

IN THE OFFICE OF THE STATE ENGINEER
OF THE STATE OF NEVADA

IN THE MATTER OF APPLICATION 58551)
FILED TO CHANGE THE MANNER OF USE OF)
THE UNDERGROUND WATERS, HERETOFORE)
APPROPRIATED UNDER PERMIT 54498,)
WITHIN THE ELDORADO GROUNDWATER)
BASIN, CLARK COUNTY, NEVADA.)

RULING
4045

GENERAL

I.

Application 58551 was filed on February 19, 1993 by Sunland Limited Partnership to change the manner of use of the underground waters heretofore appropriated under Permit 54498. The proposed manner of use is for commercial purposes to service a truck stop, restaurant and casino facility, all within portions of Section 14, 15, 16 and 22, T.22S., R.68E., M.D.B.&M. The existing manner of use is described as mining and milling purposes within the aforementioned place of use.¹

II.

Water Resources-Reconnaissance Report #36, Titled "Groundwater Appraisal of the Eldorado-Piute Valley Area California-Nevada", was prepared cooperatively by the Geological Survey, U.S. Department of the Interior and State of Nevada, Department of Conservation and Natural Resources. For the purposes of this ruling, the Eldorado Valley will be considered separate from adjacent Piute Valley.²

III.

The perennial yield of a hydrologic groundwater reservoir is be defined as the maximum amount of water of useable chemical quality that can be withdrawn and consumed economically for an indefinite period of time and can be determined by a comparative

¹ Public records in the office of the State Engineer under Permit File 58551.

² Water Resources Reconnaissance Series No. 36, "Groundwater Appraisal of the Eldorado-Piute Valley Area. Nevada and California, Rush and Huxel, 1966. (Hereinafter referred to as Reconnaissance Series No. 36).

analysis of the groundwater recharge (inflow) and the maximum natural discharge (outflow) available for capture.

IV.

The majority of the recharge to the Eldorado Valley Basin comes from precipitation. Average annual precipitation within the Eldorado Valley Hydrologic Basin ranges from 0.5 feet on the valley floor to in excess of 2.0 feet in the higher elevations. Rush and Huxel estimated that only a small percentage of the average annual precipitation of 190,000 acre-feet recharges the basin, yielding an annual recharge of approximately 1,100 acre-feet.³ The remainder is consumed by native plants.

V.

The components of outflow from Eldorado Valley are evapotranspiration, spring discharge, subsurface outflow and man developed consumptive uses. Only a minor amount of groundwater is discharged by transpiration of phreatophytes within the basin, and while springs are found in the higher elevations their accumulative discharge into the basin is minimal. Subsurface outflow from Eldorado Valley in an easterly movement occurs in such a manner that only 500 acre feet of the outflow can be salvaged.⁴ Thus, the State Engineer finds that the amount of water which represents the perennial yield of the system, is by definition, also limited to 500 acre-feet.

VI.

The committed groundwater resource in the form of permits and certificates issued by the State Engineer is in excess of 2,600 acre-feet annually, with the majority of the use, approximately 2,586 acre-feet annually, classified as mining and milling.⁵ The State Engineer has issued permits which exceed the perennial yield for mining purposes since they are, by the nature of their acuity,

³ Reconnaissance Series No. 36, page 16.

⁴ Reconnaissance Series No. 36, pages 17-19.

⁵ Public record in the office of the State Engineer, Eldorado Hydrographic Area Summary.

temporary uses and the basin will reach equilibrium condition once their use ceases.

VII.

If the perennial yield of a hydrologic system is continually exceeded, ground water levels will decline until the ground water reservoir is depleted of water of usable quality or until the pumping lifts become uneconomical to maintain. The State Engineer finds that perennial yield cannot exceed the natural replenishment to an area indefinitely, and ultimately is limited to the maximum amount of natural discharge that can be salvaged for beneficial use.

VIII.

Permit 54498 was issued on April 19, 1991 with the understanding that:

"This permit is issued under the preferred use provisions of NRS Chapter 534. The manner of use of water under this permit is by nature of its activity a temporary use. The permit will expire at the termination of mining and milling operations."¹

CONCLUSIONS

I.

The State Engineer has jurisdiction of the parties and the subject matter of this action and determination.⁶

II.

The State Engineer is prohibited by law from granting a change application where:

- A. The proposed use conflicts with existing rights, or
- B. The proposed use threatens to prove detrimental to the public interest.⁷

III.

Permit 54498 was issued with the understanding that the approved use, mining and milling, was a temporary use and such use

⁶ NRS Chapter 533.

⁷ NRS Chapter 533.370.

would terminate at the end of the mining project. The use proposed under Application 58531 is a permanent use of quasi-municipal. The granting of a permit under Application 58531 would result in the permanent withdrawal of ground water in a basin in which appropriations of ground water substantially exceed the perennial yield and would therefore adversely affect existing rights and be detrimental to the public interest.

RULING

Application 58551 is hereby denied on the grounds that the granting thereof would adversely affect existing rights and would be detrimental to the public interest and welfare.

Respectfully submitted,



R. MICHAEL TURNIPSEED, P.E.
State Engineer

RMT/MB/pm

Dated this 30th day of
November, 1993.