

IN THE OFFICE OF THE STATE ENGINEER

IN THE MATTER OF APPLICATIONS 41027)
AND 44586 FILED TO APPROPRIATE THE)
PUBLIC WATERS OF AN UNDERGROUND)
SOURCE IN SUN VALLEY, WASHOE COUNTY,))
NEVADA.)

RULING

GENERAL

Application 41027 was filed on April 7, 1980, by Ivan D. Pfennig to appropriate 0.10 c.f.s. of water from an underground source for quasi-municipal purposes within portions of the E1/2 Section 13, T.20N., R.19E., M.D.B.&M. The point of diversion is described as being within the SW1/4 NE1/4 Section 13, T.20N., R.19E., M.D.B.&M.¹

Application 44586 was filed on October 2, 1981, by P.T.L. Investments to appropriate 0.0168 c.f.s. of water from an underground source for quasi-municipal purposes within portions of the SW1/4 NE1/4 Section 13, T.20N., R.19E., M.D.B.&M. The point of diversion is described as being within the SW1/4 NE1/4 Section 13, T.20N., R.19E., M.D.B.&M.¹

Water Resources Reconnaissance Series Report No. 43, "Water Resources Appraisal of the Warm Springs-Lemmon Valley Area, Washoe County, Nevada", by F. Eugene Rush and Patrick A. Glancy was prepared cooperatively by the Nevada Department of Conservation and Natural Resources, Division of Water Resources, and U.S. Department of the Interior, Geological Survey.²

FINDINGS OF FACT

I.

The Sun Valley Ground Water Basin was designated by the State Engineer on March 1, 1978.³

II.

The estimated perennial yield of the ground water basin is approximately 25 acre-feet per year.⁴

¹ Public record in the office of the State Engineer. Well logs of domestic wells in Sun Valley Ground Water Basin.

² Water Resources Reconnaissance Series Report No. 43, "Water Resources Appraisal of the Warm Springs-Lemmon Valley Area, Washoe County, Nevada", by F. Eugene Rush and Patrick A. Glancy was prepared cooperatively by the Nevada Department of Conservation and Natural Resources, Division of Water Resources, and U.S. Department of the Interior, Geological Survey in November 1947.

³ State Engineer's Order No. 708, March 1, 1978, public record in the office of the State Engineer.

III.

Certificates have been issued under ground water permits which could be used to divert 14.4 acre-feet of water per year from the Sun Valley Ground Water Basin.¹ There are a number of domestic wells currently in use within Sun Valley and the total pumpage from these wells exceeds the perennial yield of the basin.

IV.

The proposed points of diversion under Applications 41027 and 44586 are at higher elevations than the points of diversion for the certificated rights in this basin.

V.

The approval of Applications 41027 and 44586 would authorize the additional withdrawal of 30.03 acre-feet of ground water which would exceed the perennial yield of the ground water basin. The perennial yield of a ground water reservoir may be defined as the maximum amount of water of adequate quality that can be withdrawn and consumed economically each year for an indefinite period. If perennial yield is exceeded on a continual basis, water levels will decline until adverse conditions develop including but not limited to: cones of depression, declining water tables, increased economic pumping lifts, reversal of ground water gradients which may cause migration of poor quality water into good quality zones, land subsidence, decreased flows at surface discharge areas (springs, seeps, etc.), and water quality deterioration. These conditions are well documented in several ground water basins in the State of Nevada where withdrawals have exceeded recharge of perennial yield.⁵

CONCLUSIONS

I.

The State Engineer has jurisdiction of the parties and the subject matter of this action.⁶

II.

The State Engineer is prohibited by law from granting a permit under an application to appropriate the public waters where:⁶

- 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.

⁵ See Appendix of References.

⁶ NRS 533.025 and NRS 533.030(1).

⁷ NRS 533.370(3).

III.

Existing rights and concentration of existing domestic wells within the Sun Valley Ground Water Basin exceed the very limited recharge and perennial yield of the basin.^{1, 2}

RULING

Applications 41027 and 44586 are hereby denied on the grounds that their granting would tend to impair the value of existing rights and be otherwise detrimental to the public welfare and further that there is no unappropriated water in the source.

Respectfully submitted,



PETER G. MORROS
State Engineer

PGM/KN/bl

Dated this 17th day of
April, 1985.

APPENDIX OF REFERENCES

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Methods of Determining Permeability, Transmissibility and Drawdown, U.S. Geological Survey Water Supply Paper 1536-1, R.H. Brown, J.G. Ferris, C.E. Jacob, D.B. Knowles, R.R. Meyer, H.E. Skibitzke and C.F. Theis, 1963.

Subsidence in Las Vegas Valley, John w. Bell, Nevada Bureau of Mines and Geology Bulletin 95.

Subsidence in United States due to Ground-Water Overdraft - A Review, J.F. Poland, Proceedings of the Irrigation and Drainage Division Specialty Conference, April 1973, American Society of Civil Engineers.