

IN THE MATTER OF APPLICATIONS 31394,)
31685, 31742, 31757, 31758, 31835,)
31875, 31888, 31889, 31929 AND 32172)
FILED TO APPROPRIATE THE WATERS OF)
AN UNDERGROUND SOURCE IN MASON)
VALLEY, LYON COUNTY, NEVADA.)

R U L I N G

108

INTRODUCTION

Application Nos. 31394, 31685, 31742, 31757, 31758, 31835, 31875, 31888, 31889, 31929 and 32172 were filed in the State Engineer's Office between April 29, 1977 and June 21, 1977, to appropriate underground water for irrigation purposes in Mason Valley, Nevada.

A protest to the granting of Application 31835 was filed on August 4, 1977.

In 1969 Water Resources Bulletin No. 38 "Water Resources and Development in Mason Valley, Lyon and Mineral Counties, Nevada, 1948-65" by C. J. Huxel, Jr., with a section on surface water by E. E. Harris, was prepared cooperatively by the Nevada Department of Conservation and Natural Resources, Division of Water Resources and U. S. Department of the Interior, U. S. Geological Survey. This report is available from the State Engineer's Office.

FINDINGS OF FACT

I

Application 31394 was filed on April 29, 1977 by John and Tom Connolly for permission to appropriate 6.0 c.f.s. of water from an underground source for irrigation and domestic purposes. The proposed point of diversion is located in the SE $\frac{1}{4}$ NE $\frac{1}{4}$ Section 14, T.13N., R.25E., M.D.B.& M. The proposed place of use is 600 acres located within portions of Sections 1, 12, 13 and 14 all in T.13N., R.25E., M.D.B.& M.

Application 31685 was filed on May 12, 1977 by Omar R. Brown and Linda R. Brown for permission to appropriate 0.5 c.f.s. of water from an underground source for irrigation and domestic purposes. The proposed point of diversion is located in the NE $\frac{1}{4}$ SW $\frac{1}{4}$ Section 23, T.14N., R.26E., M.D.B.& M. The water is to be used on 10 acres of land located in the NE $\frac{1}{4}$ SW $\frac{1}{4}$ of said Section 23.

Application 31742 was filed on May 17, 1977 by John G. Ritter or Lucille C. Ritter for permission to appropriate 3.0 c.f.s. of water from an underground source for irrigation and domestic purposes. The proposed point of diversion is located within the SW $\frac{1}{4}$ SW $\frac{1}{4}$ Section 32, T.14N., R.26E., M.D.B. & M. The water is to be used on 160 acres of land located within the SW $\frac{1}{4}$ of said Section 32.

Application 31757 was filed on May 20, 1977 by Snyder Livestock Co., Inc., for permission to appropriate 2.7 c.f.s. of water from an underground source for irrigation and domestic purposes. The proposed point of diversion is located within the SE $\frac{1}{4}$ SE $\frac{1}{4}$ Section 3, T.12N., R.25E., M.D.B. & M. The water is to be used on 165 acres of land within portions of Sections 2 and 3, T.12N., R.25E., M.D.B. & M.

Application 31758 was filed on May 20, 1977 by Snyder Livestock Co., Inc., for permission to appropriate 6.0 c.f.s. of water from an underground source for irrigation purposes. The proposed point of diversion is located within the SE $\frac{1}{4}$ SW $\frac{1}{4}$ Section 10, T.12N., R.25E., M.D.B. & M. The water is to be used on 760 acres of land located within portions of Sections 3, 4, 9 and 10 all within T.12N., R.25E., M.D.B. & M.

P Application 31835 was filed on May 26, 1977 by J. Wes and Donna O. Carroll for permission to appropriate 2.7 c.f.s. of water for irrigation and domestic purposes. The proposed point of diversion is located within the SW $\frac{1}{4}$ SW $\frac{1}{4}$ Section 11, T.11N., R.25E., M.D.B. & M. The water is to be used on 160 acres of land located within the SW $\frac{1}{4}$ Section 11, T.11N., R.25E., M.D.B. & M.

Application 31875 was filed on June 1, 1977 by Jackie D. Sceirine and Ellen Sceirine for permission to appropriate 6.0 c.f.s. of water from an underground source for irrigation and domestic purposes. The proposed point of diversion is located within the NW $\frac{1}{4}$ NE $\frac{1}{4}$ Section 35, T.14N., R.25E., M.D.B. & M. The water is to be used on 1080 acres of land located within portions of Sections 23, 26 and 35 all in T.14N., R.25E., M.D.B. & M.

Application 31888 was filed on June 1, 1977 by Pitchfork Ranch, Inc., for permission to appropriate 6.0 c.f.s. of water from an underground source for irrigation purposes. The proposed point of diversion is located within Lot 5, Section 4, T.11N., R.26E., M.D.B. & M. The water is to be used on 2135 acres located within portions of Sections 29 through 33, T.12N., R.26E., M.D.B. & M., and portions of Sections 4, 5, 9, 10, 14 and 15, T.11N., R.26E., M.D.B. & M.

Application 31889 was filed on June 1, 1977 by Pitchfork Ranch, Inc., for permission to appropriate 6.0 c.f.s. of water from an underground source. The proposed point of diversion is located within the NW $\frac{1}{2}$ SW $\frac{1}{2}$ Section 33, T.12N., R.26E., M.D.B.& M. The water is to be used on 2135 acres of land located within portions of Sections 29 through 33, T.12N., R.26E., M.D.B.& M., and portions of Sections 4, 5, 9, 10, 14 and 15, T.11N., R.26E., M.D.B.& M.

Application 31929 was filed on June 2, 1977 by Amos and Patricia Mencarini for permission to appropriate 6.0 c.f.s. of water from an underground source for irrigation and domestic purposes. The proposed point of diversion is located in the SE $\frac{1}{4}$ SW $\frac{1}{4}$ Section 34, T.12N., R.25E., M.D.B.& M. The water is to be used on 580 acres of land located within portions of Sections 27 and 34, T.12N., R.25E., M.D.B.& M.

Application 32172 was filed on June 21, 1977 by John A. and Marguerite S. McKenzie for permission to appropriate 2.0 c.f.s. of water from an underground source for irrigation and domestic purposes. The proposed point of diversion is located within the SW $\frac{1}{4}$ NE $\frac{1}{4}$ Section 35, T.14N., R.26E., M.D.B.& M. The water is to be used on 45 acres of land within portions of the S $\frac{1}{2}$ NE $\frac{1}{4}$ Section 35, T.14N., R.26E., M.D.B.& M. 1 /

II

Application 31835 was protested on August 4, 1977 by Robert S. and Janice Elizabeth Capurro who prayed the application be denied on the following grounds: "If permit is granted it may lower water table in area. Application 31835 is less than one half mile from Permit 19935 in the name of Robert Steven and Janice Elizabeth Capurro." 2 /

III

Applications 31394, 31685, 31742, 31757, 31758, 31835, 31875, 31888, 31889, 31929 and 32172 were filed to appropriate water from an underground source within the Mason Valley Ground Water Basin, Lyon and Mineral Counties, Nevada, as designated and described by Order of the State Engineer issued January 20, 1977. 3 /

IV

Applications 31394, 31685, 31742, 31757, 31758, 31835, 31875, 31888, 31889, 31929 and 32172 are to appropriate water from an underground source. The major part of the land to be irrigated under these applications does not have existing underground water rights. 5300 acres of the 5695 acres proposed to be irrigated under these pending applications do not now have an appurtenant underground right. 4 /

The ground water reservoir water table has risen since the advent of farmland irrigation in Mason Valley and the water table is now substantially higher than under natural conditions prior to the initiation of irrigation in the valley. The rise in the water table has now nearly stabilized with water levels close to the surface in most of Mason Valley. 5 /

VI

During the period 1948 through 1965, average annual streamflow diversions in Mason Valley amounted to 140,000 acre-feet. The water from these diversions is accounted for by:

1. Consumptive use by irrigated crops.
2. Return flow to the river through canals and drain ditches.
3. Seepage losses from canals and ditches.
4. Evapotranspiration by phreatophytes and open water surfaces.

Return flow to the river is rediverted to satisfy downstream users rights, both within Mason Valley and in lower sub-basins of the Walker River system. 6 /

VII

Pumpage of ground water for irrigation was estimated to be 20,000 acre-feet in 1961, 7 / 21,000 acre-feet in 1964, 7 / and 46,000 acre-feet in 1976. 8 / Ground water pumpage for irrigation is substantially less during years when surface water is available. In addition to irrigation pumpage, the net draft on the ground water reservoir due to pumpage for mining, municipal and domestic use is estimated to be 4,000 acre-feet per year. 9 /

VIII

The system yield for Mason Valley has been estimated to be 100,000 acre-feet/year. System yield is defined as the maximum amount of surface and ground water of usable chemical quality that can be obtained each year from sources within the system for an indefinite period of time. In Mason Valley, the total available water supply on the average consists of surface water inflow (216,500 acre-feet/year), local runoff (5,900 acre-feet/year, 2000 of which goes to recharge of the ground water reservoir), and ground water inflow (500 acre-feet/year).

This available supply then is used or leaves the valley through:

1. Consumptive use by crops
2. Evapotranspiration
3. Surface water outflow
4. Ground water outflow
5. Ground water pumpage for municipal, industrial, and domestic purposes
6. Change in ground water storage

During drought years, much of the water used for irrigation comes from ground water pumpage, with a subsequent depletion of ground water storage. In normal and wet years, excessive surface water flows tend to recharge the ground water storage reservoir. Under this system, average ground water pumpage would be 25,000 acre-feet/year, surface water use would be 75,000 acre-feet per year, and the remaining available supply would be used to make up phreato-phyte losses and surface water outflow to lower sub-basins of the system. 10/

IX

Estimated consumptive use by crops is approximately 41,000 acre-feet/year. Approximately 57,000 acre-feet of water is lost through evapotranspiration from about 53,000 acres of phreatophytes consisting of salt grass, grease wood, rabbit brush, buffaloberry, willow, cottonwood, tules and marsh plants. 11/

X

Ground water appropriations in Mason Valley for irrigation purposes could be used to divert as much as 117,000 acre-feet/year to irrigate 32,700 acres. Ground water appropriations for other uses may be used to appropriate an additional 30,000 acre-feet.

Beneficial use has been proved and certificates of appropriation issued for a total pumpage of 106,000 acre-feet/year. Present permitted rights total an additional 41,000 acre-feet/year. 12/

XI

Surface water appropriations and rights under Decree C-125 from the Walker River System far exceed the average annual flow of 216,000 acre-feet entering Mason Valley from the East and West Walker Rivers, measured from 1948 to 1965. 13/

XII

Applications to appropriate additional surface water from the Walker River Stream system have been denied on the grounds that their granting would tend to impair the value of existing rights, there is no unappropriated water in the source and the granting of the proposed appropriations would be detrimental to the public welfare. 14/

XIII

Should Applications 31394, 31685, 31742, 31757, 31758, 31835, 31875, 31888, 31889, 31929 and 32172 be granted, and subsequent development of ground water pursuant thereto detrimentally affect prior ground water rights or surface water rights as set forth under Decree C-125, and appropriated rights, the State Engineer is required by law to order withdrawals be restricted to conform to priority rights. 15/

CONCLUSIONS

1. The State Engineer has jurisdiction of the parties and the subject matter of this action. 16/
2. The State Engineer is prohibited by law from granting a permit where:
 - 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 welfare. 17/

3. Existing water rights on the Walker River Stream System and the Mason Valley Ground Water Basin far exceed flow in the Walker River Stream System and recharge from precipitation to the Mason Valley Ground Water Basin. To grant irrigation rights that consume large quantities of additional water would adversely affect existing rights and threaten to prove detrimental to the public welfare.

4. If Applications 31394, 31685, 31742, 31757, 31758, 31835, 31875, 31888, 31889, 31929 and 32172 were granted, additional lands would be irrigated and lands that are irrigated only part time would be irrigated more intensively and frequently. This would result in additional consumptive use by farmland irrigation. The additional withdrawals and consumption would remove water from the ground water reservoir which:

- A. would not be replaced resulting in depletion of the ground water reservoir, or;
- B. would be replaced by infiltrating surface water that otherwise would return to the stream system.

The additional withdrawals and consumption of underground water for irrigation would, therefore, conflict with existing rights and threaten to prove detrimental to the public welfare.

5. The State Engineer is authorized and directed to designate preferred uses of water within designated ground water areas such as the Mason Valley Ground Water Basin. 18/ The consumptive use of additional ground water to irrigate additional land or to more intensively or frequently irrigate other land is not considered to be a preferred use of the limited water resources of the Mason Valley Ground Water Basin.

6. The underground water applied for under Applications 31394, 31685, 31742, 31757, 31758, 31835, 31875, 31888, 31889, 31929 and 32172 would diminish return underground and drain flow to the Walker River and so would adversely affect the prior rights as set forth in Decree C-125 and would conflict with appropriated rights on the Walker River Stream System and threaten to prove detrimental to the public welfare.

RULING

Applications 31394, 31685, 31742, 31757, 31758, 31835, 31875, 31888, 31889, 31929 and 32172 are herewith denied on the grounds that the appropriation of additional ground water for irrigation and use of the water applied for and requested from the area described in the applications would tend to impair the value of existing rights and be otherwise detrimental to the public interest and welfare.

Respectfully submitted,


Roland D. Westergard
State Engineer

RDW/BLR/dc

Dated this 21st day
of November 1977.

FOOTNOTES

1. Public records in the Office of the State Engineer.
2. Public records in the Office of the State Engineer.
3. NRS 534.
4. Public records in the Office of the State Engineer.
5. Water Resources Bulletin #38, pp. 13, 27, 36, Figure 5.
6. Water Resources Bulletin #38, pp. 24 and 25.
7. Water Resources Bulletin #38, Table 15.
8. Estimate made in State Engineer's Office.
9. Water Resources Bulletin #38, p. 33.
10. Water Resources Bulletin #38, pp. 54-58.
11. Water Resources Bulletin #38, pp. 30, Table 14.
12. Public records in the Office of the State Engineer.
13. Public record in the Office of the State Engineer and United States vs. Walker River Irrigation District, et al., United States District Court for the District of Nevada, Equity No. C-125 as amended by the Order of the Honorable A. F. St. Sure, dated April 24, 1940, hereafter called Decree C-125.
14. Public records in the Office of the State Engineer, See denied Apps. 24944, 24951, 25015, 25016, 25018, 25236, 30095, 30096.
15. NRS 534.110, subsections 3 and 6.
16. NRS 533.025 and 533.030, subsection 1.
17. NRS 533.370, subsection 4.
18. NRS 534.120, subsection 2.