STATE OF CALIFORNIA
STATE WATER RIGHTS BOARD

In the Matter of Application 11036
of Santa Ana Valley Irrigation Company
and Application 11037 of Orange County
Water District to Appropriate from
Santa Ana River and Chino Creek in
Orange, Riverside, and San Bernardino
Counties

DECISION APPROVING APPLICATIONS

Santa Ana Valley Irrigation Company and Orange
County Water District having filed Applications 11036
and 11037, respectively, for permits to appropriate un-
appropriated water; protests having been received; hearings
having been held in Santa Ana, California, on June 12 and 13,
1962, before Chairman Kent Silverthorne and on October 16,
1963, before Board Member W. A. Alexander; the Board, having
considered all the evidence, finds as follows:

1. Application 11036 of Santa Ana Valley Irrigation
Company is for a permit to appropriate 10 cubic feet per
second (cfs) by direct diversion between March 1 and
December 1 of each year and 2,000 acre-feet per annum (afa)
by underground storage at a maximum rate of diversion to
storage of 10 cfs to be collected between December 1 and
March 1 of each season from Santa Ana River in Orange County. The point of diversion is described as the intake of the Santa Ana Valley Irrigation Company Canal within the NE\(\frac{1}{4}\) of NE\(\frac{1}{4}\) of Section 32, T3S, R8W, SBB&M. The intake is several miles downstream from Prado Dam. A portion of the water will be conveyed to spreading grounds where it will percolate underground and be later pumped from wells. The water will be used for irrigation and domestic purposes on 16,500 acres within the Company's service area of 20,000 acres.

2. Application 11037 of Orange County Water District is for a permit to appropriate 75 cfs by direct diversion between March 1 and November 30 of each year, and 4,000 afu by underground storage at a maximum rate of diversion to storage of 75 cfs to be collected between December 1 and February 28 of each season. The source is named as the underflow of Santa Ana River and Chino Creek within Riverside and San Bernardino Counties. Diversions will be made by means of infiltration galleries in the river bed above Prado Dam, terminating at the intake of the existing conduit under the dam. After passing through the conduit, the water will be allowed to flow down the river channel where it will percolate to the underground or be rediverted at the intakes of Anaheim Union Water Company or Santa Ana Valley Irrigation Company. The water will be used for domestic, irrigation, municipal, industrial, and recreational
purposes within Orange County Water District. The gross acreage within the District is 180,000 acres with a net of approximately 90,000 irrigable acres.

3. The applications were protested by San Bernardino Valley Municipal Water District, Riverside County Flood Control and Water Conservation District, San Bernardino County Flood Control District, and Grace Lee Smith. All of the protestant districts allege that no unappropriated water exists in the Santa Ana River watershed and that any diversions made under the subject applications would have an adverse effect upon the water supply in the ground water basins upstream from Prado Dam.

4. Santa Ana River originates in about 173 square miles of high mountains at the easterly end of the San Bernardino range, flows southwesterly across the upper Santa Ana Valley 40 miles to Prado Dam, thence in about the same direction 12 miles through Santa Ana Narrows, thence southerly 19 miles across the coastal plain to the ocean just west of Newport Bay. The total drainage area above Prado Dam is 1,462 square miles. For approximately 10 miles after leaving the mountains the stream flows across absorptive alluvium where percolation is augmented by spreading. Between the cities of Colton and Riverside, the stream is generally dry in the summer, partly because of diversions and partly due to percolation. Between Riverside and the headworks of the Santa Ana Valley Irrigation Company Canal, there is a
continuous surface flow of water. Approximately half way between the Narrows and the ocean, the stream enters a pressure area of the coastal plain. Above this point the alluvium is absorptive and percolation occurs both naturally and from spreading. In the pressure area percolation is negligible. Prado Reservoir at the upper end of the Narrows, operated for flood control, materially reduces peak discharges across the coastal plain but its effect on total waste to the ocean is relatively small (Staff Exh. 4, p. 3).

5. Chino Creek, named as a source in Application 11037, heads near Pomona, flows in a southerly direction, and joins Santa Ana River just above Prado Dam. It receives the local runoff of the Chino Basin and is the channel through which runoff from a portion of the San Gabriel Mountains may reach the river.

6. Considering the Santa Ana River watershed as a whole, the record indicates that no unappropriated water is now available. (S.B.M.W.D. Exh. 1. Also, see Orange County Water District v. Riverside et al., 188 Cal. App. 2d 566 (1961).) However, the applicants seek to appropriate water which is to be salvaged or conserved by eliminating an existing non-beneficial consumptive use (consumptive waste) created by phreatophytes along a 15-mile reach of the Santa Ana River from Prado Dam upstream to Jurupa Narrows. Most of the area where water is to be salvaged (shown in color on applicants' Exh. 1) belongs to Santa Ana River Development Company. This
company in turn is owned 50 per cent by Santa Ana Valley Irrigation Company. A contract authorizes the latter company to conduct the proposed drainage and salvage operations. (See Par. 20 of Application 11036.) By removing heavy vegetation and preventing its regrowth, the applicants estimate that from 50 to 60 per cent of the water now being consumptively wasted on some 4,400 acres within the area could be salvaged (RT 74). A little over 6,000 acre-feet per year of water is consumptively wasted by native vegetation of various kinds within the areas wherein a salvage operation is possible (RT 77). Identical salvage works and operation are proposed under Applications 11036 and 11037.

7. Stipulations have been entered into which dispose of most protests and issues. Most important of these stipulations are the following:

a. Any permits to be issued shall be subject to and limited by the Prado Salvage Agreement dated December 1950.

b. The recovery works and salvage systems to be operated by applicants shall not include pumping of water from below the surface of the ground.

c. The quantity of water salvaged shall be determined by the "land use method," showing estimated consumption under previous and under current land use.

8. The only protests remaining for disposition are those of the San Bernardino Valley Municipal Water District and Grace Lee Smith.
9. The San Bernardino District's downstream boundary is about eight miles upstream from the nearest area along the Santa Ana River where water is to be salvaged by applicants. There is no evidence that this district or its landowners would be prejudiced by approval of these applications.

10. The property of Grace Lee Smith as trustee is located downstream from Prado Dam. Although a written stipulation between the applicants and protestant Smith was contemplated after the close of the hearing (RT 62), nothing has been filed of record in this connection. Streamflow should be increased, not decreased, below Prado Dam as a result of the proposed salvage operations. This protestant will not be prejudiced by approval of these applications. The permits, as usual, will be made expressly subject to vested rights.

11. Water salvage operations, comparable in many respects to those planned by the applicants, have been and continue to be conducted above Prado Dam. License 6378 was issued on July 7, 1961, to Anaheim Union Water Company on its Application 8899, confirming a right to divert not in excess of 6.1 cfs from about June 1 to about December 1 of each year for irrigation and domestic uses. On November 20, 1961, License 6403 was issued to Santa Ana Valley Irrigation Company on its Application 8900, confirming a right to divert at the same rate, during the same season, and for the same purposes as specified in License 6378. The salvage area for both of
these licenses is located in the Prado Flood Control Basin, the high-water line of which extends from Prado Dam up the Santa Ana River for about five miles. The salvaged water is pumped from shallow wells located just upstream from Prado Dam, and is piped under the dam for downstream use in the same manner as proposed in Applications 11036 and 11037.

12. Unappropriated water is potentially available for Applications 11036 and 11037 in an amount not to exceed 6,000 acre-feet a year, provided the applicants conduct salvage operations and measure the water salvaged in accordance with their stipulations and the terms and conditions of the permits to be issued.

13. Although the applicants do not anticipate the possibility of salvaging all of the 6,000 acre-feet now consumed by phreatophytes, there is conjecture as to how much they might salvage in a maximum year. The protestants will be reasonably protected in this connection by the computation of quantities of water salvaged in accordance with the "land use method," and by retaining the 6,000 acre-foot figure as the maximum possible salvage in any one year under both applications. These same considerations likewise will allow approval of Application 11037 which covers 75 cfs, although this amount is obviously excessive to an unknown extent and will have to be reduced at the time of issuance of license.

14. The proposed uses are beneficial.

From the foregoing findings, the Board concludes that Applications 11036 and 11037 should be approved and that
permits should be issued to the respective applicants for a total annual quantity not to exceed 6,000 acre-feet per annum and subject to the limitations and conditions set forth in the following order.

ORDER

IT IS HEREBY ORDERED that Applications 11036 and 11037 be, and they are, approved, and that permits be issued to the applicants subject to vested rights and to the following limitations and conditions:

1(a). The amount of water to be appropriated under permit issued pursuant to Application 11036 of Santa Ana Valley Irrigation Company shall be limited to the amount which can be beneficially used and shall not exceed 10 cubic feet per second by direct diversion to be diverted from about March 1 of each year to about November 30 of each year and 2,000 acre-feet per annum by underground storage at a maximum rate of 10 cfs to be collected from about December 1 of each year to about February 28 of the succeeding year, provided that the total amount of water diverted shall not exceed 6,000 acre-feet per annum.

(b) The amount of water to be appropriated under permit issued pursuant to Application 11037 of Orange County Water District shall be limited to the amount which can be beneficially used and shall not exceed 75 cubic feet per second by direct diversion to be diverted from about March 1 of each
year to about November 30 of each year and 4,000 acre-feet per annum by underground storage at a maximum rate of 75 cfs to be collected from about December 1 of each year to about February 28 of the succeeding year. The total amount of water diverted shall not exceed 6,000 acre-feet per annum, minus such quantity of water as is diverted under permit issued pursuant to Application 11036 during the same period.

2. The maximum amount herein stated may be reduced in the license if investigation warrants.

3. Complete application of the water to the proposed use shall be made on or before December 1, 1967.

4. Progress reports shall be filed promptly by permittee on forms which will be provided annually by the State Water Rights Board until license is issued.

5. 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 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.

6. Permittee shall allow representatives of the State Water Rights 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.
7. This permit and all rights acquired or to be acquired thereunder shall be subject to and limited by the Prado Salvage Agreement entered into by and between Orange County Flood Control District, Orange County Water District, Anaheim Union Water Company, Santa Ana Valley Irrigation Company, and Santa Ana River Development Company, therein referred to as first parties, and Riverside County Flood Control and Water Conservation District, San Bernardino County Flood Control District, and Chino Basin Water Conservation District, therein referred to as second parties, a copy of which agreement is on file with the State Water Rights Board. This provision is a limitation on the rights to be acquired by permittee under this permit, and the State Water Rights Board does not assume jurisdiction to enforce said agreement.

8. Appropriation of water under this permit shall be limited to water salvaged through decreasing the non-beneficial consumptive use of water by phreatophytes within the area shown in color on Exhibit 1 of Orange County Water District and Santa Ana Valley Irrigation Company filed of record with the State Water Rights Board at the hearing on Applications 11036 and 11037. The quantity of water salvaged shall be determined with reference to the entire area indicated in color on Exhibit 1, as follows:

Salvage equals \( (\text{acres of land use shown on Exhibit 1} \times \text{unit consumptive use}) \) minus \( (\text{acres of current land use} \times \text{unit consumptive use}) \).
Permittee shall include in its annual progress report to the Board an estimate, determined by the foregoing method, of the quantity of water salvaged during the reporting period.

9. A copy of all reports containing water salvage estimates, which are submitted by the permittee to the Board, shall at the same time be submitted by the permittee to Riverside County Flood Control and Water Conservation District and to San Bernardino County Flood Control District.

10. Upon request of the Board, permittee shall make such measurements and maintain and furnish to the Board such records and information as may be necessary to determine compliance with the terms and conditions of the permit, including recognition of vested rights, and for the further purpose of determining the quantities of water placed to beneficial use under the permit.

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 , 1964.

/s/ Kent Silverthorne
Kent Silverthorne, Chairman

/s/ Ralph J. McGill
Ralph J. McGill, Member

/s/ W. A. Alexander
W. A. Alexander, Member