IN THE MATTER OF APPLICATIONS 32448, 33493, 33674,)
33675, 33677, 36582, 36583, 36596, 36597, 36598,)
36599, 36600, 36601, 36602 and 36603 FILED FOR)
THE WATERS OF AN UNDERGROUND SOURCE IN LAS VEGAS)
VALLEY, CLARK COUNTY, NEVADA)

RULING

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INTRODUCTION

Application 32448 was filed on June 29, 1977 by Gregory L. Millspaugh to appropriate 1.0 c.f.s. of the waters of an underground source to be diverted within the SE¼ NE¼ Section 17, T.19S., R.60E., M.D.B.& M., and to be used for quasi-municipal and domestic purposes (irrigation of 40 acres) within the SE¼ NE¼ Section 17, T.19S., R.60E., M.D.B.& M.

Application 33493 was filed on September 8, 1977 by Merlin R. Clary to appropriate 5.0 c.f.s. of the waters of an underground source to be diverted within the SW¼ SW¼ Section 18, T.19S., R.61E., M.D.B.& M., and to be used for the irrigation of 160 acres within the SW¼ of Section 18, T.19S., R.61E., M.D.B.& M.

Application 33674 was filed on September 20, 1977 by Richard G. Bachman to appropriate 5.0 c.f.s. of the waters of an underground source to be diverted within the NE¼ NW¼ Section 20, T.19S., R.61E., M.D.B.& M., and to be used for the irrigation of 160 acres within the NW¼ of Section 20, T.19S., R.61E., M.D.B.& M.

Application 33675 was filed on September 20, 1977 by Larry L. Bachman to appropriate 5.0 c.f.s. of the waters of an underground source to be diverted within the SW¼ SW¼ Section 17, T.19S., R.61E., M.D.B.& M., and to be used for the irrigation of 160 acres within the SW¼ of Section 17, T.19S., R.61E., M.D.B.& M.

Application 33677 was filed on September 20, 1977 by Ralph Kennith Kisling to appropriate 5.0 c.f.s. of the waters of an underground source to be diverted within the SW¼ SE¼ Section 17, T.19S., R.61E., M.D.B.& M., and to be used for the irrigation of 160 acres within the SE¼ Section 17, T.19S., R.61E., M.D.B.& M.

Application 36582 was filed on January 31, 1979 by Richard G. Bachman to appropriate 5.0 c.f.s. of the waters of an underground source to be diverted within the NW¼ NW¼ Section 20, T.19S., R.61E., M.D.B.& M., and to be used for the irrigation of 160 acres within the W½ W½ of Section 20, T.19S., R.61E., M.D.B.& M.

Application 36583 was filed on January 31, 1979 by Larry L. Bachman to appropriate 5.0 c.f.s. of the waters of an underground source to be diverted within the NW¼ NW¼ Section 17, T.19S., R.61E., M.D.B.& M., and to be used for the irrigation of 160 acres within the NW¼ of Section 17, T.19S., R.61E., M.D.B.& M.

Application 36596 was filed on February 1, 1979 by Merlin R. Clary to appropriate 5.0 c.f.s. of the waters of an underground source to be diverted within the NW¼ NW¼ Section 18, T.19S., R.61E., M.D.B.& M., and to be used for the irrigation of 160 acres within the NW¼ of Section 18, T.19S., R.61E., M.D.B.& M.

Application 36597 was filed on February 1, 1979 by Michael G. Kisling to appropriate 5.0 c.f.s. of the waters of an underground source to be diverted within the NW ¼ NE ¼ Section 18, T.19S., R.61E., M.D.B.&M., and to be used for the irrigation of 160 acres within the NE ¼ of Section 18, T.19S., R.61E., M.D.B.&M.

Application 36598 was filed on February 1, 1979 by Michael G. Kisling to appropriate 5.0 c.f.s. of the waters of an underground source to be diverted within the SW ¼ SE ¼ Section 18, T.19S., R.61E., M.D.B.&M., and to be used for the irrigation of 160 acres within the SE ¼ of Section 18, T.19S., R61E., M.D.B.&M.

Application 36599 was filed on February 1, 1979 by Edgalee Ann Kisling to appropriate 5.0 c.f.s. of the waters of an underground source to be diverted within the SW ¼ SE ¼ Section 16, T.19S., R.61E., M.D.B.&M., and to be used for the irrigation of 160 acres within the SE ¼ of Section 16, T.19S., R.61E., M.D.B.&M.

Application 36600 was filed on February 1, 1979 by Edgalee Ann Kisling to appropriate 5.0 c.f.s. of the waters of an underground source to be diverted within the SW ¼ SW ¼ Section 16, T.19S., R.61E., M.D.B.&M., and to be used for the irrigation of 160 acres within the SW ¼ Section 16, T.19S., R.61E., M.D.B.&M.

Application 36601 was filed on February 1, 1979 by Ralph K. Kisling to appropriate 5.0 c.f.s. of the waters of an underground source to be diverted within the NW ¼ NE ¼ Section 17, T.19S., R.61E., M.D.B.&M., and to be used for the irrigation of 160 acres within the NE ¼ of Section 17, T.19S., R.61E., M.D.B.&M.

Application 36602 was filed on February 1, 1979 by Kennith R. Kisling to appropriate 5.0 c.f.s. of the waters of an underground source to be diverted within the NW ¼ NW ¼ Section 19, T.19S., R.61E., M.D.B.&M., and to be used for the irrigation of 160 acres within the NW ¼ of Section 19, T.19S., R.61E., M.D.B.&M.

Application 36603 was filed on February 1, 1979 by Kennith R. Kisling to appropriate 5.0 c.f.s. of the waters of an underground source to be diverted within the NW ¼ NE ¼ Section 19, T.19S., R.61E., M.D.B.&M., to be used for the irrigation of 160 acres within the NE ¼ of Section 19, T.19S., R.61E., M.D.B.&M.

In 1948 Water Resources Bulletin No. 5, "Geology and Water Resources of Las Vegas, Pahrump, and Indian Spring Valleys, Clark and Nye Counties, Nevada" by G.B. Maxey and C.H. Jameson was prepared cooperatively by the State Engineer's Office and the U.S. Department of Interior, Geological Survey.

In 1947 Water Resources Bulletin No. 6, "Ground Water in Las Vegas, Pahrump and Indian Spring Valleys, Nevada, (A Summary)" by G.B. Maxey and T.W. Robinson was prepared cooperatively by the State Engineer's Office and the U.S. Department of Interior, Geological Survey.

In 1961 Water Resources Bulletin No. 18 "A Summary of the Hydrology on the Las Vegas Ground Water Basin, Nevada, with Special Reference to the Available Supply" by G.T. Malmberg was prepared cooperatively by Nevada Department of Conservation and Natural Resources, Division of Water Resources and U.S. Department of Interior, Geological Survey.

In 1974 Water Resources Bulletin No. 44 "Pumping and Ground Water Storage Depletion in Las Vegas Valley, Nevada 1955-74" by James R. Harrill was prepared cooperatively by Nevada Department of Conservation and Natural Resources, Division of Water Resources and U.S. Department of Interior, Geological Survey

These reports are available in the State Engineer's Office.

FINDINGS OF FACT

I

Applications 32448, 33493, 33674, 33675 and 33677 were filed in support of Carey Act Applications.

The source of water to be used to reclaim lands under Carey Act Applications is water from an underground source within the Las Vegas Valley Ground Water Basin, Clark County, Nevada. 1/

Information in the State Engineer's Office indicates that applications 36582, 36583, 36596, 36597, 36598, 36599, 36600, 36601, 36602, and 36603 were filed in support of Desert Land Entry Applications.

The source of water to be used to reclaim lands under these Desert Land Entry Applications is water from an underground source within the Las Vegas Valley Ground Water Basin, Clark County, Nevada. 1A/

II

Pursuant to a petition signed by legal appropriators of underground water in Las Vegas Valley, Clark County, Nevada, the State Engineer designated and described an area of land as an underground artesian water basin by Order No. 175 dated January 10, 1941 under the provisions of Chapter 178, Nevada Statutes, 1939. 2/

By Order No. 196 dated December 1, 1949 the State Engineer curtailed the irrigation of additional lands within a portion of the Las Vegas Artesian Basin, pursuant to Section 10 Chapter 178 Nevada Statutes of 1939 as amended by Chapter 103, Statutes of 1949. 3/

III

Ground water recharge in Las Vegas Valley is derived solely from precipitation within the Valley. 4/ The estimated annual recharge of the ground water reservoir in Las Vegas Valley is between 30,000 acre-feet and 35,000 acre-feet. 5/

On the basis of the estimated average annual discharge from the basin under natural conditions 6/, the average annual recharge is inferred to be about 25,000 acre-feet. 7/

Most ground water recharge to Las Vegas Valley is from precipitation on the east slope of the Spring Mountain Range. 8/

IV

Large springs furnished the principle water supply in Las Vegas Valley until the influx of population during the 1920's. 9/

Malmberg reported that spring discharge in Las Vegas Valley decreased from about 6,400 acre-feet per year in 1906 to about 1,400 acre-feet in 1955. As water levels declined during the period 1955-73, discharge from the major springs in the vicinity of Las Vegas ceased. 10/

The first well was drilled in Las Vegas Valley in 1906. In 1912 there were more than 100 deep wells in the Valley and more than 20,000 acre-feet of water was being discharged annually by wells and springs. The annual yield of wells and springs during the period 1912-1935 probably averaged about 21,000 acre-feet. 11/ Pumping increased as spring discharge decreased during that period 1935-1946 when total discharge from wells and spring rose to approximately 32,000 acre-feet. 12/ Pumping continued to increase and by 1955, 40,000 acre-feet were being discharged by wells alone. This trend continued to a peak of 88,000 acre-feet in 1968. At that time, importation of Colorado River water became sufficient to compensate for new growth and allow for a slight decrease in pumping over the next several years. The first phase of the Southern Nevada Water Project became operational in 1971, and the ground water pumpage was reduced to about 70,000 acre-feet during the following two years. 13/ By 1974 distribution and operating at near capacity, and demands for additional water were met by ground water; annual pumpage increased to 78,000 acre-feet. 14/

V

The perennial yield of the natural system of Las Vegas Valley has been augmented by secondary recharge. Because of this the sustained yield of the reservoir is 35,000 acre-feet annually. 15/ Pumpage in excess of 35,000 acre-feet has resulted in storage depletion from the principal aquifers, substantial water-level declines and land subsidence. 16/

VI

Since March 24, 1955 all permits to appropriate water within the designated area of Las Vegas Valley have been issued as temporary permits, subject to revocation when they can be served by a water district or municipality. 17/ To date, several permits have been revoked. 18/

VII

Should additional water be allowed for appropriation for the reclamation of lands under the Carey Act and Desert Land Entry Applications, and subsequent development of ground water pursuant thereto detrimentally affect prior ground water rights, the State Engineer is required by law to order withdrawals be restricted to conform with priority rights. 19/

CONCLUSIONS

If the subject applications were granted, additional lands would be irrigated. This would result in additional consumptive use by farm land irrigation. The additional withdrawals and consumption would remove water from the ground water reservoir which would not be replaced resulting in depletion of the ground water reservoir, substantial water level declines and land subsidence. The additional withdrawals and consumption of underground water would, therefore, conflict with existing rights and threaten to prove detrimental to the public welfare.

RULING

Applications 32448, 33493, 33674, 33675, 33677, 36582, 36583, 36596, 36597,

36598, 36599, 36600, 36601, 36602, and 36603 are hereby denied on the grounds that their granting would tend to impair the value of existing rights and threaten to prove detrimental to the public welfare.

Respectfully submitted,

William J. Newman

William J. Newman
State Engineer

WJN/PGM/pf

Dated this 27th day of February, 1980.

FOOTNOTES

1. Public Records in the State Engineer's Office
1A. Public Records in the State Engineer's Office
2. Public Records in the State Engineer's Office
3. Public Records in the State Engineer's Office
4. Water Resources Bulletin No. 5, Pg. XIII
5. Water Resources Bulletin No. 5, Pg. XIII
6. Water Resources Bulletin No. 18, Pg. 17
7. Water Resources Bulletin No. 18, Pg. 15
8. Water Resources Bulletin No. 6, Pg. 15-17
9. Water Resources Bulletin No. 6, Pg. 12
10. Water Resources Bulletin No. 44, Pg. 42, 43
11. Water Resources Bulletin No. 6, Pg. 12
12. Water Resources Bulletin No. 5, Pg. 8
13. Water Resources Bulletin No. 44, Pg. 19
14. Water Resources Bulletin No. 44, Pg. 66
15. Water Resources Bulletin No. 44, Pg. 67
16. Water Resources Bulletin No. 44, Pg. 66
17. NRS 534.120 subsection 3(a)
18. Public Records in the State Engineer's Office
19. NRS 534.110 subsection 3 and 6