

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

IN THE MATTER OF APPLICATION 85778)
FILED TO CHANGE THE POINT OF)
DIVERSION AND PLACE OF USE AND)
APPLICATION 85779 FILED TO CHANGE)
THE PLACE OF USE OF PORTIONS OF)
UNDERGROUND WATER PREVIOUSLY)
APPROPRIATED UNDER PERMIT 30259,)
CERTIFICATE 10421 WITHIN THE MASON)
VALLEY HYDROGRAPHIC BASIN (108),)
LYON COUNTY, NEVADA.)

RULING
#6351

GENERAL

I.

Application 85778 was filed on January 8, 2016, by the David M. Little Family Trust Agreement dated 5/2/1996 to change the point of diversion and place of use of 3.00178 cubic feet per second (cfs), not to exceed 673.6 acre-feet per season (afs), a portion of water previously appropriated under Permit 30259, Certificate 10421 for irrigation and domestic purposes from April 1 to November 1 of each year. The proposed point of diversion is described as being located within the SE $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 12, T.13N., R.25E., M.D.B.&M. The existing point of diversion is described as being located within the NW $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 1, T.13N., R.25E., M.D.B.&M. The proposed place of use is described as being located within the NE $\frac{1}{4}$, N $\frac{1}{2}$ SE $\frac{1}{4}$, E $\frac{1}{2}$ NW $\frac{1}{4}$, NE $\frac{1}{4}$ SW $\frac{1}{4}$ and SE $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 1 and the E $\frac{1}{2}$ E $\frac{1}{2}$ of Section 12, T.13N., R.25E., M.D.B.&M. and portions of the SW $\frac{1}{4}$ NW $\frac{1}{4}$ and W $\frac{1}{2}$ SW $\frac{1}{4}$ of Section 6 and portions of the W $\frac{1}{2}$ W $\frac{1}{2}$ of Section 7, T.13N., R.26E., M.D.B.&M. The existing place of use is described as being 168.4 acres located within portions of the N $\frac{1}{2}$ NE $\frac{1}{4}$, E $\frac{1}{2}$ NW $\frac{1}{4}$ and NE $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 1, T.13N., R.25E., M.D.B.&M.¹

II.

Application 85779 was filed on January 8, 2016, by the David M. Little Family Trust Agreement dated 5/2/1996 to change the place of use of 2.99822 cfs, not to exceed 672.8 afs, a portion of water previously appropriated under Permit 30259, Certificate 10421 for irrigation and domestic purposes from April 1 to November 1 of each year. The existing point of diversion is described as being located within the NW $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 1, T.13N., R.25E., M.D.B.&M., and

¹ File No. 85778, official records in the Office of the State Engineer.

is to remain unchanged. The proposed place of use is described as being located within the NE $\frac{1}{4}$, N $\frac{1}{2}$ SE $\frac{1}{4}$, E $\frac{1}{2}$ NW $\frac{1}{4}$, NE $\frac{1}{4}$ SW $\frac{1}{4}$ and SE $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 1 and the E $\frac{1}{2}$ E $\frac{1}{2}$ of Section 12, T.13N., R.25E., M.D.B.&M. and portions of the SW $\frac{1}{4}$ NW $\frac{1}{4}$ and W $\frac{1}{2}$ SW $\frac{1}{4}$ of Section 6 and portions of the W $\frac{1}{2}$ W $\frac{1}{2}$ of Section 7, T.13N., R.26E., M.D.B.&M. The existing place of use is described as being 168.2 acres located within portions of the SW $\frac{1}{4}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ NE $\frac{1}{4}$, NW $\frac{1}{4}$ SE $\frac{1}{4}$ and NE $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 1, T.13N., R.25E., M.D.B.&M. and portions of the NW $\frac{1}{4}$ SW $\frac{1}{4}$ and SW $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 6, T.13N., R.26E., M.D.B.&M.²

III.

Applications 85778 and 85779 were protested by David Giorgi DBA G Lazy B Partnership (G Lazy B) on the following grounds:^{1,2}

The proximity of this well will effect [sic] my own well (LOG # 10707) along with my irrigation well (permitt [sic] # 18676) which has dropped drastically from your report in November of 2015 it measured a water level of 35 Ft the reading in March of 2015 read a level at 28 Ft. I feel anyother [sic] well in this area will have a drastic effect on both my wells along with a well from the ranch I lease (permit # 19873) With four new wells being allowed in the last four years (two of O-N's, Peri & Sons, and Bitler Farms) I don't think the water level can withstand another well in this general area. With the lack of man power [sic] in your office I can't see you checking pumping rates.

I'm a small family own [sic] ranch I can't afford the expense of drilling of new wells. Also I point out that this well has been split once before(permit# 30259) I oppose the application for water # 85778 and 85779 or any new wells in this area.

IV.

Applications 85778 and 85779 were protested by Jeff Wass, Manager, Wass Investments (Wass) on the following grounds:^{1,2}

Due to the continuing drought in the Valley and dropping water levels we feel that it will negatively impact our irrigation wells and seriously impair our ability to irrigate existing crop fields.

FINDINGS OF FACT

I.

Nevada Revised Statute (NRS) § 533.365(4) 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 there is sufficient information contained within the

² File No. 85779, official records in the Office of the State Engineer.

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.

The protest by G Lazy B asserts that the proximity of the proposed well will affect their well identified by Well Driller's Report (Well Log) No. 10707, their irrigation well under Permit 18676, and the well for the ranch they lease under Permit 19873. The protest by Wass asserts that approval would negatively impact their wells and impair their ability to grow a crop. Both Protestants raise the concern over recently lowering water levels, and Wass also expressed concern over continuing drought conditions.

Wass does not identify their wells or water rights in the protest, but a review of the records of the State Engineer found Chesley E. and Janet A. Wass to be owners of record of a portion of Permit 19873, Certificate 6103, which is one of the wells over which G Lazy B also expressed concern. No other water rights, well logs, or reports of conveyance show any known relation to Wass.^{3,4,5}

Application 85779 is not seeking a change in point of diversion, but Application 85778 seeks to change the existing point of diversion (EPOD) under Permit 30259, Certificate 10421, located within the NW $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 1, T.13N., R.25E., M.D.B.&M., to the proposed point of diversion (PPOD) located within the SE $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 12, T.13N., R.25E., M.D.B.&M.

A review of the records of the office of the State Engineer identified several wells proximate to the PPOD. The domestic well identified by Well Log No. 10707 is located approximately 2,460 feet to the south-southeast from the PPOD. The irrigation well under Permit 18676, Certificate 5411 (Well Log Nos. 17301 and 5320) is located approximately 5,560 feet to the south of the PPOD. The well under Permit 19873, Certificate 6103 (Well Log No. 5986) is located approximately 3,070 feet to the south-southwest from the PPOD. Another well not identified by the Protestants is Lyon County's Fairground well under Permit 35867, Certificate 10794 (Well Log No. 19637), which is located approximately 2,760 feet to the west from the PPOD.

³ Nevada Division of Water Resources' Water Rights Database, May 17, 2016, official records in the Office of the State Engineer, available at <http://water.nv.gov/data/hydrographic/>.

⁴ Nevada Division of Water Resources' Well Log Database, May 17, 2016, official records in the Office of the State Engineer, available at <http://water.nv.gov/data/welllog/>.

⁵ Nevada Division of Water Resources' Titles Database, May 17, 2016, official records in the Office of the State Engineer, available at <http://newwater/data/titles/>.

Since the grounds for protest are born from the concern that pumping from a well at the PPOD will lower the water level at their wells and impair their existing water rights and protectable interest in domestic wells, an analysis using the standard Theis non-equilibrium equation may be applied to estimate drawdown at sites proximate to the PPOD.

In this analysis, information from area well logs, including test pumping and lithologic log, was used to determine the parameters most suitable for use in the the Theis non-equilibrium equation.⁶ The soil characteristics in this area indicate a potential for local confining conditions, but the high degree of interbedding and lack of demonstrated lateral continuity suggest that confining conditions will not extend far from any specific location. Over periods of several years or more, water would flow around these clay lenses and onto the more permeable layers so that the aquifer system behaves as a single unconfined aquifer. Therefore, two scenarios were considered when applying the standard Theis non-equilibrium equation: season effects using a confined aquifer conditions and long-term impacts using unconfined aquifer conditions.

Under confined aquifer conditions, if a well located at the PPOD pumped its maximum diversion rate (3.002 cfs) for 113 days (number of days at the maximum diversion rate it would take to pump the maximum requested duty of 673.6 acre-feet), the drawdown effects would lower the water level 5.8 feet at a radius of 2,460 feet, the distance of the nearest well identified by the Protestants. However, under unconfined aquifer conditions, the estimated drawdown after five years of pumping at the maximum 3.002 cfs was a maximum of 1.8 feet for all nearby wells identified in the analysis.⁷

Furthermore, the Theis solution assumes that the aquifer has no recharge; however, because there is significant recharge from the Walker River, ditches and canals, and normal irrigation, the drawdown estimated using Theis will be more than the actual drawdown.

Terms of groundwater permits issued by the State Engineer explicitly provide for a reasonable lowering of the static water level due to other groundwater development.⁸ Water-level measurements conducted by the Division of Water Resources indicate that the static water levels in wells in the area near the proposed point of diversion are in an overall decline.⁹

⁶ See, e.g., Well Log Nos. 5320, 5986, 10707, 17301, 19637, 35809, 109885, 120449 and 124258, official records in the Office of the State Engineer.

⁷ Drawdown Analysis memorandum, dated April 1, 2016, file No. 85778, official records in the Office of the State Engineer.

⁸ NRS § 534.110(4).

⁹ Nevada Division of Water Resources' Water Level Database, May 17, 2016, official records in the Office of the State Engineer, available on-line at <http://water.nv.gov/data/waterlevel>.

However, similar declines have been observed throughout the valley, suggesting that the cause of this decline is current drought conditions combined with cumulative groundwater pumping. Recent water-level decline in the area of the proposed place of use is two feet or less per year, and it is expected that there will be less decline after the end of the drought.

The State Engineer finds that the expected drawdown of less than two feet for the nearest wells is not unreasonable and that approval of Application 85778 will not conflict with existing rights or protectable interests in domestic wells.

CONCLUSIONS OF LAW

I.

The State Engineer has jurisdiction over the parties and the subject matter of this action and determination.¹⁰

II.

The State Engineer is prohibited by law from granting a permit to appropriate the public waters where:¹¹

- 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 protectable 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 the potential drawdown from pumping water at the proposed point of diversion under Application 85778, as estimated with the Theis non-equilibrium equation, is reasonable and that granting the application will not conflict with existing rights or protectable interests in existing domestic wells as set forth in NRS § 533.024.

¹⁰ NRS Chapters 533 and 534.

¹¹ NRS § 533.370(2).

IV.

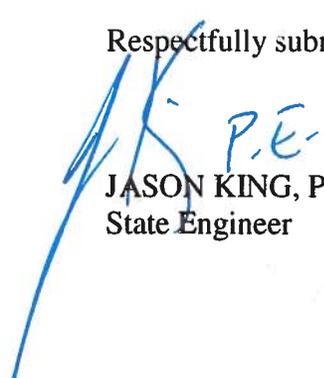
The State Engineer concludes that Application 85779 is not seeking to change the point of diversion and that pumping under this application will have no additional drawdown effect on nearby wells, nor will the proposed change conflict with existing rights or protectable interests in existing domestic wells as set forth in NRS § 533.024.

RULING

The protests to Applications 85778 and 85779 are overruled, and the applications are hereby granted subject to:

1. Existing rights; and
2. Payment of the statutory permit fees.

Respectfully submitted,


JASON KING, P.E.
State Engineer

Dated this 20th day of
July, 2016.