

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

IN THE MATTER OF APPLICATION 51418 )  
FILED TO APPROPRIATE THE PUBLIC )  
WATERS OF AN UNDERGROUND )  
SOURCE WITHIN THE DESERT VALLEY )  
HYDROGRAPHIC BASIN (31), HUMBOLDT )  
COUNTY, NEVADA. )

**RULING**

**#5355**

**GENERAL**

**I.**

Application 51418 was filed on October 8, 1987, by Leslie or Laura McKernan to appropriate 3.565 cubic feet per second of underground water for irrigation purposes. The proposed place of use is described as being 200 acres within the SE $\frac{1}{4}$  SE $\frac{1}{4}$  of Section 35 and the S $\frac{1}{2}$  SW $\frac{1}{4}$  of Section 36, T.39N., R.32E., M.D.B.&M., and the NW $\frac{1}{4}$  NW $\frac{1}{4}$  of Section 1 and the NE $\frac{1}{4}$  NE $\frac{1}{4}$  of Section 2, T.38N., R.32E., M.D.B.&M. The proposed point of diversion is described as being located within the SE $\frac{1}{4}$  SW $\frac{1}{4}$  of Section 36, T.39N., R.32E., M.D.B.&M.<sup>1</sup>

**FINDINGS OF FACT**

**I.**

State Engineer's Order No. 535, issued on May 9, 1975, described and designated the Desert Valley Hydrographic Basin as a groundwater basin in need of additional administration under the provisions of NRS § 534.030.<sup>2</sup> The State Engineer finds that Application 51418 has a proposed point of diversion and place of use located within the hydrologic boundaries of the designated Desert Valley Hydrographic Basin.

**II.**

The State Engineer finds that previous applications to appropriate underground water for irrigation have been denied in the Desert Valley Hydrographic Basin.<sup>3</sup>

**III.**

Perennial yield of a groundwater reservoir may be defined as the maximum amount of ground water that can be salvaged each year over the long term without

---

<sup>1</sup> File No. 51418, official records in the Office of the State Engineer.

<sup>2</sup> State Engineer's Order No. 535, issued May 9, 1975, official records in the Office of the State Engineer.

<sup>3</sup> State Engineer's Ruling Nos. 1951, 2049, 2130, 2131, 2132, 2326, 2337, 2371, and 3060, official records in the Office of the State Engineer.

depleting the groundwater reservoir. Perennial yield is ultimately limited to the maximum amount of natural recharge that can be salvaged for beneficial use. If the perennial yield is continually exceeded groundwater levels will decline.<sup>4</sup>

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.

#### IV.

The United States Geological Survey estimates that the perennial yield of the Desert Valley Hydrographic Basin is approximately 9,000 acre-feet.<sup>5</sup> The committed groundwater resource in the form of permits and certificates issued by the State Engineer to appropriate underground water from the Desert Valley Hydrographic Basin currently exceeds 30,000 acre-feet annually.<sup>6</sup> The State Engineer finds that existing groundwater rights in the Desert Valley Hydrographic Basin exceeds the perennial yield of the groundwater basin.

### CONCLUSIONS

#### I.

The State Engineer has jurisdiction over the parties and the subject matter of this action and determination.<sup>7</sup>

#### II.

The State Engineer is prohibited by law from granting an application to appropriate the public waters where:<sup>8</sup>

- A. there is no unappropriated water at the proposed source;
- B. the proposed use or change conflicts with existing rights;
- C. the proposed use or change conflicts with protectible interests in existing domestic wells as set forth in NRS § 533.024; or
- D. the proposed use or change threatens to prove detrimental to the public interest.

#### III.

---

<sup>4</sup> State Engineer's Office, Water for Nevada, State of Nevada Water Planning Report No. 3, p. 13, Oct. 1971.

<sup>5</sup> Nowlin, Jon, Groundwater Quality in Nevada – A Proposed Monitoring Program, Open File Report 78-768, U.S. Geological Survey, p. 191.

<sup>6</sup> Special Hydrologic Basin Abstract, Water Rights Database, Basin 31, Dec. 1, 2003, official records within the Office of the State Engineer.

<sup>7</sup> NRS chapters 533 and 534.

<sup>8</sup> NRS § 533.370(4).

Nevada Revised Statute 533.370(3) provides that if a previous application for a similar use within the same basin has been rejected on those grounds, the new application may be denied without publication. The State Engineer concludes that previous applications have been denied for similar uses in the Desert Valley Hydrographic Basin; therefore, Application 51418 may be considered for denial.

**IV.**

The committed groundwater resources of the Desert Valley Hydrographic Basin currently exceed the groundwater basin's estimated perennial yield. The State Engineer concludes that the approval of the subject applications would result in the withdrawal of substantial amounts of ground water for irrigation purposes in excess of the perennial yield of the Desert Valley Hydrographic Basin and therefore would adversely affect existing rights and be detrimental to the public interest.

**RULING**

Application 51418 is hereby denied on the grounds that its approval would conflict with existing rights and threaten to prove detrimental to the public interest.

Respectfully submitted,



HUGH RICCI, P.E.  
State Engineer

HR/TW/jm

Dated this 21st day of  
May 2004.