IN THE OFFICE OF THE STATE ENGINEER

IN THE MATTER OF APPLICATION 39902) FILED TO APPROPRIATE THE PUBLIC) WATERS OF AN UNDERGROUND SOURCE IN) CARSON DESERT GROUNDWATER BASIN,) CHURCHILL COUNTY, NEVADA.)

RULING

GENERAL

I.

Application 39902 was filed On December 6, 1979, by Glen Weston to appropriate 1.0 c.f.s. of water from an underground source for irrigation purposes within the NE1/4 SW1/4 Section 1, T.18N., R.26E., M.D.B.&M. The point of diversion is described as being within the NE1/4 SW1/4 Section 1, T.18N., R.26E., M.D.B.&M. Application 39902 became ready for action by the State Engineer's office on April 25, 1981.[1]

II.

Water Resources-Reconnaissance Series Report 59, "Water-Resources Appraisal of the Carson River Basin, Western Nevada", was prepared in 1975 and is available from the office of the State Engineer.[2]

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

[2] Water Resources-Reconnaissance Series Report 59, "Water-Resources Appraisal of the Carson River Basin, Western Nevada", by Patrick A. Glancy and T.L. Katzer, prepared cooperatively by the Nevada Department of Conservation and Natural Resources, Division of Water Resources, and Geological Survey, U.S. Department of the Interior, 1975.

III.

Open File Report 80-2042, "Geohydrology of the Basalt and Unconsolidated Sedimentary Aquifers in the Fallon Area, Churchill County, Nevada", was prepared in 1981 and a copy is available for review in the office of the State Engineer.[3]

FINDINGS OF FACT

I.

On July 6, 1978, the State Engineer designated the Carson Desert Groundwater Basin as a basin in need of additional administration under the provisions NRS Chapter 534.[4]

II.

On October 4, 1978, the State Engineer issued Order 722 which provided, in part, that the irrigation of additional land using underground water is not a preferred use of the limited underground water resource and that all applications filed after October 4, 1978, to appropriate underground water to irrigate additional land within the Carson Desert Groundwater Basin will be denied.[5]

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[3] "Geohydrology of the Basalt and Unconsolidated Sedimentary Aquifers in the Fallon Area, Churchill County, Nevada", by Patrick A. Glancy, Open-File Report 80-2042, prepared cooperatively by Nevada Division of Water Resources and U.S. Department of the Interior, Geological Survey, 1981.

[4] State Engineer's Order 716 dated July 6, 1978, public record in the office of the State Engineer.

[5] State Engineer's Order 722 dated October 4, 1978, public record in the office of the State Engineer.

III.

The estimated potential recharge to the ground water system is 1,300 acre-feet annually.[6] However, "An unknown, but probably small, part of that 1,300 acre-feet per year contributes to aquifers in the Fallon Area."[7] "Thus, for practical purposes, streamflows of the Carson River and Truckee Canal dominate the inflow to the ground water system in the Fallon area."[7]

IV.

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.[2]

V.

Permitted and certificated water rights from underground sources existing within the Carson Desert Groundwater Basin total 44,265 acre-feet annually.[1]

CONCLUSIONS

I.

The State Engineer has jurisdiction of the parties and the subject matter of this action.[8]

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6 Page 48, Footnote 2.

7 Page 10, Footnote 2.

8 NRS 533.025 and NRS 533.030, subsection 1.

II.

The State Engineer is prohibited by law from granting a permit under an application to appropriate the public waters where:[9]

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.

III.

Existing water rights within the Carson Desert Groundwater Basin exceed the perennial yield of the basin. Hydrologic data and information available to the State Engineer provide substantial evidence of the principal features of the aquifer system, including the limited recharge-discharge element zones of good quality water. The record of evidence indicates that overdraft on a continued basis will influence the migration of poor quality water into good quality zones. Based on this record of evidence, the State Engineer concludes that the granting of the subject application would adversely affect existing rights.

IV.

The approval of Application 39902 would authorize the additional withdrawal of 160 acre-feet of groundwater which would exceed the perennial yield of the Carson Desert Groundwater Basin.

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[9] NRS 533.370, subsection 3.

RULING

Application 39902 must be denied on the grounds that irrigation is not a preferred use of the limited resource in the Carson Desert Groundwater Basin and would adversely affect existing rights, and therefore approval would not be in the public interest.

Respectfully submitted,

Peter G. Morros
State Engineer

PGM/DJL/pm

Dated this 24th day of

January, 1990