

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

IN THE MATTER OF APPLICATION 85137 FILED)
TO CHANGE THE POINT OF DIVERSION AND)
PLACE OF USE OF THE PUBLIC WATERS OF)
AN UNDERGROUND SOURCE WITHIN THE)
MARYS RIVER AREA HYDROGRAPHIC BASIN)
(42), ELKO COUNTY, NEVADA.)

RULING
#6369

GENERAL

I.

Application 85137 was filed on April 30, 2015, by Dalton Real Estate, LLC to change the point of diversion and place of use of 1.3 cubic feet per second, not to exceed 275.4 acre-feet annually, of groundwater previously appropriated under Permit 72080 for irrigation and domestic purposes. The proposed point of diversion is described as being located within the SW $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 28, T.39N., R.62E., M.D.B.&M. The existing point of diversion is described as being located within the NE $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 23, T.39N., R.61E., M.D.B.&M. The proposed place of use is described as being 91.8 acres of land located within the S $\frac{1}{2}$ N $\frac{1}{2}$, N $\frac{1}{2}$ S $\frac{1}{2}$, S $\frac{1}{2}$ SW $\frac{1}{4}$, and SW $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 28, T.39N., R.62E., M.D.B.&M. The existing place of use is described as being 91.8 acres of land removed from irrigation located within the NE $\frac{1}{4}$, and W $\frac{1}{2}$ SE $\frac{1}{4}$ of Section 23, T.39N., R.61E., M.D.B.&M.¹

FINDINGS OF FACT

I.

The State Engineer finds that the proposed point of diversion under Application 85137 is located 1,380 feet north of Bishop Creek, a tributary to the Humboldt River, and a fully decreed surface-water source.¹

Pumping from the well proposed under Application 85137 can induce recharge from Bishop 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.

¹ File No. 85137, official records in the Office of the State Engineer.

The proposed point of diversion is located close to a surface-water source that is tributary to the Humboldt River; therefore, the amount of any water that may be captured from the stream was estimated using Glover's analysis.² For the analysis of Application 85137, transmissivity was estimated to be 830 ft²/day and the storage coefficient was estimated to be 0.15 for the proposed point of diversion. The State Engineer finds that after a period of five years, reduction in stream flow caused by pumping from the proposed well under Application 85137 would be 76% of the pumped rate. This percentage is the same regardless of the pumping rate.

CONCLUSIONS OF LAW

I.

The State Engineer has jurisdiction over the parties and the subject matter of this action and determination.³

II.

The State Engineer is prohibited by law from granting a permit under a change application that requests to appropriate the public waters where:⁴

- 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 after a period of five years, a well pumped under Application 85137 would capture 76% of its water from the surface-water source, which has existing senior decreed rights; therefore, the State Engineer concludes that use of water under Application 85137 will conflict with existing rights and threaten to prove detrimental to the public interest.

² 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* (Computation of rate and volume of stream depletion by wells). United States Geological Survey. Book 4, ch. D1; p. 17.

³ NRS Chapters 533 and 534.

⁴ NRS § 533.370(2).

RULING

Application 85137 is hereby denied on the grounds that approval of the application would conflict with existing rights and that it threatens to prove detrimental to the public interest.

Respectfully submitted,


JASON KING, P.E.
State Engineer

Dated this 18th day of
October, 2016.