

IN THE OFFICE OF STATE ENGINEER  
OF THE STATE OF NEVADA

IN THE MATTER OF APPLICATION 64662 )  
FILED TO APPROPRIATE THE PUBLIC )  
WATERS OF AN UNDERGROUND SOURCE )  
WITHIN THE DIXIE VALLEY GROUNDWATER )  
BASIN (128), CHURCHILL COUNTY, )  
NEVADA. )

RULING

**# 4695**

GENERAL

I.

Application 64662 was filed on December 10, 1998, by Michael A. Casey to appropriate 4.0 cubic feet per second of water for the irrigation of 120 acres of land located within the NE $\frac{1}{4}$  SW $\frac{1}{4}$ , the SE $\frac{1}{4}$  SW $\frac{1}{4}$ , and the SW $\frac{1}{4}$  SW $\frac{1}{4}$  of Section 8, T.21N., R.35E., M.D.B.&M. The proposed point of diversion is described as being within the SW $\frac{1}{4}$  SW $\frac{1}{4}$  of said Section 8.<sup>1</sup>

FINDINGS OF FACT

I.

By Order No. 715, the State Engineer designated and described the Dixie Valley Groundwater Basin under the provisions of NRS § 534.030 as a basin in need of additional administration.<sup>2</sup> The State Engineer finds that the point of diversion and place of use proposed under Application 64662 are within the designated groundwater basin.

II.

The perennial yield of a hydrologic basin is the maximum amount of water of usable chemical quality that can be consumed

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<sup>1</sup> File No. 64662, official records in the office of the State Engineer.

<sup>2</sup> State Engineer's Order No. 715 issued on June 8, 1978, official records in the office of the State Engineer.

economically each year for an indefinite period of time. The perennial yield cannot exceed the natural replenishment to an area indefinitely, and ultimately is 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 until the groundwater reservoir is depleted. 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>3</sup>

The United States Geological Survey estimates that the perennial yield of the Dixie Valley Groundwater Basin is 15,000 acre-feet annually.<sup>4</sup> The committed groundwater resource in the form of permits and certificates issued by the State Engineer's office for groundwater withdrawal within the Dixie Valley Groundwater Basin currently exceeds 21,500 acre-feet.<sup>5</sup> The State Engineer finds that the committed groundwater resource of the Dixie Valley Groundwater Basin currently exceeds its perennial yield.

### III.

The committed groundwater resource of the Dixie Valley Groundwater Basin exceeds the estimate of its perennial yield.

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

<sup>4</sup> Nowlin, Jon, Groundwater Quality in Nevada-A Proposed Monitoring Program, Open-File Report 78-768, U.S. Geological Survey, p. 197.

<sup>5</sup> Nevada Division of Water Resources Water Rights Database, Special Hydrographic Basin Abstract, Basin 128, January 29, 1999, official records in the office of the State Engineer.

The magnitude of this negative balance is not constant and can be reduced through statutory actions taken by the State Engineer. Should a reduction in the committed groundwater resource occur to a level which would allow for new appropriations of water, the State Engineer would initiate an evaluation of pending applications on a priority date basis. Typically, the priority of an application requesting a new appropriation of water is established by its filing date in the office of the State Engineer. Currently, applications requesting appropriations in excess of 60,000 acre-feet of underground water from the Dixie Valley Groundwater Basin are pending in the office of the State Engineer, with all but one holding priority dates senior to Application 64662.<sup>5</sup> The State Engineer finds that should water become available for appropriation from the Dixie Valley Groundwater Basin, it would be subject to appropriation by existing senior applications leaving no water available for appropriation under the subject application.

#### IV.

Applications which requested a permanent appropriation of underground water for irrigation purposes within the Dixie Valley Groundwater Basin have been denied by the State Engineer since March 28, 1980. These denials were based on the grounds that, "withdrawals of additional groundwater in a basin in which appropriations of groundwater substantially exceed the perennial yield of the basin would, therefore, adversely effect existing rights and be detrimental to the public interest and welfare."<sup>6</sup> The State Engineer finds that Application 64662 was filed to appropriate underground water for a similar use and in the same

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<sup>6</sup> State Engineer's Ruling Nos. 2526, 2711, 2835, 2914, and 3148, official records in the office of the State Engineer.

hydrologic basin as applications which have been denied in the past.

V.

Where a previous application for similar use of water within the same hydrologic basin has been rejected on the grounds that there is no unappropriated water or where its proposed use conflicts with existing rights or threatens to prove detrimental to the public interest the new application may be denied without publication in the newspaper for public notice.<sup>7</sup> The State Engineer finds that Application 64662 may be denied prior to going to publication.

VI.

Application 64662 was filed to appropriate a duty of 480 acre-feet annually of underground water from the Dixie Valley Groundwater Basin. The State Engineer finds that the approval of Application 64662 from a groundwater basin where the committed groundwater resource exceeds the perennial yield of the groundwater basin would conflict with the many existing water rights in the Dixie Valley Groundwater Basin.

CONCLUSIONS

I.

The State Engineer has jurisdiction over the parties and the subject matter of this action and determination.<sup>8</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>

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<sup>7</sup> NRS § 533.370(3).

<sup>8</sup> NRS Chapters 533 and 534.

- A. there is no unappropriated water at the proposed source; or
- B. the proposed use or change conflicts with existing rights; or
- C. the proposed use or change threatens to prove detrimental to the public interest.

III.

The State Engineer concludes that to grant a permit under Application 64662 in a groundwater basin where the quantity of water under existing appropriations exceeds the perennial yield would conflict with existing rights within the Dixie Valley Groundwater Basin and would threaten to prove detrimental to the public interest.

RULING

Application 64662 is hereby denied on the grounds that granting the application would interfere with existing rights and would prove detrimental to the public interest.

Respectfully submitted,



R. MICHAEL TURNIPSEED, P.E.  
State Engineer

RMT/MDB/cl

Dated this 3rd day of  
February, 1999.