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

IN THE MATTER OF APPLICATION 72007)
FILED TO APPROPRIATE THE PUBLIC)
WATERS OF AN UNDERGROUND SOURCE)
WITHIN THE HUNTINGTON VALLEY)
HYDROGRAPHIC BASIN (047), ELKO)
COUNTY, NEVADA.)

RULING

#5570

GENERAL

I.

Application 72007 was filed on December 13, 2004, by the Joseph and Kristi Cumming Family Trust to appropriate 4.5 cubic feet per second of underground water for irrigation purposes. The proposed place of use is described as being located within the N½ NE¼ of Section 23, N½ N½, N½ S½ NW¼ of Section 24, T.30N., R.56E., M.D.B.&M. The proposed point of diversion is described as being located within the SE¼ NE¼ of Section 23, T.30N., R.56E., M.D.B.&M.[1]

II.

Application 72007 was timely protested by Pershing County Water Conservation District of Nevada on the following grounds:[1]

> That the granting of said application will effect the water table and drainage and adversely effect the decreed waters of the Humboldt River.

III.

The State Engineer initially described and designated the Huntington Valley Hydrographic Basin on July 10, 1985, under the provisions of Nevada Revised Statute § 534.030, as a basin in need of additional administration.[2] The point of diversion proposed under Application 72007 is within the designated area of the Huntington Valley Hydrographic Basin.

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[1] File No. 72007, official records in the Office of the State Engineer.
[2] State Engineer's Order No. 865, July 10, 1985, official records in the Office of the State Engineer.

FINDINGS OF FACT

I.

Nevada Revised Statute § 533.365(3) provides that it is within the State Engineer's discretion to determine whether a public administrative hearing is necessary to address the merits of a protest to an application to appropriate the public waters of the State of Nevada. The State Engineer finds that in the case of protested Application 72007 there is sufficient information contained within the records of the Office of the State Engineer to gain a full understanding of the issues and a hearing on this matter is not required.

II.

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 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.[3]

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, increase in cost due to increased 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 Huntington Valley Hydrographic Basin is 15,000 acre-feet.[4] The committed groundwater resource in the form of permits and certificates issued by the State Engineer to appropriate underground water from the Huntington Valley Hydrographic Basin is currently about 9,000 acre-feet annually.[5]

The Huntington Valley Hydrographic Basin also has a combined annual yield with the South Fork Area and the Dixie Creek – Tenmile Creek Area. The combined

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[3] State Engineer's office, *Water for Nevada*, State of Nevada Water Planning Report No. 3, p. 17, Oct. 1971.
[4] Jon O. Nowlin, *Ground-Water Quality in Nevada – a Proposed Monitoring System*, USGS Open-File Report 78-768, United States Department of the Interior Geological Survey, p. 193, (1986).
[5] Special Hydrographic Basin Abstract, Water Rights Database, Basin 47, June 1, 2005, official records within the Office of the State Engineer.

annual yield is 25,000 acre-feet annually.[3] The committed groundwater resource in the form of permits and certificates issued by the State Engineer to appropriate underground water from all three valleys, excluding mining and milling, is currently about 23,000 acre-feet annually.[6]

The State Engineer finds that permits and certificates have been issued under existing rights for less than the estimated perennial yield from the groundwater system within the Huntington Valley Hydrographic Basin.

III.

The State Engineer finds that it is a condition of each appropriation of ground water acquired under NRS chapter 534 that the right of the appropriator relates to a specific quantity of water and that the right must allow for a reasonable lowering of the static water level at the appropriator's point of diversion.[7]

IV.

The State Engineer finds that there is no evidence in the Office of the State Engineer that the approval of Application 72007 would threaten to prove detrimental to the public interest.

V.

The State Engineer finds that there is no evidence that the proposed appropriation of underground water will impair the existing decreed surface water rights of the Humboldt River.

VI.

Application 72007 was filed to appropriate water for the irrigation of 265.0 acres of land. The applicant requested a diversion rate of 4.5 cfs, but did not specify a quantity of water. Expanded, a diversion rate of 4.5 cfs would equate to a quantity of water equal to about 3,258 acre-feet annually. This amount would far exceed the quantity of water necessary to irrigate 265 acres of land. Therefore, the actual quantity of water requested must be calculated based on the acreage of land and the standard duty for irrigation in this area. The standard duty of water in this area for irrigation purposes is 3.0 acre-feet per

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[6] Special Hydrographic Basin Abstract, Water Rights Database, Basins 46, 47, and 48, June 1, 2005, official records within the Office of the State Engineer.
[7] NRS § 534.110(4).

acre of land. The quantity of water requested under Application 72007 can be calculated by multiplying the number of acres by the duty of water. In this case, there are 265 acres of land at a duty of 3.0 acre-feet per acre for a total quantity of water equal to 795.0 acre-feet annually (265.0 acres x 3.0 acre-feet annually / acre = 795.0 acre-feet annually). The State Engineer finds the quantity of water requested under Application 72007 is 795.0 acre-feet annually.

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 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.

Application 72007 seeks to appropriate 795.0 acre-feet annually of underground water from the Huntington Valley Hydrographic Basin. The State Engineer concludes that there is sufficient unappropriated water available within the Huntington Valley Hydrographic Basin to satisfy the requirements of the application.

IV.

The State Engineer concludes that the approval of Application 72007 will not conflict with existing rights nor would it threaten to prove detrimental to the public interest.

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[8] NRS chapters 533 and 534.
[9] NRS § 533.370(4).

RULING

The protest to Application 72007 is hereby overruled and said application is hereby approved subject to existing rights and payment of the statutory permit fees.

Respectfully submitted,

HUGH RICCI, P.E.
State Engineer

HR/TW/jm

Dated this 3rd day of

March, 2006.