

IN THE MATTER OF APPLICATIONS )  
41084, 41085, 41086, 41087, 41088, )  
41259, 41260, 41261, 41262, 41479, )  
43797, 43798, 43799, 43800 AND )  
44437 FILED TO APPROPRIATE THE )  
PUBLIC WATERS OF AN UNDERGROUND )  
SOURCE IN EDWARDS CREEK VALLEY, )  
CHRUCHILL COUNTY, NEVADA. )

RULING

GENERAL

I.

Application 41084<sup>1</sup> was filed on April 14, 1980, by Estelle F. Hohnholt to appropriate 5.4 c.f.s. of water from an underground source for irrigation and domestic purposes on 320 acres of land within the N1/2 Section 32, T.20N., R.38E., M.D.B.&M. The point of diversion is described as being within the SW1/4 NW1/4 Section 32, T.20N., R.38E., M.D.B.&M.

Application 41085<sup>1</sup> was filed on April 14, 1980, by Denise L. Hohnholt to appropriate 5.4 c.f.s. of water from an underground source for irrigation and domestic purposes on 320 acres of land within the S1/2 Section 6, T.19N., R.38E., M.D.B.&M. The point of diversion is described as being within the SW1/4 SW1/4 Section 6, T.19N., R.38E., M.D.B.&M.

Application 41086<sup>1</sup> was filed on April 14, 1980, by Tonhya L. Hohnholt to appropriate 5.4 c.f.s. of water from an underground source for irrigation and domestic purposes on 320 acres of land within the S1/2 Section 5, T.19N., R.38E., M.D.B.&M. The point of diversion is described as being within the SW1/4 SW1/4 Section 5, T.19N., R.38E., M.D.B.&M.

Application 41087<sup>1</sup> was filed on April 14, 1980, by Reed B. Hohnholt to appropriate 5.4 c.f.s. of water from an underground source for irrigation and domestic purposes on 320 acres of land within the S1/2 Section 1, T.19N., R.37E., M.D.B.&M. The point of diversion is described as being within the SW1/4 SW1/4 Section 1, T.19N., R.37E., M.D.B.&M.

Application 41088<sup>1</sup> was filed on April 14, 1980, by Clyde H. Hohnholt to appropriate 5.4 c.f.s. of water from an underground source for irrigation and domestic purposes on 320 acres of land within the N1/2 Section 6, T.19N., R.38E., M.D.B.&M. The point of diversion is described as being within the SE1/4 NE1/4 Section 6, T.19N., R.38E., M.D.B.&M.

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

Application 41259<sup>1</sup> was filed on May 8, 1980, by Robert L. Polvi to appropriate 5.4 c.f.s. of water from an underground source for irrigation and domestic purposes on 320 acres of land within the S1/2 Section 31, T.20N., R.38E., M.D.B.&M. The point of diversion is described as being within the SE1/4 SE1/4 Section 31, T.20N., R.38E., M.D.B.&M.

Application 41260<sup>1</sup> was filed on May 8, 1980, by Viola F. Polvi to appropriate 5.4 c.f.s. of water from an underground source for irrigation and domestic purposes on 320 acres of land within the N1/2 Section 31, T.20N., R.38E., M.D.B.&M. The point of diversion is described as being within the SW1/4 NW1/4 Section 31, T.20N., R.38E., M.D.B.&M.

Application 41261<sup>1</sup> was filed on May 8, 1980, by Pamela K. Polvi to appropriate 5.4 c.f.s. of water from an underground source for irrigation and domestic purposes on 320 acres of land within the S1/2 Section 36, T.20N., R.37E., M.D.B.&M. The point of diversion is described as being within the SE1/4 SE1/4 Section 36, T.20N., R.37E., M.D.B.&M.

Application 41262<sup>1</sup> was filed on May 8, 1980, by Michael S. Polvi to appropriate 5.4 c.f.s. of water from an underground source for irrigation and domestic purposes on 320 acres of land within the N1/2 Section 1, T.19N., R.37E., M.D.B.&M. The point of diversion is described as being within the SE1/4 NE1/4 Section 1, T.19N., R.37E., M.D.B.&M.

Application 41479<sup>1</sup> was filed on June 6, 1980, by Noelle F. Dorn to appropriate 5.4 c.f.s. of water from an underground source for irrigation and domestic purposes on 320 acres of land within the N1/2 Section 7, T.19N., R.38E., M.D.B.&M. The point of diversion is described as being within the SW1/4 NW1/4 Section 7, T.19N., R.38E., M.D.B.&M.

Application 43797<sup>1</sup> was filed on May 28, 1981, by Denise L. Hohnholt to change the point of diversion and place of use of 5.4 c.f.s. of water from an underground source for irrigation and domestic purposes on 320 acres of land heretofore applied for under Application 41085. The proposed place of use is within the NW1/4 SW1/4, SE1/4 Section 6 and N1/2 NW1/4, SW1/4 NW1/4 Section 8, T.19N., R.38E., M.D.B.&M. The proposed point of diversion is described as being within the SW1/4 SE1/4 Section 6, T.19N., R.38E., M.D.B.&M.

Application 43798<sup>1</sup> was filed on May 28, 1981, by Clyde H. Hohnholt to change the point of diversion and place of use of 2.7 c.f.s., a portion of water from an underground source for irrigation and domestic purposes on 160 acres of land heretofore applied for under Application 41088. The proposed place of use is within the S1/2 S1/2 Section 30, T.20N., R.38E., M.D.B.&M. The proposed point of diversion is described as being within the SE1/4 SW1/4 Section 30, T.20N., R.38E., M.D.B.&M.

Application 43799<sup>1</sup> was filed on May 28, 1981, by Robert L. Polvi to change the place of use of 5.4 c.f.s. of water from an underground source for irrigation and domestic purposes on 320 acres of land heretofore applied for under Application 41259. The proposed place of use is within the W1/2 SW1/4, SE1/4 Section 31 and W1/2 SW1/4 Section 32, T.20N., R.38E., M.D.B.&M. The point of diversion is described as being within the SE1/4 SE1/4 Section 31, T.20N., R.38E., M.D.B.&M.

Application 43800<sup>1</sup> was filed on May 28, 1981, by Michael S. Polvi to change the place of use of 5.4 c.f.s. of water from an underground source for irrigation and domestic purposes on 320 acres of land heretofore applied for under Application 41262. The proposed place of use is within the NW1/4, W1/2 NE1/4, SE1/4 NE1/4 Section 1, T.19N., R.37E., M.D.B.&M., and the SE1/4 SE1/4 Section 35, T.20N., R.37E., M.D.B.&M. The point of diversion is described as being within the SE1/4 NE1/4 Section 1, T.19N., R.37E., M.D.B.&M.

Application 44437<sup>1</sup> was filed on September 16, 1981, by Clyde H. Hohnholt to change the place of use of 2.7 c.f.s., a portion of water from an underground source for irrigation and domestic purposes on 160 acres of land heretofore applied for under Application 41088. The proposed place of use is within the SW1/4 NW1/4, S1/2 NE1/4 Section 6 and the SW1/4 NW1/4 Section 5, T.19N., R.38E., M.D.B.&M. The point of diversion is described as being within the SE1/4 NE1/4 Section 6, T.19N., R.38E., M.D.B.&M.

## II.

Ground-Water Resources - Reconnaissance Series Report 26 titled "Ground-Water Appraisal of Edwards Creek Valley, Churchill County, Nevada, was prepared cooperatively by the Geological Survey, U.S. Department of Interior and State of Nevada, Department of Conservation and Natural Resources.

### FINDINGS

#### I.

Edwards Creek Valley is a hydrologically and topographically closed valley and the source of practically all the ground-water in the valley is runoff from precipitation within the drainage basin.<sup>2</sup>

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<sup>2</sup> Ground-Water Resources - Reconnaissance Series Report 26.

II.

The perennial yield<sup>2</sup> of a ground-water reservoir is the maximum rate at which ground-water of suitable chemical quality is available and can be withdrawn economically for an indefinite period of time. If the perennial yield is exceeded, water will be withdrawn from storage and ground-water levels will decline.

Withdrawals of ground-water in excess of the perennial yield contribute to adverse conditions<sup>3</sup> 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<sup>3</sup> within the State of Nevada where storage depletion and declining water tables have been recorded and documented.

III.

The estimated perennial yield<sup>2</sup> of Edwards Creek Valley is on the order of 8000 acre-feet. Permits and certificates of appropriation have been issued under existing rights for approximately 12,000 acre-feet of ground-water within Edwards Creek Valley.

IV.

Should additional water be allowed for appropriation under new applications and subsequent development of ground-water pursuant thereto detrimentally affect prior ground-water rights, the State Engineer is required by law<sup>4</sup> to order withdrawals be restricted to conform to priority rights.

V.

Information available<sup>1</sup> to the State Engineer indicates that Applications 41084, 41085, 41086, 41087, 41088, 41259, 41260, 41261, 41262 and 41479 were filed in support of Desert Land Entry Applications. NRS 533.367 establishes the order of priority the State Engineer must consider in acting on applications for irrigation use within the same basin.

VI.

The approval of Applications 41084, 41085, 41086, 41087, 41088, 41259, 41260, 41261, 41262 and 41479 would authorize the additional withdrawal of 11,520 acre-feet of ground-water which would substantially exceed the perennial yield of the ground-water basin.

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<sup>3</sup> See attached Appendix of References.

<sup>4</sup> NRS 534.110(6)

CONCLUSIONS

I.

The State Engineer has jurisdiction under the provisions of NRS Chapters 533 and 534.

II.

The State Engineer is prohibited by law<sup>5</sup> from granting a permit where:

- A. there is no unappropriated water at the proposed source,
- B. the proposed use conflicts with existing rights,
- C. the proposed use threatens to prove detrimental to the public welfare.

III.

The granting of permits under Applications 41084, 41085, 41086, 41087, 41088, 41259, 41260, 41261, 41262 and 41479 would result in the withdrawal of substantial amounts of ground-water in excess of the perennial yield of the ground-water basin and would therefore adversely affect existing rights and be detrimental to the public interest and welfare.

RULING

Applications 41084, 41085, 41086, 41087, 41088, 41259, 41260, 41261, 41262 and 41479 are herewith denied on the grounds that the granting thereof would adversely affect existing rights and would be detrimental to the public interest and welfare.

Applications to change 43797, 43798, 43799, 43800 and 44437 are herewith denied on the grounds that the existing rights proposed to be changed have been denied and therefore there is no water available under the applications to change.

Respectfully submitted,



Peter G. Morros  
State Engineer

PGM/bl

Dated this 12th day of  
MARCH, 1984.

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<sup>5</sup> NRS 533.370.

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.

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

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.