

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

IN THE MATTER OF APPLICATION 51239 )  
FILED TO APPROPRIATE THE PUBLIC )  
WATERS OF AN UNDERGROUND SOURCE )  
WITHIN THE TRUCKEE MEADOWS )  
GROUNDWATER BASIN (087), WASHOE )  
COUNTY, NEVADA. )

**RULING**

**# 4807**

**GENERAL**

**I.**

Application 51239 was filed on August 28, 1987, by the Robert L. Helms Construction and Development Co. to appropriate 10.0 cubic feet per second (cfs) of water from an underground source. The proposed manner of use is for the storage of 6,400 acre-feet of water within what is commonly referred to as the Helm's Gravel Pit. The proposed place of use is to be determined by future secondary water right applications. The proposed point of diversion is described as being within the SE $\frac{1}{4}$  NW $\frac{1}{4}$  of Section 10, T.19N., R.20E., M.D.B.&M.<sup>1</sup>

**II.**

Application 51239 was timely protested by the Truckee-Carson Irrigation District on the following grounds:<sup>1</sup>

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.

**FINDINGS OF FACT**

**I.**

By State Engineer's Order No. 708, dated March 1, 1978, the State Engineer designated and described the Truckee Meadows Groundwater Basin as a groundwater basin in need of additional

<sup>1</sup> File No. 51239, official records in the office of the State Engineer.

administration.<sup>2</sup> The State Engineer finds that the point of diversion described under the subject application is located within the hydrologic boundaries of the designated Truckee Meadows Groundwater Basin.

## II.

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.<sup>3,4</sup> The State Engineer finds that the natural recharge to the Truckee Meadows Groundwater Basin is approximately 28,200 acre-feet annually.

## III.

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 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.

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<sup>2</sup> State Engineer's Order No. 708, issued on March 1, 1978, official records in the office of the State Engineer.

<sup>3</sup> 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.

IV.

The State Engineer has previously denied applications that requested new appropriations of underground water from the Truckee Meadows Groundwater Basin.<sup>5</sup> 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.

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, 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 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.<sup>6</sup>

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<sup>4</sup> State Engineer's Ruling No. 3664, issued September 29, 1980, official records in the office of the State Engineer.

<sup>5</sup> 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, 34723, 34756, 34895, 34896, 34943, 34972, 35034, 35035, 35076, 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, 52413, 52691, 52718, 52719, 56394, 57574, and 57575, official records in the office of the State Engineer.

<sup>6</sup> State Engineer's Office, Water for Nevada, State of Nevada Water Planning Report No. 3, p. 13, Oct. 1971.

## VI.

At the time of its filing within the office of the State Engineer, it was the applicant's intention to reduce the groundwater pumpage from the gravel pit area to a degree where a gradual recovery of the groundwater table would occur within the pit. Water would then be stored through this natural process within the former gravel pit for uses which would be determined through the filing of secondary applications.<sup>1</sup> The State Engineer finds that Application 51239, if approved, would utilize the Helm's Gravel Pit as a storage reservoir for 6,400 acre-feet of ground water and result in an additional consumptive use of ground water.

## VII.

The gravel pit area which represents the reservoir site under Application 51239 is located within the NW $\frac{1}{4}$  of Section 10 and the SW $\frac{1}{4}$  of Section 3, T.19N., R.20E., M.D.B.&M.<sup>7</sup> Information provided by the Washoe County Assessor's office indicates that the City of Sparks is the current owner of the parcel of land which contains this area.<sup>8</sup> The State Engineer finds that the applicant does not control the reservoir site proposed under Application 51239.

## VIII.

Application 51239 requests an appropriation of underground water for storage purposes within a reservoir that is not owned by the applicant. The State Engineer finds that the applicant is not authorized to utilize land owned by the City of Sparks for a groundwater storage site.

## CONCLUSIONS

### I.

The State Engineer has jurisdiction over the parties and the subject matter of this action and determination.<sup>9</sup>

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<sup>7</sup> U.S.G.S. 7.5 minute topographic map, Vista Quadrangle, 1975.

<sup>8</sup> City of Sparks Assessor's parcel ownership summary, August 11, 1999.

<sup>9</sup> NRS Chapters 533 and 534.

**II.**

The State Engineer is prohibited by law from granting an application to appropriate the public waters where:<sup>10</sup>

- 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 Application 51239 would conflict with existing rights that appropriate underground water from the Truckee Meadows Groundwater Basin and thereby would also threaten to prove detrimental to the public interest.

**IV.**

Application 51239 was filed to appropriate 6,400 acre-feet per year of underground water for storage purposes within the Helm's Gravel Pit. The Helm's Gravel Pit is located upon land that is now owned by the City of Sparks. The approval of Application 51239 would grant the applicant a primary storage permit to impound water within a reservoir site in which it has no ownership interest. The State Engineer concludes that the approval of such an application would threaten to prove detrimental to the public interest.

**V.**

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.

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<sup>10</sup> NRS § 533.370(3).

RULING

The protest of the Truckee-Carson Irrigation District as to Application 51239 is hereby upheld, and Application 51239 is denied on the grounds that its approval would conflict with existing rights and threaten to prove detrimental to the public interest.

Respectfully submitted,



R. MICHAEL TURNIPSEED, P.E.

State Engineer

RMT/MDB/cl

Dated this 7th day of  
December, 1999.