

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

IN THE MATTER OF APPLICATION 55469)
FILED TO APPROPRIATE THE PUBLIC)
WATERS OF AN UNDERGROUND SOURCE IN)
PANACA VALLEY GROUND WATER BASIN)
(BASIN 203), LINCOLN COUNTY, NEVADA.)

RULING

3927

GENERAL

I.

Application 55469 was filed on November 19, 1990 by Steven W. Klomp and Torrie O. Klomp to appropriate 0.5 cubic feet per second (c.f.s.) of water from an underground source for irrigation and domestic purposes on eleven acres of land within the S1/2 of SE1/4 Section 6, and N1/2 of NE1/4 Section 7, T.2S., R.68E., M.D.B.&M. The point of diversion is described as being within the SE1/4 of SE1/4 Section 6, T.2S., R.68E., M.D.B.&M. The point of diversion is within the Panaca Valley Ground Water Basin (Basin 203).¹

II.

"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, and the U.S. Geological Survey.² This report describes the water resources of Panaca Valley Groundwater Basin.

"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 in cooperation with the U.S. Geological Survey.³ This report describes the water resources of Panaca Valley Groundwater Basin.

¹ Public record in the office of the State Engineer, Nevada Division of Water Resources.

² Reconnaissance Series Report 27, July 1964. The report also will be specified as "GWR Reconnaissance Series #27" in footnotes.

³ Water Resources Bulletin No. 7, 1948. The report also will be specified as "WR Bulletin #7" in footnotes.

III.

The Panaca Valley is part of the Meadow Valley Area drainage system which includes eight Valley basins situated in the south eastern part of Nevada. The basins in this drainage system, listed in order by basin number,⁴ are Dry Valley (Basin 198), Rose Valley (Basin 199), Eagle Valley (Basin 200), Spring Valley (Basin 201), Patterson Valley (Basin 202), Panaca Valley (Basin 203), Clover Valley (Basin 204) and Lower Meadow Valley Wash Basin (Basin 205). Meadow Valley Wash is the common surface water drainage channel for the area.^{1, 5, 6}

FINDINGS OF FACT

I.

The headwaters of Meadow Valley Wash originate in Spring Valley (Basin 201), in the northeastern part of the Meadow Valley Wash drainage area, and flows downstream through Spring Valley via Camp Valley Creek and Meadow Valley Wash, thence flows downstream through Eagle Valley (Basin 200), Rose Valley (Basin 199), Dry Valley (Basin 198),⁷ through Condor Canyon into Panaca Valley (Basin 203). ^{1, 5, 6}

II.

By Order No. 734, dated January 17, 1980, the State Engineer designated and described the Panaca Valley Ground Water Basin as a groundwater basin in need of additional administration under the provisions of NRS Chapter 534.¹

III.

The State Engineer has denied previous applications to appropriate underground water in Panaca Valley Ground Water Basin for irrigation use, and has determined that pursuant to NRS 534.120 the use of underground water for irrigation of additional

⁴ Basin number means "ground water basin number" as determined by the State Engineer.

⁵ GWR Reconnaissance #27.

⁶ WR Bulletin #7.

⁷ Eagle Valley, Rose Valley and Dry Valley collectively also are known as Ursine Valley.

land within Panaca Valley Ground Water Basin is not a preferred use of the limited underground water resource.^{1, 8}

IV.

The State Engineer may deny a new application without publication of the application when a previous application for a similar use of water within the same basin has been rejected as provided by Nevada Water Law.⁹

V.

The State Engineer finds that the perennial yield of a groundwater reservoir is 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 groundwater reservoir is depleted of water of usable quality or until the pumping lifts become uneconomical to maintain.¹⁰

VI.

The State Engineer finds that the existing certificated and permitted underground water rights in Panaca Valley Ground Water Basin total approximately 26,688 acre-feet annually (AFA). The estimated perennial yield of Panaca Valley Ground Water Basin is 9,000 AFA.¹ Therefore, the existing certificated and permitted underground water rights far exceed the perennial yield of the basin.

VII.

The water levels in nine wells in Panaca Valley Basin were monitored by the Nevada State Engineer's staff during the twenty-three year period 1964 through 1986.¹ These wells are located at various sites extending from the northern part to the southern part of the basin. Review of the long-term measurement

⁸ Applications denied: 36698, 37567, 37568, 38857, 40389, 40456, 40846, 40982, 42407, 42534, 43155, 45946, 46128, 47326, 49054 and 49056.

⁹ Nevada Revised Statutes (NRS) 533.370 (3).

¹⁰ GWR Reconnaissance Series #27, pg. 25.

data for these wells determined that the general trend is a continuing slight decrease in the water table elevation. The State Engineer finds that the Panaca Valley ground water system may be experiencing a long-term equilibrium condition between recharge and discharge, or that an imbalance condition exists for which discharge slightly exceeds recharge.

The water levels in four wells in Panaca Valley Basin were monitored during the nineteen year period 1946 to 1964.¹¹ All four wells exhibited a slight average annual decrease of the water levels. The State Engineer finds that the general trend is one of very slow local decline of ground-water levels, which indicates that water was being taken from storage and that locally, discharge exceeds recharge.¹¹

VIII.

The United States Geological Survey well (2S/68-8b5), located within NW1/4 Section 8, T.2S., R.68E., M.D.B.&M., has been monitored for the thirty-eight year period 1949 through 1986. The State Engineer finds that the water table in this well declined from approximately 12.5 feet below ground surface in 1949 to 17.5 feet in 1986, a long-term decline of approximately 5.0 feet.^{1,11}

IX.

The State Engineer finds that the basins in the Meadow Valley area drainage system, in downstream order, are hydrologically interrelated; and therefore, development of the ground water resource in one valley may interrupt the supply of water that would reach the next valley downstream.¹²

CONCLUSIONS

I.

The State Engineer has jurisdiction of the parties and the subject matter of this action.¹³

¹¹ GWR Reconnaissance Series #27, pgs. 24, 31 and Figures 5 and 6.

¹² GWR Reconnaissance Series #27, pg. 26.

¹³ NRS Chapters 533 and 534.

II.

The State Engineer is prohibited by law from granting a permit under an application to appropriate the public waters where:¹⁴

- A. There is no unappropriated water in 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 existing certificated and permitted underground water rights in Panaca Valley Ground Water Basin significantly exceed the estimated perennial yield of the basin.

The State Engineer has denied previous applications to appropriate underground water in Panaca Valley Ground Water Basin for irrigation use.

IV.

Evaluation of water level measurements in various wells in Panaca Valley Ground Water Basin has determined that the basin may be experiencing a long-term equilibrium condition between recharge and discharge, or an imbalance condition for which discharge slightly exceeds recharge. The State Engineer concludes that additional withdrawals of underground water for irrigation use would adversely affect an equilibrium condition, or aggravate an imbalance condition.

V.

Panaca Valley Basin underground water system experiences recharge in part by infiltration of water from the stream flow in Meadow Valley Wash in the northern area (ie the upstream area) of the Basin. The underground water migrates down slope to the southern area of the basin, where some of the underground water discharges as effluent seepage water into the Meadow Valley Wash. The effluent water flows downstream into Lower Meadow Valley Wash

¹⁴ NRS 533.370(3).

Basin, where some of the stream flow recharges the underground water system by infiltration, and some of the stream flow is diverted to accommodate surface water rights.

VI.

Approval of application 55469 would result in an appropriation of the limited underground water resources in Panaca Valley Basin for irrigation of additional land, which is not a preferred use and further would result in an additional appropriation of underground water in excess of the perennial yield of Panaca Valley Basin.

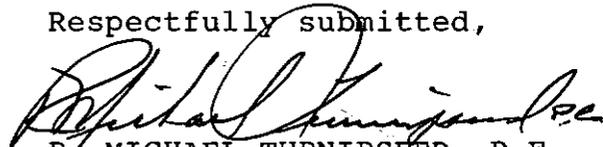
VII.

The State Engineer concludes that these impacts would adversely affect and conflict with existing underground and surface water rights in Panaca Valley Basin and Lower Meadow Valley Wash Basin, and would be detrimental to the public interest.

RULING

Application 55469 is hereby denied on the grounds that the proposed appropriation of water described by the application would conflict with existing rights and would be detrimental to the public interest.

Respectfully submitted,


R. MICHAEL TURNIPSEED, P.E.
State Engineer

RMT/RLT/pm

Dated this 21st day of
January, 1993.