

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

IN THE MATTER OF APPLICATIONS)
51240 AND 52133 FILED TO)
APPROPRIATE THE PUBLIC WATERS OF AN)
UNDERGROUND SOURCE WITHIN THE)
TRUCKEE MEADOWS GROUNDWATER BASIN)
(087), WASHOE COUNTY, NEVADA.)

RULING

4844

GENERAL

I.

Application 51240 was filed on August 28, 1987, by the Robert L. Helms Construction & Development Co. to appropriate 10.0 cubic feet per second (cfs) of underground water for quasi-municipal purposes within Sections 5, 6, 7, 8, 17, 18, and 20, T.18N., R.20E., M.D.B.&M., Sections 2 through 11, 14 through 23, and 26 through 33, T.19N., R.20E., M.D.B.&M., Sections 19, 20, and 26 through 35, T.20N., R.20E., M.D.B.&M., Sections 1, 2, 11, 12, 13, and 14, T.18N., R.19E., M.D.B.&M., Sections 1 through 29, and 32 through 36, T.19N., R.19E., M.D.B.&M., Sections 15, 22, 23, 25, 26, 27, 34, 35 and 36, T.20N., R.19E., M.D.B.&M.¹ The proposed point of diversion is described as being located within the SE $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 10, T.19N., R.20E., M.D.B.&M., which is further described as being within a gravel pit.

II.

Application 52133 was filed on May 25, 1988, by the Robert L. Helms Construction & Development Company to appropriate 1.0 cfs of underground water for construction purposes within Sections 35 and 36, T.20N., R.18E., M.D.B.&M., Sections 31 and 32, T.20N., R.19E., M.D.B.&M., Sections 1, 2, 11, 12, and 13, T.19N., R.18E., M.D.B.&M., and Sections 5, 6, 7, 8, 17, and 18, T.19N., R.19E., M.D.B.&M. The proposed point of diversion is

¹ File No. 51240, official records in the office of the State Engineer.

described as being located within the NE $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 13, T.19N., R.18E., M.D.B.&M.²

III.

Application 51240 was timely protested by the Truckee-Carson Irrigation District on the following grounds:¹

The ground water basin is fully appropriated and this application will reduce and adversely affect adjacent and downstream adjudicated surface waters since the pumpage presently returns to the Truckee River System.

IV.

Application 51240 was also timely protested by the City of Sparks on the following grounds:¹

The approval of this application and the granting of this permit threatens to prove detrimental to the public interest. The approval of this application will adversely affect an existing well permitted under Application #40527 Certificate Record #10911 Book 37 Page 10911. The approval of this application and the subsequent compliance with NRS 533.380 may place Robert L. Helms Construction Company in default of an agreement with the City of Sparks entered into February 24, 1984 and filed in the office of the Washoe County Recorder on March 19, 1984 Document #913503.

FINDINGS OF FACT

I.

By State Engineer's Order Number 708, dated March 1, 1978, the State Engineer designated and described the Truckee Meadows Groundwater Basin as a groundwater basin in need of additional administration.³ The State Engineer finds that the points of diversion described under the subject applications are located within the hydrologic boundaries of the designated Truckee Meadows Groundwater Basin.

² File No. 52133, official records in the office of the State Engineer.

³ State Engineer's Order Number 708, issued on March 1, 1978, official records in the office of the State Engineer.

II.

Applications 51240 and 52133 if approved would have an annual consumptive use of underground water which is estimated by the applicant and their agent to be 7,240 acre-feet and 282.31 acre-feet, respectively.^{1,2} The State Engineer finds that the approval of Applications 51240 and 52133 would allow an additional 7,522.31 acre-feet of underground water to be appropriated from the Truckee Meadows Groundwater Basin on an annual basis.

III.

The findings of the hydrologic study specific to the Truckee Meadows Groundwater Basin are found within Water Resources-Reconnaissance Series Report No. 57, "A Brief Water-Resources Appraisal of the Truckee River Basin, Western Nevada" ("Report 57"). This study provides a quantitative analysis of the groundwater basin's recharge-discharge components and estimates that the potential annual recharge to the Truckee Meadows Groundwater Basin from precipitation is 27,000 acre-feet per year, with an additional 1,200 acre-feet contributed by groundwater inflow from adjacent groundwater basins.^{4,5} The State Engineer finds that the natural recharge to the Truckee Meadows Groundwater Basin is approximately 28,200 acre-feet annually.

IV.

The committed groundwater resource in the form of permits and certificates issued by the State Engineer to appropriate underground water from the Truckee Meadows Groundwater Basin currently exceeds 46,900 acre-feet annually. This level of

⁴ Van Denburgh, A.S., Lamke, R.D., and Hughes, J.L., Water Resources-Reconnaissance Series Report 57, A Brief Water-Resources Appraisal of the Truckee River Basin, Western Nevada, United States Geological Survey, and State of Nevada, Division of Water Resources, Department of Conservation and Natural Resources, pp. 38, 44, and 45.

⁵ State Engineer's Ruling No. 3664, issued September 29, 1980, official records in the office of the State Engineer.

committed resources takes into consideration the State Engineer's administrative cap of 12,000 acre-feet annually placed on Sierra Pacific Power Company's water rights. The State Engineer finds that the committed groundwater resource of the Truckee Meadows Groundwater Basin exceeds the estimate of the groundwater basin's natural recharge.

v.

The State Engineer has previously denied applications that requested new appropriations of underground water from the Truckee Meadows Groundwater Basin.⁶ The State Engineer finds that any requests for additional new appropriations of ground water from the Truckee Meadows Groundwater Basin must be denied on grounds similar to those established by previous denials.

VI.

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, groundwater levels will decline until the groundwater reservoir is depleted of water of a usable quality or until the pumping lifts become uneconomical to maintain. Perennial yield cannot exceed the natural replenishment to an area indefinitely, and is ultimately limited to the maximum amount of natural discharge that can be salvaged for beneficial use.

Withdrawals of ground water in excess of the perennial yield contribute to adverse conditions such as water quality

⁶ See denied Applications 29430, 29442, 30923, 30925, 31503, 31504, 31505, 31823, 31824, 32539, 33124, 33125, 33126, 33289, 33357, 34548, 34549, 34550, 34551, 34552, 34553, 34555, 34556, 34641, 34642, 34683, 34684, 34717, 34718, 34719, 34723, 34756, 34895, 34896, 34943, 34972, 35034, 35035, 35076, 35132, 35205, 35485, 35514, 35635, 36184, 38037, 38038, 39399, 39878, 40988, 40990, 40991, 41034, 41035, 41036, 42343, 42344, 42345, 42346, 42347, 42348, 42349, 42619, 43788, 44515, 44516, 44517, 45536, 45537, 45538, 47253, 47254, 48038, 48522, 49035, 49473, 49475, 49817, 51455, 51456, 51457, 52297, 52413, 52691, 52718, 52719, 56394, 57574, and 57575, official records in the office of the State Engineer.

degradation, storage depletion, diminishing yield of wells, increased economic pumping lifts, land subsidence and possible reversal of groundwater gradients which could result in significant changes in the recharge-discharge relationship.⁷

CONCLUSIONS

I.

The State Engineer has jurisdiction over the parties and the subject matter of this action and determination.⁸

II.

The State Engineer is prohibited by law from granting an application to appropriate the public waters where:⁹

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

III.

The committed groundwater resource of the Truckee Meadows Groundwater Basin currently exceeds the groundwater basin's estimated natural recharge. The State Engineer concludes that the approval of Applications 51240 and 52133 would conflict with existing rights that appropriate underground water from the Truckee Meadows Groundwater Basin.

⁷ State Engineer's Office, Water for Nevada, State of Nevada Water Planning Report No. 3, p. 13, Oct. 1971.

⁸ NRS Chapters 533 and 534.

⁹ NRS § 533.370(3).

IV.

The State Engineer concludes that to grant an application which would conflict with existing water rights would threaten to prove detrimental to the public interest.

RULING

Applications 51240 and 52133 are hereby denied on the grounds that their approval would conflict with existing rights and threaten to prove detrimental to the public interest. No ruling is made on the merits of the protests.

Respectfully submitted,


R. MICHAEL TURNIPSEED, P.E.
State Engineer

RMT/MDB/cl

Dated this 24th day of
January, 2000.