

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

IN THE MATTER OF APPLICATION)
84553 FILED TO APPROPRIATE)
THE PUBLIC WATERS OF AN)
UNDERGROUND SOURCE WITHIN)
THE LITTLE HUMBOLDT VALLEY)
HYDROGRAPHIC BASIN (067),)
HUMBOLDT COUNTY, NEVADA.)

RULING
#6322

GENERAL

I.

Application 84553 was filed on November 25, 2014, by Crawford Cattle, LLC, to appropriate 4.456 cubic feet per second of water from an underground source 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 29, T.41N., R.42E., M.D.B.&M. The proposed place of use is described as being 250 acres within portions of the SW $\frac{1}{4}$ and W $\frac{1}{2}$ SE $\frac{1}{4}$ of Section 29; portions of the SE $\frac{1}{4}$ of Section 30; portions of the NE $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 31 and portions of the N $\frac{1}{2}$ NW $\frac{1}{4}$ and NW $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 32, all within T.41N., R.42E., M.D.B.&M.¹

FINDINGS OF FACT

I.

Nevada Revised Statute § 533.370(2) provides that the State Engineer must reject an application where there is no unappropriated water in the proposed source of supply. In determining the amount of underground water available for appropriation in a given hydrographic basin (basin), the State Engineer relies on available hydrologic studies to provide relevant data to determine the perennial yield of a basin. The perennial yield of a groundwater basin may be defined as the maximum amount of groundwater that can be withdrawn each year over the long term without depleting the basin. Perennial yield is ultimately limited to the maximum amount of natural discharge that can be utilized for beneficial use. The perennial yield cannot be more than the natural recharge to a groundwater basin and in some cases is less. If the perennial yield is exceeded, groundwater levels will decline and steady-state conditions will not be achieved, a situation commonly referred to as groundwater mining. Additionally,

¹ File No. 84553, official records in the Office of the State Engineer.

withdrawals of groundwater in excess of the perennial yield may contribute to adverse conditions such as water quality degradation, storage depletion, diminishing yield of wells, increased economic pumping lifts, and land subsidence.²

Perennial yield is a guideline that is used in Nevada to manage underground water development. Perennial yield sets an upper limit on the amount of underground water than can be developed in an underground water basin. Since perennial yield is determined by the natural hydrologic conditions, limiting underground water development to a basin's perennial yield ensures sustainable development of the underground water resource.

The perennial yield of the Little Humboldt Valley Hydrographic Basin is currently estimated as 34,000 acre-feet annually (afa), which is a combined perennial yield with the Hardscrabble Area Hydrographic Basin (068) and the Paradise Valley Hydrographic Basin (069).³ A review of the records on file in the Office of the State Engineer show total committed underground water resources in Little Humboldt Valley at 10,290.21 afa,⁴ in Hardscrabble Area at 0.00 afa⁵ and in Paradise Valley at 115,355.86 afa.⁶ The total combined committed underground water resources for Little Humboldt Valley, Hardscrabble Area and Paradise Valley is 125,646.07 afa, which greatly exceeds the total combined perennial yield of the basins. The State Engineer finds that there is no underground water available for appropriation in the quantity necessary to satisfy Application 84553.

² Office of the State Engineer, *Water for Nevada, State of Nevada Water Planning Report No. 3*, p. 13, Oct. 1971.

³ J.R. Harrill and D.O. Moore, *Effects of Ground-Water Development on the Water Regimen of Paradise Valley, Humboldt County, Nevada, 1948-68, and Hydrologic Reconnaissance of the Tributary Areas*, Water Resources Bulletin No. 39, (Department of Conservation and Natural Resources, Division of Water Resources and U.S. Department of the Interior, Geological Survey), 1970.

⁴ Nevada Division of Water Resources' Water Rights Database, Hydrographic Basin Summary, Little Humboldt Valley Hydrographic Basin (067), June 16, 2015, official records in the Office of the State Engineer.

⁵ Nevada Division of Water Resources' Water Rights Database, Hydrographic Basin Summary, Hardscrabble Area Hydrographic Basin (068), June 16, 2015, official records in the Office of the State Engineer.

⁶ Nevada Division of Water Resources' Water Rights Database, Hydrographic Basin Summary, Paradise Valley Hydrographic Basin (069), June 16, 2015, official records in the Office of the State Engineer.

CONCLUSIONS OF LAW

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 an application 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 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 committed underground water resources of the Little Humboldt Valley Hydrographic Basin combined with the committed underground water resources of the Hardscrabble Area Hydrographic Basin and the Paradise Valley Hydrographic Basin currently exceed the basins' estimated combined perennial yield. The State Engineer concludes that there is no unappropriated water at the source of supply and the approval of the subject application would result in the withdrawal of underground water in excess of the combined perennial yield of the Little Humboldt Valley Hydrographic Basin.

IV.

The State Engineer concludes that Application 84553 requests a new appropriation of underground water and its approval would conflict with existing rights and would threaten to prove detrimental to the public interest.

⁷ NRS Chapters 533 and 534.

⁸ NRS § 533.370(2).

RULING

Application 84553 is hereby denied on the grounds that there is no unappropriated water at the source of supply and approval of the application 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 13th day of
November, 2015.