

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

IN THE MATTER OF APPLICATION 51571 FILED)  
TO APPROPRIATE UNDERGROUND WATER IN THE )  
STAGECOACH SUB-AREA IN DAYTON VALLEY, )  
LYON COUNTY, NEVADA. )

RULING

# 4148

GENERAL

I.

Application 51571 was filed on November 18, 1987, by Edward H. Stark Sr. and Patricia Stark to appropriate 0.142 cfs (cubic feet per second) of water from an underground source for commercial purposes to serve a restaurant, real estate office and 40 RV units in the NE $\frac{1}{4}$  SE $\frac{1}{4}$  Section 2, T.17N., R.23E., M.D.B.&M. The point of diversion is described as being within the NE $\frac{1}{4}$  SE $\frac{1}{4}$  of said Section 2. Application 51571 became ready for the State Engineer's action March 13, 1988.<sup>1</sup>

II.

Water Resource-Reconnaissance Series Report #59, titled "Water Resources Appraisal of the Carson River Basin, Western Nevada", was prepared cooperatively by the Geological Survey, U.S. Department of the Interior and State of Nevada, Department of Conservation and Natural Resources. For the purposes of that report, the Carson River Basin was divided into seven hydrologic subareas; Carson Valley (Nevada part only), Eagle Valley, Dayton Valley, Churchill Valley, Carson Desert, Packard Valley and White Plains.<sup>2</sup>

III.

On January 22, 1973, the State Engineer designated and described the Dayton Valley Ground Water Basin as a ground water basin in need of additional administration as provided for in NRS 534.120.<sup>3</sup>

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<sup>1</sup> Public record in the office of the State Engineer, Application 51571.

<sup>2</sup> Water Resources-Reconnaissance Series Report #59, public record in the office of the State Engineer.

<sup>3</sup> State Engineer's Order No. 487, dated January 22, 1973, official records in the office of the State Engineer.

FINDINGS OF FACT

I.

The perennial yield of a hydrologic system is the maximum amount of water of usable chemical quality that can be consumed economically each year for an indefinite period of time. 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.<sup>4</sup>

If the perennial yield is continually exceeded, ground water levels will decline until the ground water reservoir is depleted. Withdrawals of ground water in excess of the perennial yield contribute to adverse conditions such as water quality degradation, storage depletion, reduced pumpage, uneconomical pumping lifts, land subsidence and reversal of ground water gradients which could result in significant changes in the recharge-discharge relationship. The conditions have developed in several other ground water basins within the State of Nevada where storage depletion and declining water levels have been recorded and documented.<sup>5</sup>

The estimated ground water recharge to the Dayton Valley Groundwater Basin by precipitation is 7,900 acre-feet per year. An additional 1,545 acre-feet is added from subsurface flow through alluvium from Eagle Valley and Carson Valley.<sup>2</sup> Therefore, the perennial yield of Dayton Valley is 9,445 acre-feet per year.

Permits and certificates have been issued under existing rights for more than 30,000 acre-feet annually of ground water within Dayton Valley.<sup>6</sup>

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

<sup>5</sup> See attached Appendix of References.

<sup>6</sup> Public record in the office of the State Engineer, Hydrographic Basin Abstract 8-103.

The State Engineer finds that permitted ground water appropriations in the Dayton Valley Ground Water Basin substantially exceed the perennial yield of the basin. The State Engineer further finds that the approval of Application 51571 would conflict with existing rights and be detrimental to the public interest.

II.

The State Engineer has previously denied applications to appropriate ground water from Dayton Valley for irrigation, quasi-municipal and municipal uses on the grounds that "Withdrawals of additional ground water in a basin in which appropriations of ground water substantially exceed the perennial yield of the basin would, therefore, adversely affect existing rights and be detrimental to the public interest and welfare".<sup>7</sup> The State Engineer finds that the proposed use under Application 51571 is similar to that under the previously denied applications.

CONCLUSIONS

I.

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

II.

The State Engineer is prohibited by law from granting a permit where:<sup>9</sup>

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

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<sup>7</sup> Rulings 2084, 2493, 2583, 2588, 2593, 3022, 3708, 3874 and 3933, public records in the office of the State Engineer.

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

<sup>9</sup> NRS 533.370(3).

Where a previous application for a similar use of water within the same basin has been rejected on these grounds, a new application may be denied without publication.<sup>9</sup>

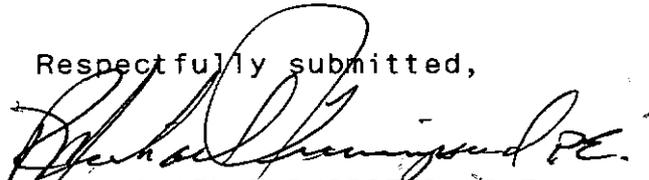
III.

Existing ground water rights exceed the perennial yield in the Dayton Valley Ground Water Basin and in the Stagecoach Sub-Area. The State Engineer concludes that the approval of an additional appropriation under Application 51571 from the limited ground water reservoir would adversely affect existing rights and be detrimental to the public interest.

RULING

Application 51571 is denied on the grounds that the granting of this application for an appropriation of ground water in a basin where the water rights of record exceed the perennial yield would conflict with existing rights and be detrimental to the public interest.

Respectfully submitted,



R. MICHAEL TURNIPSEED, P.E.  
State Engineer

RMT/RSR/pm

Dated this 19th day of  
October, 1994.

## APPENDIX OF REFERENCES

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