

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

IN THE MATTER OF APPLICATION 56394)
FILED TO APPROPRIATE WATER FROM AN)
UNDERGROUND SOURCE IN TRUCKEE)
MEADOWS, WASHOE COUNTY, NEVADA.)

RULING

4091

GENERAL

I.

Application 56394 was filed by Harold J. and Barbara A. Curti on May 31, 1991, to appropriate 207.43 acre-feet annually from an underground source for irrigation purposes. The point of diversion is within the NE $\frac{1}{4}$ NE $\frac{1}{4}$ Section 28, T.18N., R.20E., M.D.B.&M., and the place of use is 50 acres within SE $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 21, SW $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 22, NE $\frac{1}{4}$ NW $\frac{1}{4}$ and NW $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 27, the SE $\frac{1}{4}$ NE $\frac{1}{4}$, SW $\frac{1}{4}$ NE $\frac{1}{4}$, NW $\frac{1}{4}$ NE $\frac{1}{4}$ and the NE $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 28, all in T.18N., R.20E., M.D.B.&M.¹

FINDINGS OF FACT

I.

In 1973, Water Resource - Reconnaissance Series Report 57, "A Brief Water - Resource Appraisal of the Truckee River Basin, Western Nevada" by A. S. Van Denburgh, R. D. Lamke, and J. L. Hughes was prepared cooperatively with the Nevada Department of Conservation and Natural Resources, Division of Water Resources and the U. S. Department of the Interior, Geological Survey. This report is available from the office of the State Engineer.¹

II.

Application 56394 was filed to appropriate water from an underground source in the Truckee Meadows Ground Water Basin, Washoe County, Nevada.

By Order #708 dated March 1, 1978, the State Engineer designated and described the Truckee Meadows Ground Water Basin as a ground water basin coming under the provisions of NRS 534.

III.

It is estimated that the potential annual recharge to the ground water basin from precipitation is 27,000 acre-feet. The

¹ Public records in the office of the State Engineer.

estimated annual sub-surface inflow of groundwater is less than 1200 acre-feet.²

Any consumptive withdrawal in excess of the natural recharge will either deplete the ground water reservoir or cause additional surface water to percolate into the ground water reservoir.

IV.

The State Engineer finds that the existing certificated and permitted ground water rights in the Truckee Meadows Ground Water Basin for municipal, wildlife, commercial, irrigation and other purposes amount to more than 79,000 acre-feet annually (Reduced to 47,000 acre-feet annually by considering Sierra Pacific Power Company curtailment) which exceeds the perennial yield of the basin.¹

The State Engineer, pursuant to Chapter 534 of Nevada Revised Statutes, has limited Sierra Pacific Power Company's annual underground pumpage within the Truckee Meadows Groundwater Basin from in excess of 44,000 acre-feet annually of certificated rights to 12,000 acre-feet annually (excluding purchased water rights).¹

V.

The perennial yield of a hydrologic system is the maximum amount of water of usable chemical quality that can be consumed economically each year for an indefinite period of time. If the perennial yield 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. Ground water pumpage 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.²

Withdrawals of ground water in excess of the perennial yield contribute to adverse conditions such as water quality degradation, storage depletion, diminishing yield of wells, increased economic pumping lifts, land subsidence and possible reversal of ground

² See attached Appendix of References.

water gradients which could result in significant changes in the recharge-discharge relationship. These conditions have developed in several other ground water basins within the State of Nevada where storage depletion and declining water tables have been recorded and documented.

VI.

Applications for irrigation and municipal uses for underground appropriations have been denied in the Truckee Meadows Ground Water Basin.³

Applications for the same purpose in the same basin can be denied prior to publication.⁴

CONCLUSIONS

I.

The State Engineer has jurisdiction of the parties and the subject matter of this action.⁵

II.

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

- A. There is no unappropriated water at the proposed source, or
- B. The proposed use conflicts with existing rights, or
- C. The proposed use threatens to prove detrimental to the public interest.⁶

³ Public records in the office of the State Engineer. See transcripts of hearings and associated rulings. Denied applications include 29430, 29442, 30923, 30924, 30925, 31503, 31504, 31505, 31823, 31824, 33124, 33125, 33126, 33289, 33357, 34641, 34642, 34683, 34684, 34717, 34718, 34719, 34723, 34895, 34896, 34943, 34972, 35034, 35035, 35036, 35037, 35071, 35076, 35132, 35205, 35485, 35514, 36184 and 39878.

⁴ NRS 533.370(3).

⁵ NRS 533 and 534.

⁶ NRS 533.370.

III.

The State Engineer concludes that existing water rights for ground water in the Truckee meadows Ground Water Basin exceed the annual recharge from precipitation and underflow. To grant additional irrigation rights would result in additional consumptive use in this designated basin. The additional withdrawals and consumption would remove water from the ground water reservoir which:

- A. Would not be replaced resulting in depletion of the ground water reservoir, or
- B. Would be replaced by infiltrating surface water that would otherwise remain in or return to the stream system.

The additional withdrawal and consumption of underground water as applied for would, therefore, conflict with and tend to impair the value of existing rights and threaten to prove detrimental to the public interest and welfare.

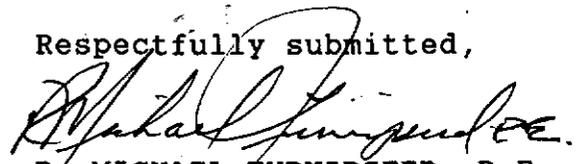
IV.

The State Engineer is authorized by law to deny applications prior to publication when applications for the same purpose in the same basin were previously denied.⁵

RULING

Application 56394 is hereby denied on the grounds that the proposed appropriation of additional ground water for irrigation would conflict with and tend to impair the value of existing rights and threaten to prove detrimental to the public interest and welfare.

Respectfully submitted,


R. MICHAEL TURNIPSEED, P.E.
State Engineer

RMT/TEG/pm

Dated this 11th day of
February, 1994.

APPENDIX OF REFERENCES

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Appendix of References
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