

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

IN THE MATTER OF APPLICATIONS 84413)
AND 84414 FILED TO APPROPRIATE THE)
PUBLIC WATERS OF AN UNDERGROUND)
SOURCE WITHIN THE LAMOILLE VALLEY)
HYDROGRAPHIC BASIN (45), ELKO COUNTY,)
NEVADA.)

RULING

#6346

GENERAL

I.

Application 84413 was filed on October 6, 2014, by Casino West, Inc., Masini Investments, LLC and L&M Family Limited Partnership to appropriate 1.5 cubic feet per second (cfs) of groundwater for irrigation purposes. The proposed point of diversion is described as being located within the SE $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 4, T.33N., R.58E., M.D.B.&M. The proposed place of use is described as being located within the S $\frac{1}{2}$ NW $\frac{1}{4}$, N $\frac{1}{2}$ NE $\frac{1}{4}$, portions of the SW $\frac{1}{4}$ NE $\frac{1}{4}$, W $\frac{1}{2}$ SE $\frac{1}{4}$ and the SW $\frac{1}{4}$ of Section 4, T.33N., R.58E., M.D.B.&M. On the application under item #13, the Applicant states that the water sought to be appropriated will be used as a supplemental groundwater right to the Humboldt River Decree Proof No. 00421.¹

II.

Application 84414 was filed on October 6, 2014, by Casino West, Inc., Masini Investments, LLC and L&M Family Limited Partnership to appropriate 2.5 cfs of groundwater for irrigation purposes. The proposed point of diversion is described as being located within the SW $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 10, T.33N., R.58E., M.D.B.&M. The proposed place of use is described as being located within portions of the W $\frac{1}{2}$, SE $\frac{1}{4}$, and the E $\frac{1}{2}$ NE $\frac{1}{4}$ of Section 9 and portions of the W $\frac{1}{2}$ of Section 10, all within T.33N., R.58E., M.D.B.&M. On the application under item #13, the Applicant states that the water sought to be appropriated will be used as a supplemental groundwater right to the Humboldt River Decree Proof Nos. 00416, 00421 and 00447.²

III.

Applications 84413 and 84414 were timely protested by Pershing County Water Conservation District of Nevada on the following grounds:^{1,2}

¹ File No. 84413, official records in the Office of the State Engineer.

² File No. 84414, official records in the Office of the State Engineer.

Granting of said application[s] could affect flows of Thorpe and Lamoille Creeks which are tributaries of the Humboldt River. Also, periods of use should be the same as in the Decree, as these are supplemental to Decree Applications. Also because these are supplemental applications, there should be no set diversion rate except to not exceed 3.0.

IV.

Applications 84413 and 84414 were timely protested by Humboldt River Basin Water Authority on the following grounds:^{1,2}

1. The proposed point of diversion is immediately proximate to Thorpe Creek, the surface waters of which are fully appropriated under the Bartlett Decree. Production of groundwater from a well at the proposed point of diversion is likely to have an adverse impact upon the flow of Thorpe Creek and to existing decreed surface water rights on Thorpe Creek and other downstream water rights holders.
2. A review of well logs for other existing groundwater wells in the vicinity of the proposed point of diversion suggests that a seal in the proposed well casing to a typical depth of 50' may not afford protection to the surface flows of Thorpe Creek.
3. The proposed point of diversion is within a section of land within T34N, R42E which has been designated by the Nevada State Engineer through Order 869 as requiring special management pursuant to NRS 534 and accordingly, approval of Application 84413 [and 84414] and production of groundwater from a well at the proposed point of diversion may impair other existing groundwater rights.
4. The adverse impact upon the flow of Thorpe Creek occasioned by the production of groundwater from a well at the proposed point of diversion is not in the public interest.

V.

The Applicant filed an Answer to the protests, responding that the Applications could be granted upon the State Engineer requiring a 100' seal on the well, which would protect the surface-water source. In addition, the Applicant responded that Order 869 was a designation order issued in 1985, which order provided for additional authority of the State Engineer in management of the basin, but did not prohibit the granting of additional water rights.

FINDINGS OF FACT

I.

Nevada Revised Statute § 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 Applications 84413 and 84414, 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.

Applications 84413 and 84414 were filed for supplemental rights to Claims 00416, 00421 and 00447 of the Bartlett Decree.³ The proposed points of diversion listed under Applications 84413 and 84414 are located approximately 30 feet from Thorpe Creek. Pumping from these wells can induce recharge from Thorpe Creek in excess of naturally occurring stream infiltration by increasing the hydraulic gradient between the stream channel and the well. This occurs regardless of when the stream is flowing, because groundwater storage depletion caused by pumping in one season will be replaced by enhanced recharge in the following season. The amount of water captured from the stream was estimated using Glover's analysis.⁴ For this analysis, transmissivity was estimated to be within the range of 200 - 2,000 ft²/day and the storage coefficient was estimated to be 0.15 for the proposed points of diversion.¹ The State Engineer finds that the Glover's analysis demonstrates that over a period of five years, reduction in stream flow caused by pumping from the proposed wells under Applications 84413 and 84414 would be over 90% of the volume pumped.

Although the Applicant asserts in its Answer that the State Engineer could grant the applications with conditions similar to other permitted rights, the State Engineer finds that in the case of these applications, the practice of pumping when no water is flowing in Thorpe Creek and requiring a 100' foot seal⁵ could delay the capture of surface flows, but that the delay would not significantly change the estimate of stream flow reduction over a five-year period.

³ Claim Nos. 00416, 00421 and 00447, Bartlett Decree, incorporated as Section 1 into the Decree entered in *In the Matter of the Determination of the Relative Rights of Claimants and Appropriators of the Waters of the Humboldt River Stream System and its Tributaries*, Case No. 2804, Sixth Judicial District Court of the State of Nevada, In and For the County of Humboldt (October 20, 1931).

⁴ Glover, R. E., and C.G. Balmer, 1954, River depletion resulting from pumping a well near a river. *Am. Geophysical Union Trans.*, v. 35, no. 3: 468-470; and see also, Jenkins, C.T., 1968, *Techniques of water-resources investigations of the United State Geological Survey*, Book 4, ch. D1, Computation of rate and volume of stream depletion by wells, United States Geological Survey, p. 17.

⁵ See generally Nevada Administrative Code (NAC) § 534.390.

CONCLUSIONS OF LAW

I.

The State Engineer has jurisdiction over the parties and the subject matter of this action and determination.⁶

II.

The State Engineer is prohibited by law from granting a permit under an application to appropriate the public waters where:⁷

- 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.

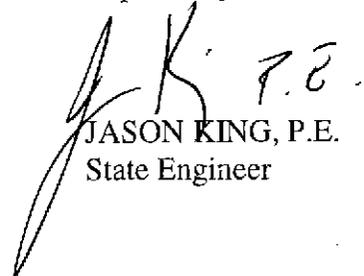
III.

Glover's analysis demonstrates that over a period of five years, Applications 84413 and 84414 would capture over 90% of the volume pumped from the surface water source, which has existing senior decreed rights. Although conditions have been proposed, which could delay the capture of the surface water source, the conditions would not significantly change the estimate of stream flow reduction over a five-year period; therefore, the State Engineer concludes that Applications 84413 and 84414 will conflict with existing rights.

RULING

The protests to Applications 84413 and 84414 are upheld in part and Applications 84413 and 84414 are hereby denied on the grounds that approval would conflict with existing rights and would threaten to prove detrimental to the public interest.

Respectfully submitted,



JASON KING, P.E.
State Engineer

Dated this 6th day of
May, 2016.

⁶ NRS Chapters 533 and 534.

⁷ NRS § 533.370(2).