

IN THE OFFICE OF THE STATE ENGINEER
OF THE STATE OF NEVADA

IN THE MATTER OF APPLICATION)
73222 FILED TO CHANGE THE POINT)
OF DIVERSION AND PLACE OF USE)
OF A PORTION OF THE PUBLIC)
WATERS OF AN UNDERGROUND SOURCE)
PREVIOUSLY APPROPRIATED UNDER)
PERMIT 60366, WITHIN THE LAS)
VEGAS VALLEY ARTESIAN BASIN)
(212), CLARK COUNTY, NEVADA.)

RULING

#5808

GENERAL

I.

Application 73222 was filed on September 6, 2005, by Robert S. and Debbie D. Davidson to change the point of diversion and place of use of .00892 cubic feet per second of underground water for Quasi-Municipal purposes previously appropriated under Permit 60366. The proposed place of use is that portion of Lot 1 of Parcel maps, File 69, Page 46, and a portion of Lot 1 of Parcel maps, File 70, Page 12 being a portion of the SW¼ NW¼ of Section 6, T.21S., R.59E., M.D.B.&M., Assessor Parcel Number 164-06-201-002 being 2.51 acres more or less. The proposed point of diversion is described as being located within the SW¼ NW¼ of Section 6, T.21S., R.59E., M.B.D.&M. within Calico Basin, which is located within the Las Vegas Valley Artesian Basin. The existing point of diversion is described as being located within the SW¼ SE¼ of Section 31, T.19S., R.60E., M.B.D.&M., within the Las Vegas Valley Artesian Basin.¹

¹ File No. 73222, official record in the Office of the State Engineer.

FINDINGS OF FACT

I.

The State Engineer initially described and designated a portion of the Las Vegas Valley Artesian Basin on January 10, 1941, under the provisions of NRS § 534.030, as a basin in need of additional administration.² The State Engineer subsequently extended the boundaries of the designated area of the Las Vegas Valley Artesian Basin on February 29, 1944,³ November 22, 1946,⁴ April 18, 1961,⁵ May 25, 1964,⁶ and December 27, 1983.⁷ The December 27, 1983 designation order extended the designated area of the Las Vegas Valley Artesian Basin to include the entire Las Vegas Artesian Hydrographic Basin.

On April 15, 1992, the State Engineer issued a Notice of Curtailment for the Las Vegas Valley Artesian Basin under the provisions of NRS § 534.030.⁸ The curtailment order states:

...that with the following exceptions applications filed after March 23, 1992 pursuant to NRS § 534.120 within the designated Las Vegas Artesian Basin will be denied.

See Amended Order No. 1054 for list of exceptions, none of which are applicable to this ruling.

² State Engineer's Order No. 175, dated January 10, 1941, official records in the Office of the State Engineer.

³ State Engineer's Order No. 182, dated February 29, 1944, official records in the Office of the State Engineer.

⁴ State Engineer's Order No. 189, dated November 22, 1946, official records in the Office of the State Engineer.

⁵ State Engineer's Order No. 249, dated April 18, 1961, official records in the Office of the State Engineer.

⁶ State Engineer's Order No. 275, dated May 25, 1964, official records in the Office of the State Engineer.

⁷ State Engineer's Order No. 833, dated December 27, 1983, official records in the Office of the State Engineer.

⁸ State Engineer's Amended Order No. 1054, dated April 15, 1992, official records in the Office of the State Engineer.

In addition to the concerns outlined in Amended Order No. 1054 the State Engineer also recognized four areas in the Las Vegas Valley Artesian Basin as having localized problems caused by ground-water pumpage. One of these areas is known as Calico Basin - Spring Mountain Ranch Area, which in part is described as encompassing all of Sections 5, 6, 7, 8, 17, 18, 19, 20, 29, 30, 31 and 32, T.21S., R.59E., M.D.B.&M.⁹ This is the same area in which Application 73222 seeks to divert water.

The Nevada Division of Water Resources has cooperated with the United States Department of Interior, Geological Survey, in studying land subsidence, water pumpage and ground-water level changes in the Las Vegas Valley and has published these study results in various reports.¹⁰

⁹ State Engineer's correspondence to Clark County Department of Comprehensive Planning, February 4, 1993, and July 28, 1993, official records in the Office of the State Engineer.

¹⁰ Maxey, G.B. and Jameson, C.H., Well Data in Las Vegas and Indian Springs Valleys, Nevada, Water Resources Bulletin No. 4, Office of the State Engineer and U.S.G.S., pp. 22-23 (1946); Harrill, James R., Water-level Changes Associated with Ground-water Development in Las Vegas Valley, Nevada, 1971-1975, Water Resources-Information Series Report 22, Nevada Division of Water Resources and U.S.G.S., p.6 (1976); Harrill, James R., Water-level Changes Associated with Ground-water Development in Las Vegas Valley, Nevada, March 1975 to March 1976, Water Resources-Information Series Report 26, Nevada Division of Water Resources and U.S.G.S., p.4 (1977); Katzer, Terry, Water-level Changes Associated with Ground-water Development in the Las Vegas Valley, Nevada, March 1976 to March 1977, Water Resources-Information Series Report 27, Nevada Division of Water Resources and U.S.G.S., p.6 (1977); Wood, David B., Water-level Changes Associated with Ground-water Development in the Las Vegas Valley, Nevada, March 1977 to March 1978, Water Resources-Information Series Report 29, Nevada Division of Water Resources and U.S.G.S., p.4 (1979); Wood, David B., Water-level Changes Associated with Ground-water Development in the Las Vegas Valley, Nevada, 1978-1979, Water Resources-Information Series Report 30, Nevada Division of Water Resources and U.S.G.S., p. 17 (1988); Wood, David B., Water-level Changes Associated with Ground-water Development in the Las Vegas Valley, Nevada, 1979-1981, Water Resources-Information Series Report 31, Nevada Division of Water Resources and U.S.G.S., p. 17 (1988); Wood, David B., Water-level Changes Associated with Ground-water Withdrawals and Surface-water Imports, in the Las Vegas Valley, Nevada, 1981-1983, Water Resources-Information Series Report 32, Nevada Division of Water Resources and U.S.G.S., pp. 16-20 (1991); Wood, David B., Water-level Changes Associated with Ground-water Withdrawals and Surface-water Imports, in the Las Vegas, Valley, Nevada, 1983-1985, Water Resources - Information Series Report 33, Nevada Division of Water Resources and U.S.G.S., pp. 15-19 (1991); Burbey, Thomas J., Pumpage and Water-level Change in the Principal Aquifer of Las Vegas Valley, Nevada, 1980-1990, Nevada Division of Water Resources and U.S.G.S., pp. 36-44 (1995)

II.

In 1993, an analysis of impact of additional ground-water withdrawal was done in the Calico Basin Area during the review of a proposed subdivision called Calico Canyon Ranch Estates. This analysis found that of the approximate 40 existing wells in the Calico Basin Area, at least 10 of these wells needed to be deepened or replaced due to water-level declines. Additionally, the analysis found that there are water quality problems in Calico Basin due to gypsum.⁹ A re-inspection of the State Engineer's records as of October 2006, found that of the approximate 52 existing wells within the Calico Basin Area, at least 19 of these wells needed to be deepened or replaced.¹¹

The State Engineer finds that the Las Vegas Valley Artesian Basin is an area of active management. The State Engineer further finds that the Calico Basin Area lies within this area of active management and has been experiencing water level declines and water quality degradation.

III.

At the present time, there are 73 individual parcels located within Section 6, T.21S., R.59E., owned by various private individuals and public entities.¹² As previously stated, as of October 2006, there are approximately 52 existing wells located within the Calico Basin, which lies within Section 6, T.21S., R.59E. Each of the approximate 21 remaining parcels, which currently do not have an existing well, qualify for the drilling of a domestic well under the authority of NRS § 534.180 without the issuance of a permit by the State Engineer. The State Engineer finds this future demand results in an additional demand increase of

¹¹ Nevada Division of Water Resources' well log database, Official records in the Office of the State Engineer.

¹² Public records of the Clark County Assessor's Office.

approximately 40 percent in an area already experiencing water level declines and water quality degradation.

IV.

Application 73222 proposes to divert approximately 1,785 gallons per day, or 2 acre-feet of ground water per year, for quasi-municipal purposes. The State Engineer finds that the point of diversion for Application 73222 is described as being located within the SW $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 6, T.21S., R.59E., M.D.M.¹ The State Engineer finds that this point of diversion is located within the Calico Basin - Spring Mountain Ranch Area, which is recognized by the State Engineer as having localized problems caused by ground-water pumpage. The State Engineer finds that to grant a permit for an additional diversion of ground water within the Calico Basin - Spring Mountain Ranch Area would only further exacerbate the problem of ground water level declines, thus it would interfere with existing water rights and threaten to prove detrimental to the public interest.

CONCLUSIONS

I.

The State Engineer has jurisdiction over the parties and the subject matter of this action and determination.¹³

II.

The State Engineer is prohibited by law from granting a permit for an application where:¹⁴

- A. there is no unappropriated water at the proposed source;
- B. the proposed use or change conflicts with existing rights;
- C. the proposed use or change conflicts with protectible interests in existing domestic wells as set forth in NRS § 533.024; or
- D. the proposed use or change threatens to prove detrimental to the public interest.

¹³ NRS chapters 533 and 534.

¹⁴ NRS § 533.370(5).

III.

The State Engineer concludes that to issue a permit for an additional diversion of ground water in the Calico Basin - Spring Mountain Ranch Area, an area already recognized as having problems caused by ground-water pumpage as evidenced by ground-water level declines, would conflict with existing rights, would conflict with the protectible interest in existing domestic wells and would threaten to prove detrimental to the public interest.

RULING

Application 73222 is hereby denied on the grounds that it would conflict with existing rights, would conflict with the protectible interests in existing domestic wells and would threaten to prove detrimental to the public interest.

Respectfully submitted,



TRACY TAYLOR, P.E.
State Engineer

TT/BC/jm

Dated this 4th day of
January, 2008.