

IN THE OFFICE OF THE STATE ENGINEER

IN THE MATTER OF APPLICATIONS 33933, )  
33949, 33950, 33951, 33952, 33953, 33955, )  
34208, 34673, 35680, 36426, 36427, 36687, )  
36855, 37170 AND 37512 FILED TO )  
APPROPRIATE THE PUBLIC WATERS OF AN )  
UNDERGROUND SOURCE WITHIN THE )  
ELDORADO VALLEY GROUND WATER )  
BASIN, CLARK COUNTY, NEVADA. )

RULING

GENERAL

Application 33933 was filed on October 3, 1977, by Ethel H. Terracciano 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 11, T.28S., R.63E., M.D.B.&M. The point of diversion is described as being within the NW1/4 NE1/4 Section 11, T.28S., R.63E., M.D.B.&M.<sup>1</sup>

Application 33949 was filed on October 3, 1977, by LaLinda Sue Keeton 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 33, T.24S., R.63E., M.D.B.&M. The point of diversion is described as being within the NE1/4 NW1/4 Section 33, T.24S., R.63E., M.D.B.&M.<sup>1</sup>

Application 33950 was filed on October 3, 1977, by Carol Lynn Keeton Metcalf 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 28, T.24S., R.63E., M.D.B.&M. The point of diversion is described as being within the SE1/4 SW1/4 Section 28, T.24S., R.63E., M.D.B.&M.<sup>1</sup>

Application 33951 was filed on October 3, 1977, by Steven Lee Keeton 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 33, T.24S., R.63E., M.D.B.&M. The point of diversion is described as being within the SE1/4 NE1/4 Section 33, T.24S., R.63E., M.D.B.&M.<sup>1</sup>

Application 33952 was filed on October 3, 1977, by Catherine Keeton 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 34, T.24S., R.63E., M.D.B.&M. The point of diversion is described as being within the NE1/4 NW1/4 Section 34, T.24S., R.63E., M.D.B.&M.<sup>1</sup>

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

Application 33953 was filed on October 3, 1977, by Raymond Keeton 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 28, T.24S., R.63E., M.D.B.&M. The point of diversion is described as being within the SE1/4 SE1/4 Section 28, T.24S., R.63E., M.D.B.&M.<sup>1</sup>

Application 33955 was filed on October 3, 1977, by Fairy Faye Frank Keeton 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 27, T.24S., R.63E., M.D.B.&M. The point of diversion is described as being within the SE1/4 SW1/4 Section 27, T.24S., R.63E., M.D.B.&M.<sup>1</sup>

Application 34208 was filed on October 17, 1977, by Gary Steven Metcalf to appropriate 2.7 c.f.s. of water from an underground source for irrigation and domestic purposes on 150 acres of land within the NW1/4 Section 27, T.24S., R.63E., M.D.B.&M. The point of diversion is described as being within the NE1/4 NW1/4 Section 27, T.24S., R.63E., M.D.B.&M.<sup>1</sup>

Application 34673 was filed on December 1, 1977, by Frank E. Dunlap 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 10, T.27S., R.63E., M.D.B.&M. The point of diversion is described as being within the NE1/4 SE1/4 Section 10, T.27S., R.63E., M.D.B.&M.<sup>1</sup>

Application 35680 was filed on August 2, 1978, by Una F. Sloan to appropriate 0.5 c.f.s. of water from an underground source for irrigation purposes on 20 acres of land within the SE1/4 Section 22, T.24S., R.63E., M.D.B.&M. The point of diversion is described as being within the SE1/4 SE1/4 Section 22, T.24S., R.63E., M.D.B.&M.<sup>1</sup>

Application 36426 was filed on January 15, 1979, by Vera Grace Crowe to appropriate 0.5 c.f.s. of water from an underground source for irrigation and domestic purposes on 20 acres of land within the NW1/4 Section 23, T.24S., R.63E., M.D.B.&M. The point of diversion is described as being within the SW1/4 NW1/4 Section 33, T.24S., R.63E., M.D.B.&M.<sup>1</sup>

Application 36427 was filed on January 5, 1979, by Edward Crowe to appropriate 0.5 c.f.s. of water from an underground source for irrigation and domestic purposes on 20 acres of land within the NE1/4 Section 23, T.24S., R.63E., M.D.B.&M. The point of diversion is described as being within the SE1/4 NE1/4 Section 23, T.24S., R.63E., M.D.B.&M.<sup>1</sup>

Application 36687 was filed on February 9, 1979, by Wayne A. Conklin 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 10, T.27S., R.63E., M.D.B.&M. The point of diversion is described as being within the SW1/4 SW1/4 Section 10, T.27S., R.63E., M.D.B.&M.<sup>1</sup>

Application 36855 was filed on February 26, 1979, by Harris A. Hansen to appropriate 3.5 c.f.s. of water from an underground source for irrigation purposes on 320 acres of land within the N1/2 Section 29, T.24S., R.63E., M.D.B.&M. The point of diversion is described as being within the NE1/4 NE1/4 Section 29, T.24S., R.63E., M.D.B.&M.<sup>1</sup>

Application 37170 was filed on March 23, 1979, by Gerald W. McSwiggan to appropriate 3.5 c.f.s. of water from an underground source for irrigation and domestic purposes on 320 acres of land within the S1/2 Section 30, T.24S., R.63E., M.D.B.&M. The point of diversion is described as being within the SE1/4 SE1/4 Section 30, T.24S., R.63E., M.D.B.&M.<sup>1</sup>

Application 37512 was filed on April 2, 1979, by Ann L. Myer to appropriate 5.0 c.f.s. of water from an underground source for irrigation and domestic purposes on 320 acres of land within the S1/2 Section 28, T.25S., R.64E., M.D.B.&M. The point of diversion is described as being within the SE1/4 SE1/4 Section 28, T.25S., R.64E., M.D.B.&M.<sup>1</sup>

Water Resources - Reconnaissance Series Report 36 titled "Ground-Water Appraisal of the Eldorado - Paiute Valley Area, Nevada and California", was prepared cooperatively by the U.S. Geological Survey, Department of Interior and the Nevada Department of Conservation and Natural Resources.

### FINDINGS OF FACT

#### I.

The Eldorado - Paiute Valley area is in the extreme southern part of Nevada in Clark County. Eldorado Valley is topographically closed and has a central playa. Eldorado Valley is arid and the unconsolidated alluvium, where saturated, forms the only aquifer in the valley. The consolidated rocks are relatively impermeable and, except at surface discharge areas, are not significant sources of ground water.<sup>2</sup>

#### II.

Information available to the State Engineer indicates that the shallowest depth to water in existing wells in Eldorado Valley is 275 feet below land surface which is not considered to be an acceptable economic pumping lift for agricultural use.<sup>2</sup>

#### III.

The perennial yield of a ground water basin is 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, adverse conditions will develop which include, but are not limited to, 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 and provide substantial evidence of the adverse effect of these conditions.<sup>3</sup>

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<sup>2</sup> Water Resources - Reconnaissance Series Report 36.  
NRS 534.110.

<sup>3</sup> See footnote 2 and Appendix of References.

IV.

Information available to the State Engineer indicates that the subject applications were filed in support of proposed Carey Act and Desert Land Entry withdrawals, and therefore, are subject to the priority criteria set forth in the statute.<sup>4</sup>

V.

The subject applications represent a proposed combined withdrawal of 12,550 acre-feet of ground water annually which substantially exceeds the perennial yield of the Eldorado Valley Ground Water Basin. The perennial yield for the basin is identified as 500 acre-feet annually.<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>

III.

The requests for withdrawal of ground water under the subject applications substantially exceed the perennial yield of the ground water basin.

IV.

The depth to ground water within the basin exceeds acceptable economic pumping lifts for agricultural purposes.

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<sup>4</sup> NRS 533.357.

<sup>5</sup> See footnotes 1 and 2.

<sup>6</sup> NRS Chapters 533 and 534.

<sup>7</sup> NRS 533.370(3).

V.

The granting of the applications would result in depletion of ground water storage and, therefore, would not be in the public interest and welfare for the reasons set forth in Finding III.

**RULING**

Applications 33933, 33949, 33950, 33951, 33952, 33953, 33955, 34208, 34673, 35680, 36426, 36427, 36687, 36855, 37170 and 37512 are herewith denied on the grounds that the approval thereof would adversely effect existing rights and would be detrimental to the public interest and welfare.

Respectfully submitted



Peter G. Morros  
State Engineer

PGM/bl

Dated this 9th day of  
November, 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.