

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

IN THE MATTER OF APPLICATION 81901)
FILED TO APPROPRIATE THE PUBLIC)
WATERS OF AN UNDERGROUND)
SOURCE WITHIN THE CLOVERS AREA)
HYDROGRAPHIC BASIN (64) LANDER)
COUNTY, NEVADA.)

RULING

#6227

GENERAL

I.

Application 81901 was filed on May 16, 2012, by Kimberlie M. Davis and Paul L. Buffington to appropriate 1.0 cubic foot per second (cfs), not to exceed 160.0 acre-feet annually (afa), of water from an underground source to irrigate 40.0 acres of land described as being located within the S½ NW¼ SW¼ and SW¼ SW¼ of Section 2, T.32N., R.44E., M.D.B.&M. The proposed point of diversion is described as being located within the SW¼ SW¼ of said Section 2.¹

II.

Application 81901 was timely protested by the Pershing County Water Conservation District of Nevada on the following grounds:¹

The granting of said application will affect the water table and drainage, and adversely affect the decreed waters of the Humboldt River. Also, Basin #064 is over appropriated.

Application 81901 was also timely protested separately by Josh A. Smith, and Ervin D. and Helen Thompson on grounds that there is already a concentration of wells within ½ to 1 mile area of the Protestants' existing permitted wells; water levels are dropping; and they are not getting enough water to irrigate.¹

¹ File No. 81901, official records in the Office of the State Engineer.

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 in the case of protested Application 81901 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 the records of the Office of the State Engineer indicates that Permit 14278, Certificate 5075, is limited to 80.0 afa for the irrigation of 20.0 acres, and Permit 54888, Certificate 13845 is limited to 74.48 afa for the irrigation of 18.62 acres.^{2,3} Both of these permits are in the name of Ervin D. and Helen V. Thompson, and are located in separate wells within the SE $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 10, T.34N., R.44E., M.D.B.&M. These wells are approximately $\frac{1}{2}$ mile south of the proposed point of diversion for Application 81901. Permit 31145, Certificate 10399, and Permit 34883, Certificate 10768 have a total combined duty not to exceed 291.60 afa for the irrigation of 72.90 acres.^{4,5} Both of these permits are in the name of Slagowski Family Trust, and are located in the same well within Lot 14 (NE $\frac{1}{4}$ SE $\frac{1}{4}$) of Section 10, T.34N., R.44E., M.D.B.&M. Protestant Smith appears to have some interest in these permits, but no Reports of Conveyance have been filed with the Office of the State Engineer to update ownership from the Slagowski Family Trust for these permits. The well for these permits is approximately 1 mile south of the proposed point of diversion for Application 81901.

III.

The combined perennial yield of Hydrographic Basins 64 (Clovers Area), 65 (Pumpnickel Valley) and 66 (Kelly Creek Area) is 72,000 afa.⁶ The individual perennial yield

² File No. 14278, official records in the Office of the State Engineer.

³ File No. 54888, official records in the Office of the State Engineer.

⁴ File No. 31145, official records in the Office of the State Engineer.

⁵ File No. 34883, official records in the Office of the State Engineer.

⁶ Special Hydrographic Basin Abstract, Water Rights Database, Basins 64, 65 and 66, May 1, 2013, official records in the Office of the State Engineer.

of Basins 64, 65 and 66 are 40,000 afa, 16,000 afa and 16,000 afa, respectively.⁷ The individual committed resource of Basins 64, 65 and 66 are 41,763 afa, 14,631 afa and 33,222 afa, respectively.⁶ Of these committed resources, mining and milling purposes constitute 8,875 afa, 6,397 afa and 27,280 afa, respectively.⁶ The State Engineer considers the groundwater used in mining and milling operations to be a temporary use of water, and as such is not considered in the long-term committed resource analysis. The State Engineer finds that the perennial yields of these groundwater basins belong to the basin and not to the Humboldt River; therefore, these basins are not over appropriated and there is water available for appropriation. The State Engineer finds the Applicant seeks to appropriate 160 afa and there is sufficient underground water available from the Clovers Area Hydrographic Basin to accommodate this request.

IV.

The State Engineer has estimated an average transmissivity of 1,700 square feet per day and an estimated storage coefficient of 0.01 for the aquifer in this area.⁸ These values were used to estimate water level declines that could be expected from pumping 160.0 afa from the proposed point of diversion under Application 81901. The projected water level declines were generated using the standard Cooper-Jacob straight-line approximation of the Theis non-equilibrium equation for water level draw downs when a well is pumped or flowed. The method assumes a homogeneous, isotropic aquifer, with infinite extent and no recharge. These conditions would represent a worst-case scenario. The theoretical pump test assumed continuous pumping from 1 day to 30 years. The results indicate that after 30 years of continuous pumping, the cumulative draw down would be 5.72 ft. for a well ½ mile away (i.e. Protestant Thompson well, Permit 54888), and 4.48 ft. for a well 1 mile away (i.e. Protestant Smith (Slagowski Family Trust) well, Permit 31145). The State Engineer finds that Application 81901, if approved, would not cause an unreasonable lowering of the water level in the wells under Permits 54888 and 31145, and will not impair Humboldt River water users since the proposed well is more than 2 miles away from the Humboldt River, and is a relatively small volume of groundwater.

⁷ Jon O. Nowlin, *Ground-water Quality in Nevada – A Proposed Monitoring Program*, Open File Report 78-768, (United States Geological Survey, Nevada Division of Environmental Protection), p.193, 1986.

⁸ Well Driller Reports, official records of the Office of the State Engineer, and State Engineer's Ruling No. 5270.

Therefore, the pumping of the Applicant's well would not have a negative impact on the Protestants' water rights, and thus may be considered for approval.

V.

Staff from the State Engineer's office have conducted annual water level measurements in the wells represented by Permit 54888 (Protestant Thompson well) and Permit 31145 (Slagowski Family Trust well) since 1997, and plan to continue the annual springtime measurements prior to the commencement of the irrigation season. For the well under Permit 54888, water levels have declined from 41.4 ft. in 1997, to 50.2 ft. in 2013, a drop of 8.8 ft. in 16 years.⁹ For the well under Permit 31145, water levels have declined from 52.1 ft. in 1997, to 62.4 ft. in 2013, a drop of 10.3 ft. in 16 years.¹⁰ The water levels and hydrographs for these wells do display a sharper decline since 2006 of 8.8 ft. and 9.8 ft, respectively, or approximately 1.0 ft./yr. and 1.4 ft./yr. for the respective wells. However, the State Engineer finds that these are not precipitous water level declines.

CONCLUSIONS

I.

The State Engineer has jurisdiction over the parties and the subject matter of this action and determination.¹¹

II.

The State Engineer is prohibited by law from granting an application to appropriate the public waters where:¹²

- 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.

⁹ Hydrograph and water level measurements for Site 064 N32 E44 10ADA1, official records of the Office of the State Engineer.

¹⁰ Hydrograph and water level measurements for Site 064 N32 E44 10DAA1, official records of the Office of the State Engineer.

¹¹ NRS Chapters 533 and 534.

¹² NRS § 533.370(2).

III.

Based on the findings, the State Engineer concludes that there is unappropriated water at the source sufficient to satisfy the requirements of the requested appropriation, the proposed use of water will not conflict with existing water rights within the Clovers Area Hydrographic Basin or the Humboldt River, and the granting of Application 81901 does not threaten to prove detrimental to the public interest.

RULING

The protests to Application 81901 are hereby overruled, and Application 81901 is hereby approved subject to existing rights and the payment of the statutory permit fees.

Respectfully submitted,


JASON KING, P.E.
State Engineer

Dated this 23rd day of
May, 2013.