IN THE OFFICE OF THE STATE ENGINEER

IN THE MATTER OF APPLICATION 34899) FILED TO APPROPRIATE THE PUBLIC) WATERS OF AN UNDERGROUND SOURCE) WITHIN THE MIDDLE REESE RIVER VALLEY) DESIGNATED GROUND WATER BASIN,) LANDER COUNTY, NEVADA.)

RULING

GENERAL

I.

Application 34899 was filed on January 20, 1978, by John Filippini to appropriate 4.0 c.f.s. of water from an underground source for irrigation and domestic purposes on 160 acres of land within Lot 4, SW1/4 NW1/4 Section 2 and Lot 1, SE1/4 NE1/4 Section 3, T.26N., R.43E., M.D.B.&M. The point of diversion is described as being within the SW1/4 NW1/4 Section 2, T.26N., R.43E., M.D.B.&M.[1]

II.

In 1963, Water Resources Reconnaissance Series Report No. 19 entitled "Ground Water Appraisal of Antelope-Middle Reese River Valleys, Lander County, Nevada", by E. G. Crothwaite, 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. A copy of this report is available for review in the office of the State Engineer.

FINDINGS OF FACT

I.

The State Engineer designated a portion of the Middle Reese River Valley Ground Water Basin under the provisions of NRS 534.030 on August 5, 1964.[2]

II.

The point of diversion under Application 34899 is described as being within the designated portion of Middle Reese River Valley Ground Water Basin.[2]

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[1] Public record in the office of the State Engineer.

[2] State Engineer's Order No. 276 dated August 5, 1964, public record in the office of the State Engineer.

III.

An estimate of the average annual recharge to the ground water reservoir in Middle Reese River Valley is approximately 14,000 acre-feet.[3] 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. If the perennial yield is continually exceeded, ground 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. Perennial yield cannot exceed the natural replenishment to an area indefinitely and ultimately is limited to the maximum amount of natural discharge that can be salvaged for beneficial use.[4]

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 ground water gradients which could result in significant changes in the recharge-discharge relationship. These conditions have developed in several other ground water basins within the State of Nevada where storage depletion and declining water tables have been recorded and documented.[4]

IV.

Certificates of appropriation from the ground water reservoir have been issued in the amount of 56,700 acre-feet per year. Additionally, the State Engineer has issued permits which would allow the diversion of 16,000 acre-feet per year when fully developed. Therefore, a total of 72,700 acre-feet per year of water right is currently appropriated from the Middle Reese River Valley Ground Water Basin.[1]

V.

According to test hydrograph data compiled by the U.S. Geological Survey for the Middle Reese River Valley Ground Water Basin, wells located within the central cone of depression caused by pumping have experienced an average static water level decline of 35 to 45 feet during the period 1966-1981. This central cone of depression is located within the NE quadrant of T.25N., R.42E., M.D.B.&M., and is approximately 9 miles southwest from the proposed point of diversion. Wells located in the nearby vicinity of the proposed point of diversion have experienced an average static water level decline of 10-15 feet for the same period.[1]

VI.

Pumpage inventories have been maintained on a year-to-year basis since 1981 within the Middle Reese River Valley Ground Water Basin.[5]

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[3] Water Resources Reconnaissance Series Report No. 19, public record in the office of the State Engineer.

[4] See attached Appendix of References.

[5] Pumpage inventory, Middle Reese River Valley, public record in the office of the State Engineer.

The ground water pumpage inventory totals for the period 1981-1984 are as follows:

1981 - 29,285 acre-feet
1982 - 27,402 acre-feet
1983 - 25,535 acre-feet
1984 - 24,460 acre-feet

These totals also include ground water used to supplement surface water rights.[4]

VII.

There are no existing ground water rights of record for the proposed place of use under Application 34899. However, a surface water right exists to irrigate 92.81 acres of said proposed place of use from Watt Creek under Permit 3437, Certificate 748, currently in the name of James L. Watt.[1]

VIII.

Should Application 34899 be granted, an additional 480 acre-feet per year, based upon 3.0 acre-feet per acre, could be appropriated from the ground water reservoir. To date, 16 applications to appropriate water for irrigation purposes within Middle Reese River Ground Water Basin have been denied. Fifteen of those applications had an earlier priority date than Application 34899.[1]

CONCLUSIONS

I.

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

II.

The State Engineer is prohibited by law from granting a permit under an application to appropriate the public waters where:[7]

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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[6] NRS Chapters 533 and 534.

[7] NRS 533.370(3).

III.

Existing certificated water rights and the current pumpage inventory total for the Middle Reese Valley Ground Water Basin exceed the estimated average annual recharge from precipitation. The potential also exists for additional pumpage, and therefore an increase in the static water level decline, under existing permitted ground water rights which have not yet been fully developed. The granting of additional water rights for irrigation from this limited ground water resource, would adversely affect existing rights and threaten to prove detrimental to the public welfare.

IV.

The State Engineer is authorized and directed to designate preferred uses of water within designated ground water areas.[8] The consumptive use of additional ground water for irrigation purposes is not considered to be a preferred use of the limited ground water resource within the Middle Reese Ground Water Basin.

RULING

Application 34899 is herewith denied on the grounds that the appropriation of additional ground water for irrigation purposes is not considered to be a preferred use of the limited resource within the designated basin and that the granting thereof would tend to impair the value of existing rights and would be detrimental to the public interest and welfare.

Respectfully submitted,

PETER G. MORROS
State Engineer

PGM/SHF/bl

Dated this 13th day of June, 1985.

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[8] NRS 534.120(2).

APPENDIX OF REFERENCES

Land Subsidence in Las Vegas Valley, 1935-63, Information Series No. 5 U.S.G.S.

State of Nevada, Department of Highways, Report on Land Subsidence in Las Vegas Valley.

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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.