IN THE MATTER OF APPLICATION 30934)
FILED TO APPROPRIATE WATER FROM AN) R U L I N G
UNDERGROUND SOURCE IN SMITH VALLEY,)
LYON COUNTY, NEVADA.)

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INTRODUCTION

Application 30934 was filed in the State Engineer's office on December 15, 1976 to appropriate underground water for irrigation purposes in Smith Valley, Nevada.

A protest to the granting of Application 30934 was filed in the State Engineer's office on March 24, 1977.

In 1976, Water Resources Bulletin No. 43, "Geohydrology of Smith Valley, Nevada with Special Reference to the Water-Use Period, 1953-72" by F. E. Rush and C. V. Schroer was prepared cooperatively by the Nevada Department of Conservation and Natural Resources, Division of Water Resources and the United States Department of the Interior, Geological Survey. This report is available from the State Engineer's office.

A hearing before the State Engineer in the matter of Applications 27734, 28175, 28263, 28264, 28291, 28309, 29072, 29274, 30128 and 30137 was held in the District Court Room, Lyon County Courthouse, Yerington, Nevada, on December 16, 1976. A transcript of the hearing is on file in the State Engineer's office.

FINDINGS OF FACT

I

Application 30934 was filed by John R. and Lura K. Weaver on December 15, 1976, to appropriate 5.0 c.f.s. of water from an underground source for irrigation purposes in Smith Valley, Nevada. The point of diversion is within the SW¼ NE¼ Section 5, T.10N., R.24E., M.D.B.& M., and the place of use is within the NE¼ Section 5, W½ SW¼ NW¼ Section 4, T.10N., R.24E., M.D.B.& M.[1]

II

Application 30934 was protested on March 24, 1977 by Six-N-Ranch, who prayed that the application be denied on the following grounds:

"In 1948 our irrigation well near Rowntree Lane had a standing water level of 16 feet and a 40 horsepower motor was sufficient. When other wells were drilled near our well and the water level noticeably started going down, we installed a 75 horsepower motor. More wells have been drilled in this area and the water level has continued to drop. We currently are lifting the water approximately 210 feet with a 100 horsepower motor. Even with a 100 horsepower motor we are not receiving the amounts of water we had with our original 40 horsepower motor.

Last year in 1976, we had to lower our irrigation well near Albright Lane 40 feet because the well was surging. The result has been less water at higher costs. If the pumping level of our well near Rowntree Lane drops approximately ten more feet, it will be necessary to lower this well also.

About 3/4 mile to the southeast of our well near Rowntree Lane we have an irrigation well that lifts the water at approximately 285 feet. To the southeast of our well near Rowntree Lane are two wells on the former Louie Cordone property. Both of these wells are pumping the water from depths over 250 feet.

It is our opinion that if permit number 30934 is granted that this would continue to increase the problems which are already being realized in our area."[2]

III

Application 30934 was filed to appropriate water from an underground source from within the Smith Valley Artesian Basin, Lyon County, Nevada as designated and described by Order of the State Engineer issued June 27, 1960.[3]

IV

Application 30934 is to appropriate water from an underground source. The land to be irrigated under this application does not have an existing underground water right.[4]

V

The ground water reservoir water table has risen since the advent of farmland irrigation in Smith Valley and the water table is now substantially higher than under natural conditions before irrigation began. This rise in the water table has now nearly stabilized[5] with water levels close to the surface in many parts of Smith Valley.[6]

VI

The West Walker River is a gaining river below diversion canals in Smith Valley and serves as a drain for the irrigated farmlands. There is an estimated 30,000 ac-ft/yr of return ground water and tailwater flow to the West Walker River in Smith Valley.[7]

VII

The recharge from precipitation to the Smith Valley ground water reservoir is estimated to be 17,000 ac-ft/yr.[8] Any consumptive withdrawal in excess of the natural recharge from precipitation will either deplete the ground water reservoir or cause additional surface water to percolate into the ground water reservoir.[9] Discharge by evapotranspiration by low-value phreatophytes and discharging bare soil is estimated to withdraw 13,000 ac-ft/yr from the Smith Valley Ground Water Reservoir.[10]

VIII

Pumpage of ground water for irrigation was estimated to be 20,000 ac-ft in 1972[11] and 21,000 ac-ft in 1976.[12] Pumpage for irrigation is substantially less when surface water is available but is still estimated to average more than the 4000 ac-ft/yr difference between recharge from precipitation and discharge by evapotranspiration by low-value phreatophytes and discharging bare soil.

IX

In the relatively dry year of 1972, approximately one-half of the water applied for irrigation was consumed, that is, it did not return to either the surface or the ground water system.[13] If Application 30934 is granted, it is estimated that one-half of the water withdrawn under this application would also be consumptively used putting an additional draught on the ground water reservoir and the West Walker River water that recharges the underground reservoir.

X

Surface water appropriations and rights under Decree C-125[14] from the West Walker River System far exceed the average annual flow of 179,000 ac-ft measured at Hoye Canyon from 1958 to 1972.[15]

XI

Ground water appropriations for irrigation from Smith Valley could be used to divert as much as 59,000 ac-ft/yr to irrigate 15,000 acres. Beneficial use has been proved and certificates of appropriation issued for 39,000 ac-ft/yr to irrigate 10,000 acres.[16]

XII

Large cones of depression have developed in areas of concentrated pumping in Smith Valley. During the irrigation season of 1972, ground water levels had declined over 20 feet in areas of concentrated pumpage both south and north of the West Walker River in Smith Valley.[17]

In Section 31, T.12N., R.24E., M.D.B.& M., irrigation wells have had to be regulated and pumpage curtailed because of declining ground water levels.[18]

In 1976 the water table had declined in some areas to the extent that pumps on domestic and irrigation wells have had to be lowered.[19]

XIII

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.[20]

XIV

Applications to appropriate underground water to irrigate additional land in Smith Valley have been denied on the grounds that their granting would tend to impair the value of existing rights.[21]

XV

Should Application 30934 be granted, and should subsequent development of ground water pursuant thereto detrimentally affect prior ground water rights, or surface 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.[22]

CONCLUSIONS

1. The State Engineer has jurisdiction of the parties and the subject matter of this action.[23]

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.[24]

3. Existing water rights on the West Walker River Stream System and the Smith Valley Artesian Basin far exceed flow in the West Walker River Stream System and recharge from precipitation to the Smith Valley Artesian 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 Application 30934 is granted, additional land would be irrigated or land that is 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 withdrawal 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 Smith Valley Artesian Basin.[25] 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 Smith Valley Artesian Basin.

6. The underground water applied for for irrigation under Application 30934 would diminish return underground and tailwater flow[26] to the West 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

Application 30934 is denied and the protest to Application 30934 is upheld on the grounds that the appropriation of underground water for irrigation and use of the water applied for and requested from the area described in the application would tend to impair the value of existing rights; and would be detrimental to the public interest and welfare.

Respectfully submitted,

Roland D. Westergard
State Engineer

RDW/JC/dc

Dated this 23rd day

of June 1977.

FOOTNOTES

1. Public records located within the Office of the State Engineer.

2. Public records located within the Office of the State Engineer.

3. NRS 534

4. Public records located within the Office of the State Engineer.

5. Water Resources Bulletin No. 43, p. 22, 25 and 60.

6. Reporter's transcript of proceedings on the hearing of testimony and evidence before Roland D. Westergard, State Engineer on December 16, 1976, (hereafter referred to as Transcript) p. 18, lines 4 & 5, p. 21, lines 15 through 23, p. 26, lines 6 through 11, p. 27, lines 21 through 25, p. 38, lines 5 through 9, p. 61, line 8; Water Resources Bulletin No. 43, Plat 2.

7. Water Resources Bulletin No. 43, p. 60 & 61.

8. Water Resources Bulletin No. 43, p. 49 & 50.

9. Water Resources Bulletin No. 43, p. 65.

10. Water Resources Bulletin No. 43, p. 62 & 63.

11. Water Resources Bulletin No. 43, p. 53.

12. Estimate made in State Engineer's office.

13. Water Resources Bulletin No. 43, p. 51, Transcript p. 43, lines 18, 19 & 20.

14. Public records located within the State Engineer's office & United States v. 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.

15. Water Resources Bulletin No. 43, p. 39 & 23.

16. Public records located within the State Engineer's Office.

17. Water Resources Bulletin No. 43, p. 65, 66 & 67.

18. Public records located within the State Engineer's office.

19. Transcript p. 80, lines 8 through 11, p. 81, lines 5 through 8.

20. Public records located within the State Engineer's office. See Denied Applications 30095 and 30096.

21. Public records located within the State Engineer's office. See Denied Applications 27242, 27328, 27572, 27701, 27734, 28175, 28263, 28264, 28291, 28309, 29072, 29274, 30128 and 30137.

22. NRS 534.110, subsections 3 and 6.

23. NRS 533.025 and 533.030, subsection 1.

24. NRS 533.370, subsection 4.

25. NRS 534.120, subsection 2.

26. Transcript p. 28, lines 17 through 26, p. 55, lines 4 through 10.