

IN THE OFFICE OF THE STATE ENGINEER

IN THE MATTER OF APPLICATIONS 48205,) 48206 AND 48207 FILED TO CHANGE THE) POINT OF DIVERSION AND PLACE OF USE) OF THE WATERS OF AN UNDERGROUND) SOURCE HERETOFORE APPROPRIATED) UNDER PERMITS 47596, 47595 AND 47594,) RESPECTIVELY, IN THE CARSON DESERT) GROUND WATER BASIN, CHURCHILL) COUNTY, NEVADA.)

RULING

GENERAL

I.

Application 48205¹ was filed on July 13, 1984, by Lahontan Farms/Peter Sidlow to change the point of diversion and place of use of 0.30 c.f.s. of water from an underground source heretofore appropriated under Permit 47596. The existing point of diversion is described as being within the SE1/4 SE1/4 Section 31, T.19N., R.27E., M.D.B.&M., and the existing place of use is 427 acres located in portions of the NW1/4, SW1/4 and SE1/4 Section 31, T.19N., R.27E., M.D.B.&M. The proposed point of diversion is described as being within the NE1/4 NE1/4 Section 31, T.19N., R.27E., M.D.B.&M., and the proposed place of use is 552 acres within the NE1/4, NW1/4, SW1/4 and SE1/4 Section 31, T.19N., R.27E., M.D.B.&M. The existing and proposed manner of use is irrigation and domestic.

¹ State of Nevada Exhibit No. 2 and 2A, public administrative hearing, April 30, 1985. Application 35794 was filed on August 21, 1978, to appropriate 2.7 c.f.s. of water from an underground source for irrigation and domestic purposes on 160 acres of land in the NW1/4 and a portion of the NW1/4 SW1/4 Section 27, T.19N., R.27E., M.D.B.&M. This application was approved and a permit issued on February 20, 1979. On April 29, 1983, Application 46840 was filed to change the point of diversion and place of use of a portion of the water heretofore appropriated under Permit 35794. This application was subsequently approved and a permit issued on November 21, 1983, for 1.87 c.f.s. On January 19, 1984, Application 47596 was filed to change the point of diversion and place of use of a portion of Permit 46840 and a permit was subsequently issued on July 6, 1984, for 0.30 c.f.s. for irrigation and domestic purposes. Public record in the office of the State Engineer.

Application 48205 was protested² on September 5, 1984, by Allen and Linda Greenhaw on the following grounds:

"We are protest a well on Lahontan Farm which is 920 feet from our well which has had effect on our well under Permit 30625 this well effect our irrigation and domestic wells. When test a week later it was down 137 feet from 85 feet with us not watering."

II.

Application 48206³ was filed on July 13, 1984, by Lahontan Farms/Peter Sidlow to change the point of diversion and place of use of 1.35 c.f.s. of water from an underground source heretofore appropriated under Permit 47595. The existing point of diversion is described as being within the SE1/4 SE1/4 Section 31, T.19N., R.27E., M.D.B.&M., and the existing place of use is 427 acres within portions of the NW1/4, SW1/4 and SE1/4 Section 31, T.19N., R.27E., M.D.B.&M. The proposed point of diversion is described as being within the NE1/4 NE1/4 Section 31, T.19N., R.27E., M.D.B.&M., and the porposed place of use is 552 acres within portions of the NE1/4, NW1/4, SW1/4 and SE1/4 Section 31, T.19N., R.27E., M.D.B.&M. The existing and proposed manner of use is irrigation and domestic.

² State of Nevada Exhibit No. 7, public administrative hearing, April 30, 1985. Public record in the office of the State Engineer.

³ State of Nevada Exhibit No. 2 and 2A, public administrative hearing, April 30, 1985. Application 34879 was filed on January 13, 1978, to appropriate 5.4 c.f.s. of water from an underground source for irrigation and domestic purposes on 320 acres of land in the S1/2 NE1/4, and E1/2 SW1/4 Section 29, T.19N., R.27E., M.D.B.&M. This application was approved and a permit issued on November 9, 1978. On January 29, 1980, Application 40431 was filed to change the place of use of the water heretofore appropriated under Permit 34879. This application was subsequently approved and a permit issued on December 9, 1980. On April 29, 1983, Application 46839 was filed to change the point of diversion and place of use of a portion of water heretofore appropriated under Permit 40431. This application was subsequently approved and a permit issued on November 21, 1983 for 1.35 c.f.s. On January 19, 1984, Application 47595 was filed to change the point of diversion and place of use of water heretofore appropriated under Permit 46839. This application was subsequently approved and a permit issued for 1.35 c.f.s. on July 6, 1984. Public record in the office of the State Engineer.

Application 48206 was protested⁴ on September 5, 1984, by Allen and Linda Greenhaw on the following grounds:

"We are protest a well on Lahontan Farm which is 920 feet from our well which has had effect on our well under Permit 30625 this well effect our irrigation and domestic wells. When test a week later it was down 137 feet from 85 feet with us not watering."

III.

Application 48207⁵ was filed on July 13, 1984, by Lahontan Farms/Peter Sidlow to change the point of diversion and place of use of 1.57 c.f.s. of water from an underground source heretofore appropriated under Permit 47594. The existing point of diversion is described as being within the SE1/4 SE1/4 Section 31, T.19N., R.27E., M.D.B.&M., and the existing place of use is 427 acres within portions of the NW1/4, SW1/4 and SE1/4 Section 31, T.19N., R.27E., M.D.B.&M. The proposed point of diversion is described as being within the NE1/4 NE1/4 Section 31, T.19N., R.27E., M.D.B.&M., and the proposed place of use is 552 acres within portions of the NE1/4, NW1/4, SW1/4 and SE1/4 Section 31, T.19N., R.27E., M.D.B.&M. The existing and proposed manner of use is irrigation and domestic.

⁴ State of Nevada Exhibit No. 7, public administrative hearing, April 30, 1985. Public record in the office of the State Engineer.

⁵ State of Nevada Exhibits 2 and 2A, public administrative hearing, April 30, 1985. Application 31268 was filed on April 1, 1977, to appropriate 4.0 c.f.s. of water from an underground source for irrigation and domestic purposes on 240 acres of land in the SE1/4 NW1/4, NE1/4 SW1/4, S1/2 NE1/4, N1/2 SE1/4 and S1/2 SE1/4 Section 34, T.18N., R.28E., M.D.B.&M. This application was approved and a permit issued on May 1, 1979. On August 12, 1981, Application 44285 was filed to change the point of diversion and place of use of water heretofore appropriated under Permit 31268. This application was subsequently approved and a permit issued on November 12, 1982. On January 19, 1984, Application 47594 was filed to change a portion of the point of diversion and place of use of water heretofore appropriated under Permit 44285. This application was subsequently approved and a permit issued on July 6, 1984, for 1.57 c.f.s. Public record in the office of the State Engineer.

Application 48207 was protested⁶ on September 5, 1984, by Allen and Linda Greenhaw on the following grounds:

"We are protest a well on Lahontan Farm which is 920 feet from our well which has had effect on our well under Permit 30625 this well effect our irrigation and domestic wells. When test a week later it was down 137 feet from 85 feet with us not watering."

IV.

The Carson Desert, Packard Valley and White Plains Ground Water Basin was designated⁷ by the State Engineer on July 6, 1978, as a ground water basin in need of additional administration and coming under the provisions of Chapter 534 NRS (Conservation and Distribution of Underground Waters).

V.

On October 4, 1978, the State Engineer issued an order⁸ on curtailment of water appropriation within the Carson Desert Ground Water Basin.

VI.

Water Resources-Reconnaissance Series Report 59, titled "Water Resources Appraisal of the Carson River Basin, Western Nevada", was prepared cooperatively by the U.S. Geological Survey and the Department of Conservation and Natural Resources, Division of Water Resources.⁹

⁶ State of Nevada Exhibit No. 7, public administrative hearing, April 30, 1985. Public record in the office of the State Engineer.

⁷ State Engineer's Order No. 716, public record in the office of the State Engineer. NRS 534.030.

⁸ State Engineer's Order No. 722, public record in the office of the State Engineer. NRS 534.010 to 534.190.

⁹ Public record in the office of the State Engineer.

U.S. Geological Survey Open-File Report 80-2042, titled "Geohydrology of the Basalt and Unconsolidated Sedimentary Aquifers in the Fallon Area, Churchill County, Nevada", was prepared cooperatively by the U.S. Geological Survey and the Department of Conservation and Natural Resources, Division of Water Resources.¹⁰

VII.

A public administrative hearing was held before the State Engineer on April 30, 1985. Evidentiary presentations were made by the applicant and protestant in the matter set forth herein.¹¹ The State Engineer took administrative notice of records and information within the State Engineer's office.¹² Additionally, a written statement from the Truckee-Carson Irrigation District, as an interested party, was received into the record.¹³

FINDINGS OF FACT

I.

On January 19, 1984, Lahontan Valley Farms submitted a request to the State Engineer for a waiver¹⁴ to drill an exploration well within the SE1/4 SE1/4 Section 31, T.19N., R.27E., M.D.B.&M. On January 25, 1984, the State Engineer granted a conditional waiver¹⁵ for a test well within the 40-acre subdivision as set forth and described.

¹⁰ Public record in the office of the State Engineer.

¹¹ Transcript is public record in the office of the State Engineer. NRS 533.365.

¹² Transcript of public administrative hearing, April 30, 1985, p. 8.

¹³ See transcript and exhibits of public administrative hearing, April 30, 1985. Public record in the office of the State Engineer.

¹⁴ State of Nevada Exhibit No. 3, public administrative hearing, April 30, 1985.

¹⁵ State of Nevada Exhibit No. 4, public administrative hearing, April 30, 1985. NRS 534.

II.

On August 28, 1984, personnel of the State Engineer's office made a field investigation¹⁶ of the area described in the waiver and determined that a production well had been drilled within the NE1/4 NE1/4 Section 31, T.19N., R.27E., M.D.B.&M., in violation of the statute.¹⁷ Subsequently the State Engineer issued a cease and desist order¹⁸ on August 31, 1984, and ordered the well plugged in accordance with the State Engineer's regulations for drilling water wells¹⁹ as set forth in Chapter 534 of the Nevada Administrative Code. It was additionally determined that the applicant has caused three (3) exploratory wells to be drilled — the first two having been pumped or otherwise tested and found unsatisfactory for purposes of development.²⁰ Upon satisfactory results from the pumping and testing of the third exploratory well, the applicant caused to be drilled a 16" production well and further caused to be installed a pump, motor and electrical power²¹ for the purpose of irrigating land in close proximity to the subject well. The production well is located as described in the proposed points of diversion under Applications to change, 48205, 48206 and 48207.

¹⁶ See report of field investigation, State of Nevada Exhibit No. 5, public administrative hearing April 30, 1985.

¹⁷ NRS 534.050(1).

¹⁸ See State Engineer's Order No. 847, State of Nevada Exhibit No. 6, public administrative hearing, April 30, 1985.

¹⁹ The well was ordered plugged in accordance with Part 14 (Plugging Wells) of the regulations.

²⁰ State of Nevada Exhibit No. 8, Protestants' Exhibit No. 2, public administrative hearing, April 30, 1985.

²¹ State of Nevada Exhibit No. 8, Protestants' Exhibit No. 2, public administrative

III.

On September 21, 1984, the State Engineer and the applicant entered into a stipulation²² recognized as interlocutory in nature for the purpose of collecting and evaluating additional data from the 16" production well.

IV.

Beginning on March 5, 1985, the State Engineer's office conducted a 72 hour pump test²³ of the completed 16" production well located in the NE1/4 NE1/4 Section 31 and the subject of the applications to change set forth herein. The results of the pump test and the effects on the static water level at the protestants' wells are set forth in the record.²⁴

V.

The protestants entered into the record evidence²⁵ relating to energy consumption at their domestic and irrigation wells which reflect periodic increases from 1981 through 1984. The record²⁶ also reflects periodic ground water withdrawals at the protestants' wells for irrigation, watering of trees and a garden. The State Engineer finds that although this evidence may reflect lowering of the water table at the protestants' wells, it is inconclusive as to cause.

²² State of Nevada Exhibit No. 8, public administrative hearing, April 30, 1985.

²³ State of Nevada Exhibit No. 10, public administrative hearing, April 30, 1985. NRS 534.110(2)(b).

²⁴ State of Nevada Exhibit No. 10, public administrative hearing, April 30, 1985. The protestants' existing wells are represented by Permit 30625, Certificate 11146, and a single family domestic well located approximately 1009 feet from the applicants' production well. The domestic well is located approximately 30 feet from the Greenhaw irrigation well. See transcript p. 56, public administrative hearing, April 30, 1985.

²⁵ Protestants' Exhibit Nos. 1 and 6, public administrative hearing, April 30, 1985.

²⁶ Testimony of Linda Greenhaw, pp. 31-83, pp. 129-132, public administrative hearing, April 30, 1985. Public record in the State Engineer's office under Permit 30625, Certificate 11146.

VI.

The pumping test analysis²⁷ establishes the predicted drawdown at the protestants' wells as a result of sustained pumping over a period of 150 days at a diversion rate consistent with the rates applied for in the change applications. The predicted drawdown does not account for pumping at the protestants' wells or effects of pumping of other irrigation wells in the area. The predicted drawdown at the protestants' wells, as a result of the pump test, does not constitute an unreasonable lowering of the water table as set forth in the statute.²⁸

VII.

There is sufficient marginal evidence²⁹ to suggest that cumulative ground water withdrawals from the applicants' production well and other irrigation wells in the area during the irrigation season may result in additional lowering of the water table at the protestants' wells. The State Engineer finds that it will be necessary to institute a continuing program of water level monitoring to establish a conclusive record.

²⁷ State of Nevada Exhibit No. 10, public administrative hearing, April 30, 1985. The reliability of the scientific method utilized in the pumping test analysis is confirmed by comparison of the "predicted" and "actual" drawdown at protestants' well after 3 days of sustained pumping. Predicted drawdown was 11.82 feet while actual drawdown was measured at 11.99 feet - a difference of approximately 1.0%.

²⁸ NRS 534.110(4).

²⁹ The static water level at the protestants' irrigation well prior to March 5, 1985, was measured at 78.88 feet below the top of the well casing. On June 13, 1985, the static water level was measured at 84.19 feet after sustained pumping by other irrigation wells in the area and in the absence of any additional pumping at the production test well. Excluding the protestants' wells and the production test well, there are three other irrigation wells in close proximity to the protestants' wells that have actively been pumping and irrigating approximately 550 acres of land since April 1, 1985. See public record in the State Engineer's office under Permits 47592, 47593, 47597, 47598 and 40431. There is evidence that the protestants' irrigation well has also been periodically pumped during this period.

CONCLUSIONS

I.

The State Engineer has jurisdiction of the parties and the subject matter of this action and determination.³⁰

II.

The State Engineer is prohibited by law from granting a permit under an application to change the public waters where:³¹

- A. The proposed change conflicts with existing rights, or
- B. The proposed change threatens to prove detrimental to the public interest.

III.

Based on the record of evidence, the State Engineer concludes that the approval of Applications to Change, 48205, 48206 and 48207, must be conditional, subject to a continuing ground water level monitoring program to establish a record on the cumulative effects of sustained pumping by junior priority irrigation wells in general proximity to the protestants' wells.

IV.

The record of evidence establishes a reliable projected drawdown at the protestants' wells as a result of sustained pumping over a 150 day period at the production well under the applications to change set forth herein. The projected drawdown does not constitute an unreasonable lowering of the water table at the protestants' wells.

³⁰ NRS Chapters 533 and 534.

³¹ NRS 533.370(3).

V.

Based on the record of evidence, the approval of Applications to Change, 48205, 48206 and 48207, will not be detrimental to the public interest, however, this conclusion should not be interpreted to preclude the State Engineer from regulating ground water withdrawals in the area or a determination as to reasonable economic pumping lifts.³²

RULING

The protests to Applications to Change, 48205, 48206 and 48207, are herewith overruled, conditioned on a continuing ground water level monitoring program to establish additional data on the cumulative effects of sustained pumping by the applicants' production well set forth herein and other junior priority rights within general proximity of the protestants' wells. This approval is conditioned on the understanding that the State Engineer may regulate ground water withdrawals and determine and establish economic pumping lifts for the area set forth herein.

Respectfully submitted,


PETER G. MORROS
State Engineer

PGM/bl

Dated this 19th day of
June, 1985.

³² NRS 534.110(4).