

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

IN THE MATTER OF APPLICATION 71146)
FILED TO CHANGE THE POINT OF)
DIVERSION AND PLACE OF USE OF THE)
PUBLIC WATERS OF AN UNDERGROUND)
SOURCE PREVIOUSLY APPROPRIATED)
UNDER PERMIT 60639 WITHIN THE)
CARSON VALLEY HYDROGRAPHIC BASIN)
(105), DOUGLAS COUNTY, NEVADA.)

RULING
5748

GENERAL

I.

Application 71146 was filed on April 29, 2004, by Douglas County to change the point of diversion and place of use of 0.5 cubic feet per second (cfs), not to exceed 70 acre-feet annually (afa), of underground water previously permitted for appropriation under Permit 60639. The proposed manner of use and place of use is described on the application as being for municipal purposes within the Douglas County service area. Exhibit A attached to the application, specifically describes the service area by section, township and range. The changes requested by Application 71146, if approved, would transfer a portion of the Applicant's diversion from an existing point of diversion in the SE¼ NW¼ of Section 29, T.13N., R.20E., M.D.B.&M., to a point that is located within the SE¼ NW¼ of Section 5, T.14N, R.20E., M.D.B.&M. The existing place of use is described as being Douglas County's older service area defined in Permit 60639.¹

II.

Permit 70489 was issued on July 16, 2004, to Douglas County for the diversion of 0.777 cfs (120.0 afa) for municipal purposes.² The point of diversion is an existing well referred to as the East Topsy Lane Well (or North County Well No.2), which is the same point of diversion as described under Application 71146.¹

III.

Application 71146 was timely protested by Pete Bachstadt on the grounds that approval of the application would deplete older residential wells in the immediate area

¹ File No. 71146, official records in the Office of the State Engineer.

² File No. 70489, official records in the Office of the State Engineer.

without a guarantee of the continued availability of the utility without excessive costs and there is no municipal service available due to the application of NRS § 119.183.¹ Mr. Bachstadt's particular concern is that the approval of the application will adversely affect his domestic well located at 1190 Rabe Way (APN 09-311-12).

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 in the case of protested Application 71146, there is sufficient information contained within the records of the Office of the State Engineer to gain a full understanding of the issues and a hearing on this matter is not required.

II.

A review of records on file in the Office of the State Engineer show the Protestant is the owner of a domestic well that serves dwellings located approximately 2,500 feet southeast of the proposed point of diversion under Application 71146. The use of the domestic well is exempted from the requirement of obtaining a water right permit under Nevada water law.³ It is the policy of the state to recognize the importance of domestic wells as appurtenances to private homes and to create a protectible interest in such wells and to protect their supply from unreasonable adverse effects, which are caused by municipal, quasi-municipal or industrial uses.⁴ In consideration of water right applications, the State Engineer must take into account whether the proposed change conflicts with protectible interests in existing domestic wells as set forth in NRS § 533.024.⁵

The State Engineer finds that the Protestant has an existing domestic well and has a protectible interest in said domestic well.

III.

Nevada water law does not prevent the granting of permits to applicants, which are later in time, on the grounds that the diversions under the proposed later appropriations may cause lowering of the static water level at the appropriator's point of

³ NRS §§ 534.013 and 534.180.

⁴ NRS § 533.024 (1)(b).

⁵ NRS § 533.370 (5).

diversion, so long as any protectible interests in existing domestic wells and the rights of existing appropriators can be reasonably satisfied. Additionally, Nevada water law requires the State Engineer to include as a condition of the permit that pumping water pursuant to the permit may be limited or prohibited to prevent any adverse effects on an existing domestic well located within 2,500 feet of the well.⁶ A review of Application 71146 and NRS § 534.110, shows that any permit issued under Application 71146 would fall within the criteria of this statute and would include the above-stated permit condition giving the State Engineer the authority to limit or prohibit the pumping of water at the proposed well site.

The State Engineer finds that protections exist within the Nevada water law to protect domestic well owners from an unreasonable lowering of the water table, should such impacts occur as a result of pumping water at the proposed well site.

IV.

Application 71146 involves changing the point of diversion of 0.5 cfs (70.0 afa) to the location of the existing East Topsy Lane well. A review of records on file in the Office of the State Engineer show existing Permits 70489, 71260, 71473, 72266 and 72819 at the East Topsy Lane well site allow a diversion rate of 1.0405 cfs and an annual duty of 195.6 acre-feet. If Application 71146 were approved, the maximum annual duty of water that could be withdrawn would increase to 265.6 acre-feet annually. A Theis solution was used to predict the possible impacts to the Protestant's well from the potential increase in pumping under Application 71146.

The Theis analytical solution for non-equilibrium flow to a well was used to simulate the effects of pumping of the maximum annual duty under the proposed and existing rights. The simulation used aquifer properties derived from East Topsy Lane Monitoring Well Construction and Testing report dated September 9, 2003, submitted to this office for consideration of Application 70489. The simulation mimicked the presence of an impermeable barrier adjacent and to the west of the pumping well, used an aquifer transmissivity of 1,400 ft²/d, and a storage coefficient of 0.1. The results of the Theis solution in this setting are believed to represent a worst case prediction due to the simulation of an adjacent no-flow barrier and by not considering annual recharge to the ground-water aquifer. The analysis results in a drawdown at the Protestant's well estimated to be 10 feet after 5 years and 16 feet after 30 years. A Well Driller's log was

⁶ NRS § 534.110 (5).

not available for the Protestant's well. However, the Protestant submitted a letter of concern on February 23, 2004, associated with the filing of Permit 70489, stating that the well was 100 feet deep, and that the water level changed from 10 feet to 13 feet since it was drilled.

The State Engineer finds the projected drawdown impact of 16 feet over 30 years at the Protestant's well is reasonable and will not conflict with protectible interests in his domestic well.

V.

Two individuals wrote letters of concern regarding the filing of Application 71146 in response to SB 159 noticing, and the possible impacts to domestic wells in the area. The respondents were Kathleen O'Connell of 7321 Center Drive (APN 09-311-22), and Stephen Luschar of 7101 Center Drive (APN 09-311-31). These residences with domestic wells are located 2,000 to 2,500 feet south of the East Topsy Lane well site. No Well Driller's logs are available for these wells. However, several logs are available for adjacent lots and indicate well depths of 120 to 140 feet, and static water levels of 14 to 40 feet.

Based on the Theis solution discussed above the State Engineer finds the projected drawdown impact on these wells is reasonable and will not conflict with protectable interests in these domestic wells.

CONCLUSIONS

I.

The State Engineer has jurisdiction over the parties and the subject matter of this action and determination.⁷

II.

The State Engineer is prohibited by law from granting a permit under a change application that requests to appropriate the public waters where:⁸

- 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 groundwater model computation shows a minimal drawdown of 16 feet after 30 years in the Protestant's domestic well. The State Engineer concludes Application 71146 will not conflict with protectible interests in existing domestic wells as set forth in NRS § 533.024, NRS § 534.110, and NRS § 533.370 and the application will not cause an unreasonable drawdown at nearby domestic wells.

IV.

Application 71146 was filed to change existing groundwater rights within the Carson Valley Hydrographic Basin. Based on the record of evidence available, the State Engineer concludes that approval of Application 71146 will not conflict with existing rights nor threaten to prove detrimental to the public interest.

RULING

The protest to Application 71146 is hereby overruled and the application is approved subject to existing rights, payment of the statutory permit fees and a monitoring plan approved by this office.

Respectfully submitted,



TRACY TAYLOR, P.E.
State Engineer

TT/ALE/jm

Dated this 28th day of

June, 2007.