

IN THE OFFICE OF THE STATE ENGINEER

IN THE MATTER OF APPLICATIONS 49054)
AND 49056 FILED TO APPROPRIATE THE)
PUBLIC WATERS OF AN UNDERGROUND)
SOURCE IN PANACA VALLEY, LINCOLN)
COUNTY, NEVADA.)

RULING

GENERAL

Application 49054 was filed on May 17, 1985, by Landon and Wanda G. Frei to appropriate 2.0 c.f.s. of water from an underground source for irrigation and domestic purposes on 82.26 acres of land within the N1/2 N1/2 Section 17, T.2S., R.68E., M.D.B.&M. The point of diversion is described as being within the NW1/4 NW1/4 Section 17, T.2S., R.68E., M.D.B.&M.¹

Application 49056 was filed on May 17, 1985, by June W. Cox Pete to appropriate 2.0 c.f.s. of water from an underground source for irrigation purposes on 80 acres of land within the S1/2 SE1/4 Section 35, T.2S., R.67E. and the N1/2 NE1/4, SW1/4 NE1/4 Section 2, T.3S., R.67E., M.D.B.&M. The point of diversion is described as being within the NW1/4 NE1/4 Section 2, T.3S., R.67E., M.D.B.&M.¹

Water Resources Reconnaissance Series Report 27, "Ground-Water Appraisal of the Meadow Valley Area, Lincoln and Clark Counties, Nevada", by F. Eugene Rush, Geologist, was prepared cooperatively by the Nevada Department of Conservation and Natural Resources, Division of Water Resources, and the U.S. Department of the Interior, Geological Survey. This report is available for review in the office of the State Engineer.

Water Resources Bulletin No. 7, "Geology and Ground Water in the Meadow Valley Wash Drainage Area, Nevada, Above the Vicinity of Caliente", by David A. Phoenix and others, was prepared cooperatively by the State of Nevada, office of the State Engineer, and the U.S. Department of the Interior, Geological Survey. This report is available for review in the office of the State Engineer.

Panaca Valley is one of eight valleys in southeastern Nevada which are all a part of the Colorado River drainage system known as the Meadow Valley Area.

FINDINGS OF FACT

I.

By Order dated January 17, 1980, the State Engineer designated and described the Panaca Valley Ground Water Basin as a ground water basin in need of additional administration under the provisions of NRS Chapter 534.¹

¹ Public record in the office of the State Engineer.

II.

The Panaca Valley is part of a drainage system which includes seven other basins. The basins in this drainage system include Patterson, Spring, Eagle, Dry, Rose, Panaca, Clover, and Lower Meadow Valley. These basins, in downstream order, are hydrologically interrelated and therefore development of the ground water resource in one valley may intercept the supply of water that would reach the next valley down gradient. Therefore, consideration is given to the perennial yield of the entire drainage area. The preliminary perennial yield of the area is considered to be approximately 25,000 acre-feet.²

III.

Existing certificated and permitted ground water rights in the Panaca Valley Ground Water Basin total over 28,000 acre-feet per year. The existing certificated and permitted ground water rights in Patterson, Spring, Eagle, Dry, Rose, Clover Valleys, and Lower Meadow Valley Wash total over 28,000 acre-feet per year. Thus the total existing water rights in the drainage system exceed 50,000 acre-feet per year.¹

IV.

The perennial yield of a ground water reservoir may be defined as the maximum amount of water of usable chemical quality that can be withdrawn and consumed economically each year for an indefinite period of time. If the perennial yield is continually exceeded, water levels will decline until the ground water reservoir is depleted of water of usable quality or until the pumping lifts become uneconomical to maintain.³

V.

Ground water pumpage within Panaca Valley amounted to an estimated total of 13,552 acre-feet in 1982, 11,183 acre-feet in 1983, and 7,212 acre-feet in 1984, determined by pumpage inventories conducted by the office of the State Engineer.¹

VI.

It has been determined that ground water levels within the irrigable lands proposed under Applications 49054 and 49056 are subject to and influenced by waters from secondary recharge of existing irrigation rights from Big Springs. The monitoring program conducted by the State Engineer's office from 1967-1984 still shows a decline in water table levels up to 8 feet within the areas irrigated from Big Springs and as much as 23 feet within other areas of the basin.¹

VII.

Ground water levels measured in six monitor wells within the basin have experienced declines during the period 1968 to 1983.¹

² Water Resources-Reconnaissance Series Report 27, p. 26.

³ Water Supply Paper 1832, p. 39, U.S. Geological Survey; NRS 534.110(4).

CONCLUSIONS

I.

The State Engineer has jurisdiction of the parties and the subject matter of this action.⁴

II.

The State Engineer is prohibited by law⁵ from granting a permit under an application to appropriate the public waters where:

- 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 welfare.

III.

If Applications 49054 and 49056 were granted, additional land would be irrigated. This would result in additional consumptive use by farm land irrigation. The additional withdrawals and consumption would remove water from the ground water reservoir which would not be replaced, resulting in depletion of the ground water reservoir, or would be replaced by infiltrating surface water that would otherwise serve existing rights.

Additional withdrawal and consumption of the ground water resource would contribute detrimentally to an existing condition of declining ground water levels within the basin. This additional withdrawal and consumption of underground water for irrigation would, therefore, conflict with existing rights and threaten to prove detrimental to the public welfare.

⁴ NRS 533.025 and NRS 533.030(1).

⁵ NRS 533.370(3).

RULING

Applications 49054 and 49056 are herewith denied on the grounds that this appropriation of underground water for the irrigation of additional lands would tend to impair the value of existing rights and would be detrimental to the public interest and welfare within the Panaca Valley Ground Water Basin. The irrigation of additional lands within the Panaca Valley Ground Water Basin under these conditions is not considered to be a preferred use of the limited resource as provided under NRS Chapter 534.

Respectfully submitted,



PETER G. MORROS
State Engineer

PGM/MD/bl

Dated this 25th day of
July, 1985.