

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

IN THE MATTER OF APPLICATION 52210,)
FILED TO APPROPRIATE THE PUBLIC)
WATERS OF AN UNDERGROUND SOURCE)
WITHIN THE CARSON VALLEY)
HYDROGRAPHIC BASIN (105), DOUGLAS)
COUNTY, NEVADA.)

RULING

6033

GENERAL

I.

Application 52210 was filed on June 10, 1988, by Douglas County, Nevada to appropriate 4.9 cfs of underground water for quasi-municipal purposes. The proposed place of use is described as the entirety of Douglas County, Nevada and is further described by legal subdivision within Exhibit A attached to the application. The proposed point of diversion is described as being located within the SE $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 16, T.13N., R.20E., M.D.B.&M.¹

II.

Application 52210 was timely protested by Ronald Simek and Sierra Creek Ranch on similar grounds summarized as follows:²

- The Protestants own property and/or water rights within the proposed place of use of this application.
- Douglas County has no overall water service plan or service commitment for the entire area.
- Applicant has not demonstrated a need for the water.
- Application 52210 would adversely affect existing rights and be detrimental to the public welfare.

III.

Application 52210 was timely protested by TCID on the grounds that use of the water would tend to adversely affect surface water users, the basin is fully appropriated and previous applications for quasi-municipal use have been denied.²

¹ File No. 52210, official records in the Office of the State Engineer.

FINDINGS OF FACT

I.

Nevada Revised Statute § 533.365(3) provides that it is within the State Engineer's discretion to determine whether a public administrative hearing is necessary to address the merits of a protest to an application to appropriate the public waters of the State of Nevada. The State Engineer finds that a hearing is not necessary to consider the merits of the protests filed against Application 52210.

II.

State Engineer's Order No. 684, issued June 14, 1977, described and designated the Carson Valley Hydrographic Basin as a groundwater basin in need of additional administration under the provisions of NRS § 534.030.²

The description of the proposed point of diversion, found within Application 52210 and its supporting map, was used to plot the location of the proposed well location. The State Engineer finds that Application 52210 has a proposed points of diversion located within the hydrologic boundaries of the designated Carson Valley Hydrographic Basin.

III.

Applications that request a permanent appropriation of underground water for irrigation purposes and applications for quasi-municipal uses within the Carson Valley Hydrographic Basin have been previously denied by the State Engineer.³ In particular, State Engineer's Ruling No. 2589 denied applications for quasi-municipal purposes based in part on findings that the committed groundwater resources meet or exceed the estimated groundwater recharge.

² State Engineer's Order No. 684, June 14, 1977, official record in the Office of the State Engineer.

³ See, State Engineer Rulings for denied Application Nos. 28799, 28800, 28802, 29698, 30348, 30349, 30075, 30203, 30640, 30711, 30789, 30870, 31169, 31170, 31171, 31182, 31258, 31259, 31376, 31377, 31380, 31381, 31386, 31414, 31415, 31416, 31459, 31500, 31508, 31509, 31615, 31616, 31660, 31661, 31687, 31688, 31689, 31690, 31691, 31692, 31693, 31694, 31695, 31696, 31697, 31698, 31699, 31700, 31701, 31702, 31703, 31704, 31705, 31706, 31747, 31759, 31760, 31761, 31762, 31776, 31777, 31807, 31810, 31846, 31849, 32107, 32108, 32109, 32141, 32142, 32143, 32144, 32147, 32148, 32149, 32150, 32151, 32152, 32153, 32154, 32321, 32322, 32327, 32328, 32330, 32331, 32332, 32333, 32345, 32347, 32353, 32365, 32428, 32429, 32430, 32431, 32446, 32447, 32584, 32585, 32594, 32606, 32607, 32608, 32831, 32936, 32937, 32950, 32663, 33366, 33449, 33474, 33880, 34613, 34746, 35000, 35023, 35024, 35235, 35431, 35880, 35881, 36175, 36465, 37113, 37114, 36604, 40170 and 40171, official records in the Office of the State Engineer.

The State Engineer finds that applications to appropriate underground water from the Carson Valley Hydrographic Basin have been previously denied. The State Engineer finds that Application 52210 has the effect of appropriating water for a similar use and within the same basin as applications that have been denied in the past.

IV.

The Nevada Revised Statutes (NRS) chapters 533 and 534 and the policies developed by the Office of the State Engineer control the appropriation of water within the State of Nevada. Under the provisions found under NRS § 533.370(5), before an application that requests a new appropriation of underground water can be considered for approval it must be determined, among other things, that there is unappropriated water available at the targeted source. The answer to the question of what amount of underground water is available for additional appropriation from the Carson Valley Hydrographic Basin can be found in an analysis of the basin's recharge-discharge relationship. Central to this equation is the concept of the perennial yield of the Carson Valley Hydrographic Basin.

Perennial yield of a groundwater reservoir may be defined as the maximum amount of groundwater that can be salvaged each year over the long term without depleting the groundwater reservoir. Perennial yield is ultimately limited to the maximum amount of natural discharge that can be salvaged for beneficial use. If the perennial yield is continually exceeded groundwater levels will decline.⁴

Withdrawals of groundwater in excess of the perennial yield contribute to adverse conditions such as water quality degradation, storage depletion, diminishing yield of wells, increase in cost due to increased pumping lifts, land subsidence and possible reversal of groundwater gradients, which could result in significant changes in the recharge-discharge relationship.

The Office of the State Engineer has for many years relied upon estimates of perennial yield. These estimates are critical in determining the degree of regulation, which must be placed upon a basin's limited underground water resources. Over the years, many of the basins initially reviewed have undergone further study and additional reports have been prepared. In this case, a newer report relating to the Carson Valley Hydrographic Basin was published in 1986.⁵ This

⁴ Office of the State Engineer, *Water for Nevada, State of Nevada Water Planning Report No. 3*, p. 13, Oct. 1971.

⁵ D. K. Maurer, *Geohydrology and Simulated Response to Groundwater Pumpage in Carson Valley, a River-Dominated Basin in Douglas County, Nevada, and Alpine County, California*, Water-Resources Investigations Report 86-4328 (United States Geological Survey), 1986.

report was reviewed by the Office of the State Engineer and it is within this report that the currently accepted estimate of 49,000 afa for the perennial yield of the Carson Valley Hydrographic Basin is found.⁶

The State Engineer finds that the estimated perennial yield of the Carson Valley Hydrographic Basin is 49,000 afa.

V.

The committed groundwater resource in the form of permits and certificates issued by the Office of the State Engineer and within the Carson Valley Hydrographic Basin currently exceeds 94,000 afa, although it should be noted that about 53,000 afa of that amount is derived from irrigation commitments. The amount of water actually committed under existing water rights must take into account the supplemental nature of the majority of irrigation water rights. Supplemental irrigation groundwater rights are water rights, which have a place of use appurtenant to the same place of use as an existing surface-water right and are available for use only when the surface-water flow is inadequate to meet irrigation demands or the primary surface right is out of priority. Of the 53,000 afa of committed irrigation groundwater rights, approximately 45,500 afa are supplemental to surface water rights.⁷ Notwithstanding the supplemental irrigation rights, a comparison of the committed groundwater resources to the estimated perennial yield of the basin does not point toward any substantial amounts of groundwater being available for appropriation at this time.

The State Engineer finds that there is insufficient groundwater to satisfy the quantity requested for appropriation under Application 52210.

CONCLUSIONS

I.

The State Engineer has jurisdiction over the parties and the subject matter of this action and determination.⁸

II.

The State Engineer is prohibited by law from granting an application to appropriate the public waters where:⁹

⁶ *Ibid*, p. 36.

⁷ State Engineer's Ruling No. 5791, official records in the Office of the State Engineer.

⁸ NRS Chapters 533 and 534.

⁹ NRS § 533.370(5).

- 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.

III.

The State Engineer concludes that similar applications to appropriate groundwater have been previously denied in the Carson Valley Hydrographic Basin; therefore, Application 52210 may also be considered for denial.

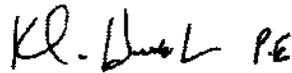
IV.

The State Engineer concludes that the approval of the subject application would adversely affect existing rights and threaten to prove detrimental to the public interest.

RULING

The protests to the application are upheld in part and Application 52210 is hereby denied on the grounds that its approval would conflict with existing rights and threaten to prove detrimental to the public interest. No ruling is made on the remaining protest grounds.

Respectfully submitted,


TRACY TAYLOR, P.E.
State Engineer

Dated this 19th day of
March 2010