (b) immediately below its lower storage dam or provide other suitable means in order that accurate measurement can be made of the quantity of water flowing into and out of its reservoirs.

7. Permittee shall maintain a flow of 8 gallons per minute or the natural flow of Big Creek, if less, in the channel of Big Creek at the upstream property line of the Crook Ranch.
8. The maximum quantity herein stated may be reduced in the license if investigation warrants.

9. Actual construction work shall begin on or before June 1, 1969, and shall thereafter be prosecuted with reasonable diligence, and if not so commenced and prosecuted this permit may be revoked.

10. Said construction work shall be completed on or before December 1, 1971.

11. Complete application of the water to the proposed use shall be made on or before December 1, 1972.

12. Progress reports shall be filed promptly by permittee on forms which will be provided annually 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 and to carry out legally established water quality objectives.

14. 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.
15. In accordance with the requirements of Water Code Section 1393, permittee shall clear the site of the proposed reservoirs of all structures, trees, and other vegetation which would interfere with the use of the reservoirs for water storage and recreational purposes.

16. Construction of the dams shall not be commenced until the Department of Water Resources has approved plans and specifications.

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

Dated: DEC 5 1968

GEORGE B. MAUL
George B. Maul, Chairman

W. A. ALEXANDER
W. A. Alexander, Vice Chairman

RALPH J. McGILL
Ralph J. McGill, Member

NORMAN B. HUME
Norman B. Hume, Member

E. F. DIBBLE
E. F. Dibble, Member
EXHIBIT A

Net Water Gain from Development

A. Facts and Assumptions

1. Big Creek watershed
2. Area of the development 25 Sq. miles or 16,000 acres
3. Large reservoir area to be developed 2,400 acres
4. Small reservoir area to be developed 200 acres
5. Lineal feet of streets 30 acres
6. Width of surface and cleared area of streets 150,000 ft.
7. Area of each home and driveway 32 ft.
8. Width of surface and cleared area of streets 1,200 Sq. feet each
9. Golf Course and Park area 32 ft.
10. Estimated urban water use per lot per day 150 acres
11. Groveland Ranger Station average rainfall for period 1940 - 1964 400 gallons
12. Average annual Big Creek run off for period 1921 - 1965 36.78 inches

B. Annual Water Loss

1. Gross evaporation and percolation losses on reservoir surfaces 690 AF
2. Gross use for irrigation of golf course and park areas 525 AF

Total Water Loss - 1,215 AF

C. Annual Water Gain

1. Saving of evapotranspiration on area flooded by reservoirs 575 AF
2. Saving of evapotranspiration on streets - 275 AF
3. Saving of evapotranspiration on homes and driveways - 165 AF
4. Return flow from urban use 105 AF
5. Return flow from irrigation of golf course and park areas - 531 AF

Total Water Gain - 1,651 AF

D. Net Water Gain

1,651 AF - 1,215 AF

436 AF

Ex. 12