

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

IN THE MATTER OF APPLICATIONS )  
69529 AND 69530 FILED TO )  
APPROPRIATE THE PUBLIC WATERS OF )  
AN UNDERGROUND SOURCE WITHIN THE )  
BUFFALO VALLEY HYDROGRAPHIC BASIN )  
(131), HUMBOLDT COUNTY, NEVADA. )

**RULING**

**#5430**

**GENERAL**

**I.**

Application 69529 was filed on February 04, 2003, by Nevada Land & Resource Co., LLC, to appropriate 5.4 cubic feet per second (cfs) of underground water for the irrigation of 320 acres of land that are described as being located within Section 33, T.33N., R.42E., M.D.B.&M. The proposed point of diversion is described as being located within the SW $\frac{1}{4}$  SW $\frac{1}{4}$  of said Section 33.<sup>1</sup>

**II.**

Application 69530 was filed on February 04, 2003, by Nevada Land & Resource Co., LLC, to appropriate 5.4 cfs of underground water for the irrigation of 320 acres of land that are described as being located within Section 29, T.33N., R.42E., M.D.B.&M. The proposed point of diversion is described as being located within the SE $\frac{1}{4}$  SE $\frac{1}{4}$  of said Section 29.<sup>2</sup>

**FINDINGS OF FACT**

**I.**

The 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 depleting the groundwater reservoir. Perennial yield is ultimately limited

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<sup>1</sup> File No. 69529, official records in the Office of the State Engineer.

<sup>2</sup> File No. 69530, official records in the Office of the State Engineer.

to the maximum amount of natural discharge that can be salvaged for beneficial use. If the perennial yield is continually exceeded groundwater levels will decline.<sup>3</sup>

Withdrawals of ground water in excess of the perennial yield may 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.

The United States Geological Survey estimates that the perennial yield of the Buffalo Valley Hydrographic Basin is approximately 8,000 acre-feet.<sup>4</sup>

## II.

The committed groundwater resource in the form of permits and certificates issued by the State Engineer to appropriate underground water from the Buffalo Valley Hydrographic Basin currently exceeds 20,850 acre-feet annually. The State Engineer recently considered two applications filed by this same applicant for underground water for irrigation purposes in Buffalo Valley.<sup>5</sup> After consideration of the temporary mining and milling permits that will revert back to the source and the permanent appropriations of water in the groundwater basin the State Engineer granted this applicant Permits 67704 and 68153 but for quantities far less than requested. When this applicant was granted those rights of appropriation it essentially appropriated the remaining groundwater of the valley for major uses such as the irrigation of large pieces of land. The State Engineer finds there is insufficient water available to

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

<sup>4</sup> Id. at 46.

<sup>5</sup> State Engineer's Ruling No. 5195, dated January 10, 2003, official records in the Office of the State Engineer.

support the appropriations requested under Applications 69529 and 69530.

**CONCLUSIONS**

**I.**

The State Engineer has jurisdiction over the parties and subject matter of this action and determination.<sup>6</sup>

**II.**

The State Engineer is prohibited by law from granting an application to appropriate the public waters where:<sup>7</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.**

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

**RULING**

Applications 69529 and 69530 are hereby denied on the grounds that approval would conflict with existing water

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<sup>6</sup> NRS chapters 533 and 534.

<sup>7</sup> NRS § 533.370(4).

Ruling  
Page 4

rights and threaten to prove detrimental to the public interest.

Respectfully submitted,



Hugh Ricci, P.E.  
State Engineer

HR/WHR/jm

Dated this 14th day of  
October, 2004.