

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

IN THE MATTER OF APPLICATION )  
68489 FILED TO APPROPRIATE )  
THE PUBLIC WATERS OF AN )  
UNDERGROUND SOURCE WITHIN )  
THE WHITE RIVER VALLEY )  
HYDROGRAPHIC BASIN (207), )  
NYE COUNTY, NEVADA. )

**RULING**  
**# 5597**

**GENERAL**

**I.**

Application 68489 was filed on February 11, 2002, by Bruce A. and Pamela G. Jensen to appropriate 3.5 cubic feet per second of water from an underground source for irrigation purposes. The proposed place of use is described as being located within the W $\frac{1}{2}$  SW $\frac{1}{4}$  of Section 2 and the E $\frac{1}{2}$  SE $\frac{1}{4}$  of Section 3, T.07N., R.61E., M.D.B.&M. The proposed point of diversion is described as being located within SW $\frac{1}{4}$  SW $\frac{1}{4}$  of said Section 2.<sup>1</sup>

**II.**

Application 68489 was timely protested by the United States Department of Interior, National Park Service on the grounds that:

1. The proposed withdrawal is located in the White River Valley in the central part of the valley. The aquifers in White River Valley are part of a regional groundwater flow system that is informally called the White River groundwater flow system (Eakin, 1962).
2. Groundwater recharge in White River Valley was estimated at about 37,000 acre-ft/year (afy) from precipitation (Eakin, 1962). Most of the recharge results from runoff in the mountains or percolation into bedrock in the mountains.
3. Discharge from White River Valley occurs as underflow to downgradient basins and discharge through evapotranspiration (Eakin, 1962). Harrill and others (1988) estimated that about 40,000 acre-ft/year leaves White River Valley as underflow to Pahroc Valley.
4. Perennial yield for White River Valley is listed as 37,000 afy (Nevada Division of Water Resources and Water Planning, 1992).

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<sup>1</sup> File No. 68489, official records in the Office of the State Engineer.

5. According to the Nevada Hydrographic Basin Abstracts (reported as of 2/3/2000), there is 129,782 acre-ft in pending applications, 5,716 acre-ft in existing permits and 20,260 acre-ft in certificated water rights in White River Valley.
6. Ground-water withdrawal rates larger than the recharge to White River Valley would come from storage and constitute ground-water mining. This application, in combination with senior pending applications and existing permits, will mine ground-water.

Therefore, the protestant asserts that:

1. The proposed appropriation, in combination with senior water rights and pending applications, exceed the perennial yield in White River Valley, therefore water is not available for appropriation.
2. The public interest would not be served by granting a permit for this application because lowering of the water table will affect discharge from this basin and impair existing water users and water resources.
3. The approval and development of the appropriation proposed by this application will impair the water rights of the United States, because:
  - A. The appropriation, in combination with other appropriations and withdrawals will further reduce the discharge of the Muddy River. The United States' senior water right and other existing rights to the Muddy River will be impaired.
  - B. The proposed appropriation, in combination with existing appropriations and pending applications in the White River ground-water flow system, may reduce the discharge of Lake Mead NRA [National Recreation Area] springs because large withdrawals would capture ground water that naturally discharges through springs.<sup>1</sup>

## FINDINGS OF FACT

### I.

Nevada Revised Statute § 533.357 provides that when two or more applications are made to appropriate ground water for irrigation purposes from what appears to be the same groundwater basin the State Engineer shall observe the following order of priority in acting on the applications, according to the status of the applicant and the intended place of use: (1) an owner of land for use on that land; (2) an owner of land for use on adjacent land for which he intends to file an application under the Carey Act of the Desert Land Entry Act, 43 U.S.C. §§ 321 et seq.; (3) any other person whose application is preparatory to proceeding under the Carey Act or the Desert Land Entry Act. The State

Engineer finds this provision of Nevada Water Law provides the basis for which he can act on this application, which is junior in priority to the many Carey Act and Desert Land Entry Act applications pending in this groundwater basin.

## II.

The perennial yield of the White River Valley Hydrograph Basin has been established as 37,000 acre-feet annually.<sup>2</sup> Existing permits and certificates issued for the use of ground water from the White River Valley total less than 32,000 acre-feet annually.<sup>3</sup> The State Engineer finds the duty of water permitted for irrigation in the White River Valley is 4.0 acre-feet per acre; thus, the water necessary to support the appropriation requested for this 160 acres proposed to be irrigated is 640 acre-feet annually. The State Engineer finds there is 640 acre-feet annually available for appropriation from the White River Valley Hydrographic Basin.

## III.

The State Engineer finds only this application is under consideration and the protest issue related to the other pending applications is not before him, particularly since most of the pending applications are Carey Act or Desert Land Entry Act applications many of which have not been acted on by the land entry agency for over 25 years and many of which will likely not go forward. Furthermore, as noted above, Nevada Revised Statute § 533.357 provides the State Engineer the authority to give this application priority over those pending land entry applications.

## IV.

The protestant asserts that groundwater withdrawals in excess of recharge would constitute groundwater mining. The State Engineer finds the groundwater withdrawals in the White River Valley Hydrographic Basin are not in excess of the perennial yield.

## V.

The protestant asserts that discharge from the White River Valley occurs as underflow to downgradient basins and discharge through evapotranspiration, and that 40,000 acre-feet leaves the White River Valley as underflow to Pahroc Valley. The perennial yield of the Pahroc Valley Hydrographic Basin, the downgradient hydrographic

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<sup>2</sup> Nowlin, Jon, Ground-water Quality in Nevada – A Proposed Monitoring Program, Open File Report 78-768, United States Geological Survey, p. 201.

<sup>3</sup> State Engineer's Water Rights Database January 25, 2005.

basin is 21,000 acre-feet annually.<sup>4</sup> Existing permits or certificates for the use of ground water in Pahroc Valley Hydrographic Basin total less than 30 acre-feet annually.<sup>5</sup> The State Engineer finds since the approval of this appropriation is within the perennial yield of the groundwater basin and so few rights to the use of ground water exist in Pahroc Valley, the issue of lowering of the groundwater level or diminishing discharge from the groundwater basin is in this instance not an issue that warrants much consideration.

## VI.

The protestant asserts that the proposed appropriation in combination with other appropriations and withdrawals will further reduce the discharge of the Muddy River, thereby impairing the United States' water rights and may reduce discharge of springs at Lake Mead NRA, because large withdrawals would capture groundwater that naturally discharges through springs. The State Engineer finds this appropriation is within the perennial yield available for appropriation within this groundwater basin; therefore, the State Engineer does not believe it will affect either the discharge of the Muddy River or the springs within the Lake Mead NRA.

## CONCLUSIONS

### I.

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

### II.

The State Engineer is prohibited by law from granting a permit under an application to appropriate the public water 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.

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<sup>4</sup> Nowlin, Jon, Ground-water Quality in Nevada – A Proposed Monitoring Program, Open File Report 78-768, United States Geological Survey, p. 201.

<sup>5</sup> State Engineer's Water Rights Database, January 28, 2005.

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

<sup>7</sup> NRS § 533.370(4).

**III.**

The State Engineer finds Nevada Revised Statute § 533.357 provides him the authority to act on this junior application for irrigation while senior Carey Act or Desert Land Entry Act applications are pending in the hydrographic basin.

**RULING**

The protest to Application 68489 is hereby overruled and the application is approved subject to existing rights and payment of the statutory permit fees.

Respectfully submitted,

A handwritten signature in cursive script that reads "H. Ricci, P.E.".

HUGH RICCI, P.E.  
State Engineer

HR/jm

Dated this 14th day of  
March, 2006.