

IN THE OFFICE OF THE STATE ENGINEER

IN THE MATTER OF APPLICATIONS 35507, )  
35508, 35509, 35511, 35512, 35684, 35685 AND )  
36133 FILED TO APPROPRIATE THE PUBLIC )  
WATERS OF AN UNDERGROUND SOURCE IN )  
JEAN LAKE VALLEY, CLARK COUNTY, )  
NEVADA. )

RULING

GENERAL

Application 35507 was filed on June 5, 1978, by Arnold G. Balliet to appropriate 2.7 c.f.s. of water from an underground source for irrigation and domestic purposes on 160 acres of land within the SW1/4 Section 7, T.24S., R.61E., M.D.B.&M. The point of diversion is described as being within the NE1/4 SW1/4 Section 7, T.24S., R.61E., M.D.B.&M.<sup>1</sup>

Application 35508 was filed on June 5, 1978, by Cynthia M. Faatz to appropriate 2.7 c.f.s. of water from an underground source for irrigation and domestic purposes on 160 acres of land within the SW1/4 Section 8, T.24S., R.61E., M.D.B.&M. The point of diversion is described as being within the NW1/4 SW1/4 Section 8, T.24S., R.61E., M.D.B.&M.<sup>1</sup>

Application 35509 was filed on June 5, 1978, by John E. Faatz to appropriate 2.7 c.f.s. of water from an underground source for irrigation and domestic purposes on 160 acres of land within the NW1/4 Section 8, T.24S., R.61E., M.D.B.&M. The point of diversion is described as being within the NW1/4 NW1/4 Section 8, T.24S., R.61E., M.D.B.&M.<sup>1</sup>

Application 35511 was filed on June 5, 1978, by Carole Faatz to appropriate 2.7 c.f.s. of water from an underground source for irrigation and domestic purposes on 160 acres of land within the NE1/4 Section 7, T.24S., R.61E., M.D.B.&M. The point of diversion is described as being within the NW1/4 NE1/4 Section 7, T.24S., R.61E., M.D.B.&M.<sup>1</sup>

Application 35512 was filed on June 5, 1978, by John A. Faatz to appropriate 2.7 c.f.s. of water from an underground source for irrigation and domestic purposes on 160 acres of land within the SE1/4 Section 7, T.24S., R.61E., M.D.B.&M. The point of diversion is described as being within the NW1/4 SE1/4 Section 7, T.24S., R.61E., M.D.B.&M.<sup>1</sup>

-----  
<sup>1</sup> Public record in the office of the State Engineer.

Application 35684 was filed on August 2, 1978, by Harry R. Seymour to appropriate 2.7 c.f.s. of water from an underground source for irrigation and domestic purposes on 160 acres of land within the SE1/4 Section 32, T.24S., R.61E., M.D.B.&M. The point of diversion is described as being within the SE1/4 SE1/4 Section 32, T.24S., R.61E., M.D.B.&M.<sup>1</sup>

Application 35685 was filed on August 2, 1978, by Lillian E. Seymour to appropriate 2.7 c.f.s. of water from an underground source for irrigation and domestic purposes on 160 acres of land within the SW1/4 Section 33, T.24S., R.61E., M.D.B.&M. The point of diversion is described as being within the SE1/4 SW1/4 Section 33, T.24S., R.61E., M.D.B.&M.<sup>1</sup>

Application 36133 was filed on November 6, 1978, by George B. Kline, Jr., to appropriate 2.7 c.f.s. of water from an underground source for irrigation and domestic purposes on 160 acres of land within the NE1/4 Section 31, T.24S., R.60E., M.D.B.&M. The point of diversion is described as being within the SE1/4 NE1/4 Section 31, T.24S., R.60E., M.D.B.&M.<sup>1</sup>

In 1968, Water Resources Reconnaissance Series Report 46, "Water-Resources Appraisal of Mesquite-Ivanpah Valley Area, Nevada and California", by Patrick A. Glancy, was prepared cooperatively by the Nevada Department of Conservation and Natural Resources and the U.S. Department of the Interior, Geological Survey. This report is on file in the office of the State Engineer.

#### FINDINGS OF FACT

##### I.

Applications 35507, 35508, 35509, 35511, 35512, 35684, 35685 and 36133 were filed in support of Carey Act applications.<sup>1</sup>

##### II.

The estimated annual recharge to Jean Lake Valley is 100 acre feet and the preliminary estimate of perennial yield is 50 acre-feet.<sup>2, 3</sup> "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. Perennial yield cannot exceed the natural recharge to an area and ultimately is limited to the maximum quantity of natural discharge that can be salvaged for beneficial use."<sup>4</sup>

-----  
<sup>2</sup> Reconnaissance Report 46, p. 24.

<sup>3</sup> Reconnaissance Report 46, p. 2.

<sup>4</sup> Reconnaissance Report 46, p. 41.

III.

The approval of Applications 35507, 35508, 35509, 35511, 35512, 35684, 35685 and 36133 would authorize the withdrawal of 6400 acre-feet of ground water on a yearly basis which would substantially exceed the perennial yield of the ground water basin.

IV.

If perennial yield is exceeded on a continual basis, water levels will decline until adverse conditions develop including but not limited to:

- a. cones of depression,
- b. declining water tables,
- c. reversal of ground water gradients which may cause migration of poor quality water into good quality zones,
- d. land subsidence,
- e. decreased flows at surface discharge areas (springs, seeps, etc.).

These conditions are well documented in several ground water basins in the State of Nevada where withdrawals have exceeded recharge or perennial yield.<sup>5</sup>

CONCLUSIONS

I.

The State Engineer has jurisdiction of the parties and the subject matter of this action.<sup>6</sup>

II.

The State Engineer is prohibited by law from granting a permit where:

- A. there is no unappropriated water in 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.<sup>7</sup>

-----  
<sup>5</sup> See Appendix of References.

<sup>6</sup> NRS 533.025 and NRS 533.030, subsection 1.

<sup>7</sup> NRS 533.370.

RULING

Applications 35507, 35508, 35509, 35511, 35512, 35684, 35685 and 36133 are hereby denied on the grounds that there is insufficient water in the source for the proposed uses and that their granting would conflict with prior existing rights.

Respectfully submitted



Peter G. Morros  
State Engineer

PGM/KN/bl

Dated this 31st day of

December, 1984.

## 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.

Evaluation of the Water Resources of Lemmon Valley with Emphasis on Effects of Ground-Water Development to 1971, J.R. Harrill, Water Resources Bulletin No. 42, United States Geological Survey and State of Nevada, State Engineer's Office, Division of Water Resources, Department of Conservation and Natural Resources, 1972.

Hydrologic Response to Irrigation Pumping in Diamond Valley, Eureka and Elko Counties, Nevada, 1950-65, J.R. Harrill, Water Resources Bulletin No. 35, United States Geological Survey and State of Nevada, State Engineer's Office, Division of Water Resources, Department of Conservation and Natural Resources, 1968.

Effects of Irrigation Development on the Water Supply Quinn River Valley area, Nevada and Oregon, 1950-1964, C.J. Huxel, Jr., Water Resource Bulletin No. 34, United States Geological Survey and State of Nevada, State Engineer's Office, Division of Water Resources, Department of Conservation and Natural Resources, 1966.

Hydrologic Response to Irrigation Pumping in Hualapai Flat, Washoe, Pershing and Humboldt Counties, Nevada, 1960-1967, J.R. Harrill, Water Resource Bulletin No. 37, United States Geological Survey and State of Nevada, State Engineer's Office, Division of Water Resources, Department of Conservation and Natural Resources, 1969.

The Effects of Pumping on the Hydrology of Kings River Valley, Humboldt County, Nevada, 1957-1964, G.T. Malmberg and G.F. Worts, Jr., Water Resource Bulletin No. 31, United States Geological Survey and State of Nevada, State Engineer's Office, Division of Water Resources, Department of Conservation and Natural Resources, 1966.

Effects of Ground-Water Development on the Water Regimen of Paradise Valley, Humboldt County, Nevada, 1948-1968, and Hydrologic Reconnaissance of the Tributary Areas, J.R. Harrill and D.O. Moore, Water Resource Bulletin No. 39, United States Geological Survey, 1970.

Ground-Water Storage Depletion in Pahrump Valley, Nevada-California, 1962-75, J.R. Harrill, Open File Report 81-635, United States Geological Survey, 1982, prepared in cooperation with Nevada Division of Water Resources.

Development of a Relation for Steady State Pumping Rate for Eagle Valley Ground-Water Basin, Nevada, F.E. Arteaga, T.J. Durbin, United States Geological Survey, 1978, prepared in cooperation with Nevada Division of Water Resources.

Basic Ground-Water Hydrology, Ralph C. Heath, U.S. Geological Survey Water Supply Paper 2220, 1983.

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.