

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

IN THE MATTER OF APPLICATIONS 36761,)
36762, 36763, 36764, 36765, 36766,)
36767, 36768, 36769, 36770, 36771,)
36772, 36773, 36774, 36775 AND 36776)
FILED TO APPROPRIATE THE WATERS OF AN)
UNDERGROUND SOURCE IN THE AMARGOSA)
DESERT GROUNDWATER BASIN, NYE COUNTY,)
NEVADA.)

RULING ON REMAND

GENERAL

I.

Application 36761 was filed by James Owen on February 12, 1979, to appropriate 3.6 c.f.s. of underground water for irrigation purposes. The point of diversion within the SE1/2 SW1/4 of Section 23, T.16S., R.48E., M.D.B.&M., and the place of use is 160 acres within the SW1/4 of Section 23, T.16S., R.48E., M.D.B.&M.¹

Applications 36762 was filed by James Owen on February 12, 1979, to appropriate 3.6 c.f.s. of underground water for irrigation purposes. The point of diversion within the SW1/4 NW1/4 of Section 23, T.16S., R.48E., M.D.B.&M., and the place of use is 160 acres within the NW1/4 of Section 23, T.16S., R.48E., M.D.B.&M.¹

Application 36763 was filed by James Owen on February 12, 1979, to appropriate 3.6 c.f.s. of underground water for irrigation purposes. The point of diversion is within the NW1/4 SW1/4 of Section 23, T.16S., R.48E., M.D.B.&M., and the place of use is 160 acres within the SW1/4 of Section 23, T.16S., R.48E., M.D.B.&M.¹

Application 36764 was filed by James Owen on February 12, 1979, to appropriate 3.6 c.f.s. of underground water for irrigation purposes. The point of diversion is within the SE1/4

¹ State's Exhibit No. 7, received in evidence at Administrative Hearing before the State Engineer, August 3, 1989.

NOTE: All hereinafter referenced Exhibits were received in this August 3, 1989 Record.

NW1/4 of Section 25, T.16S., R.48E., M.D.B.&M., and the place of use is 160 acres within the NW1/4 of Section 25 T.16S., R.48E., M.D.B.&M.¹

Application 36765 was filed by James Owen on February 12, 1979, to appropriate 3.6 c.f.s. of underground water for irrigation purposes. The point of diversion is within the NE1/4 SW1/4 of Section 25, T.16S., R.48E., M.D.B.&M., and the place of use is 160 acres within the SW1/4 of Section 25, T.16S., R.48E., M.D.B.&M.¹

Application 36766 was filed by James Owen on February 12, 1979, to appropriate 3.6 c.f.s. of underground water for irrigation purposes. The point of diversion is within the NE1/4 SE1/4 of Section 26, T.16S., R.48E., M.D.B.&M., and the place of use is 160 acres within the SE1/4 of Section 26, T.16S., R.48E., M.D.B.&M.¹

Application 36767 was filed by James Owen on February 12, 1979, to appropriate 3.6 c.f.s. of underground water for irrigation purposes. The point of diversion is within the SW1/4 NE1/4 of Section 36, T.16S., R.48E., M.D.B.&M., and the place of use is 120 acres within the SE1/4 of Section 36, T.16S., R.48E., M.D.B.&M.¹

Application 36768 was filed by James Owen on February 12, 1979, to appropriate 3.6 c.f.s. of underground water for irrigation purposes. The point of diversion is within the SW1/4 SE1/4 of Section 36, T.16S., R.48E., M.D.B.&M., and the place of use is 160 acres within the SE1/4 of Section 36, T.16S., R.48E., M.D.B.&M.¹

Application 36769 was filed by James Owen on February 12, 1979, to appropriate 3.6 c.f.s. of underground water for irrigation purposes. The point of diversion is within the SE1/4 SW1/4 of Section 36, T.16S., R.48E., M.D.B.&M., and the place of use is 160 acres within the SW1/4 of Section 36, T.16S., R.48E., M.D.B.&M.¹

Application 36770 was filed by James Owen on February 12, 1979, to appropriate 3.6 c.f.s. of underground water for irrigation purposes. The point of diversion is within the NE1/4 NW1/4 of Section 36, T.16S., R.48E., M.D.B.&M., and the place of use is 160 acres within the NW1/4 of Section 36, T.16S., R.48E., M.D.B.&M.¹

Application 36771 was filed by James Owen on February 12, 1979, to appropriate 3.6 c.f.s. of underground water for irrigation purposes. The point of diversion is within the NW1/4 SE1/4 of Section 30, T.16S., R.49E., M.D.B.&M., and the place of use is 160 acres within the SE1/4 of Section 30, T.16S., R.49E., M.D.B.&M.¹

Application 36772 was filed by James Owen on February 12, 1979, to appropriate 3.6 c.f.s. of underground water for irrigation purposes. The point of diversion is within the NW1/4 SE1/4 of Section 30, T.16S., R.49E., M.D.B.&M., and the place of use is 160 acres within the SW1/4 of Section 30, T.16S., R.49E., M.D.B.&M.¹

Application 36773 was filed by James Owen on February 12, 1979, to appropriate 3.6 c.f.s. of underground water for irrigation purposes. The point of diversion is within the SW1/4 NE1/4 of Section 31, T.16S., R.49E., M.D.B.&M., and the place of use is 160 acres within the NE1/4 of Section 31, T.16S., R.49E., M.D.B.&M.¹

Application 36774 was filed by James Owen on February 12, 1979, to appropriate 3.6 c.f.s. of underground water for irrigation purposes. The point of diversion is within the NW1/4 SE1/4 of Section 31, T.16S., R.49E., M.D.B.&M., and the place of use is 160 acres within the SE1/4 of Section 31, T.16S., R.49E., M.D.B.&M.¹

Application 36775 was filed by James Owen on February 12, 1979, to appropriate 3.6 c.f.s. of underground water for irrigation purposes. The point of diversion is within the NW1/4 SW1/4 of Section 31, T.16S., R.49E., M.D.B.&M., and the place of

use is 160 acres within the SW1/4 of Section 31, T.16S., R.49E., M.D.B.&M.¹

Application 36776 was filed by James Owen on February 12, 1979, to appropriate 3.6 c.f.s. of underground water for irrigation purposes. The point of diversion is within the SW1/4 NW1/4 of Section 31, T.16S., R.49E., M.D.B.&M., and the place of use is 160 acres within the NW1/4 of Section 31, T.16S., R.49E., M.D.B.&M.¹

II.

Timely protests to the granting of Applications 36761, 36762, 36763, 36764, 36765, 36766, 36767, 36768, 36769, 36770, 36771, 36772, 36773, 36774, 36775 and 36776 were filed on June 7, 1979, in the name of Industrial Mineral Ventures (IMV). Said protests seek denial of the applications on the following grounds:

1. Unequivocally there is no unappropriated water in the proposed source of supply, as the Amargosa Desert Ground Water Basin is already overappropriated.
2. The granting of this application would conflict with the prior rights of Protestant, as it would cause an unreasonable lowering of the ground water level.
3. The granting of this application would prove detrimental to the public interest, as the prior rights of Protestant would be adversely effected. Consequently, its mining and milling operation would suffer, all to the detriment of Protestant, Nye County and the State of Nevada."²

The State Engineer denied the subject applications in Ruling #2793, on December 15, 1982, the grounds for denial being that, the appropriation of underground water for irrigation purposes, would conflict with and tend to impair the value of existing rights and be detrimental to the public interest and welfare.³

² State's Exhibit No. 8.

³ State's Exhibit No. 2.

The Ruling was timely appealed by James Owen, in a petition for Judicial Review of the State Engineer's Order, filed in the Fifth Judicial District Court, State of Nevada.⁴

On May 10, 1983, an order remanding the matter to the Respondent State Engineer for the purpose of receiving additional evidence and argument was issued by the Court.⁵

After duly noticing all parties of record, the State Engineer received evidence and testimony in the matter at an Administrative Hearing in Carson City, Nevada, on August 3, 1989.⁶

FINDINGS OF FACT

I.

Protestant IMV offered evidence and testimony that Applications 36761 through 36776, should be denied. Evidence and testimony addressed the theoretical performance of the aquifer if pumpage occurs under the proposed applications. Protestant's expert witness Hydro-Search, Inc. (HSI) provided an overview of existing data and analyses relied upon in determining the most probable aquifer parameters, transmissivity and storage coefficient.⁷ The State Engineer finds the aquifer parameters have been adequately defined.

⁴ State's Exhibit No. 3.

⁵ State's Exhibit No. 6.

⁶ State's Exhibits No. 1 and No. 17.

⁷ Transcript, administrative hearing before State Engineer August 3, 1989, pgs 41-48. Testimony of John V.A. Sharp, PhD.

NOTE: All hereinafter referenced transcript pages refer to the record developed at this hearing.

The representative values of transmissivity and storage coefficient were then used by protestant's expert witness HSI in various well production scenarios to predict the performance of the aquifer in response to the proposed pumpage over the next twenty years. In their predictions the witness used exact well locations, proposed production flow rates and ignored any effect from secondary recharge. The predictions used well locations and production rates only of the proposed subject wells and assumed an infinite aerial extent of the aquifer.⁸ The State Engineer finds the performance predictions generated by HSI utilized an accepted standard methodology involving the aquifer parameters, flow rates, well locations and the infinite extent of the aquifer, and further finds the predictions made could be reproduced by other experts using the same or similar empirical formulas and solution techniques.

III.

The interference effects (drawdown) predicted by protestants aquifer performance analysis (model) indicated a water level drop of forty-eight feet and sixty-one feet in protestants wells after twenty years of pumpage under the subject applications. Protestant further represented these estimates are likely conservative due to other conditions not taken into account in the modeling. Possible negative boundaries in the aquifer system, probable smaller transmissivity values and possible storage coefficient values being much smaller in reality than used in the model all would result in greater drawdowns at protestant's wells in response to the proposed pumpage under the subject applications.⁹ On cross-examination, Protestants testified that recharge effects would indeed tend to lessen drawdowns at protestants wells but maintained that the predicted

⁸ Transcript, pgs 48-57

⁹ Transcript, Pgs. 41-57

water level drops were still considered conservative.¹⁰ The State Engineer finds the predictions made by HSI, provide reasonable estimates of how the aquifer will respond to development and further finds these drawdowns will likely be greater due to the less optimistic aquifer parameters probable.

CONCLUSIONS

I.

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

II.

The State Engineer is prohibited by law from granting a permit where:

- A. There is no unappropriated water in the proposed source, or
- B. The proposed use conflicts with existing rights, or
- C. The proposed use threatens to prove detrimental to the public welfare.¹²

III.

Unrebutted evidence and testimony received indicates the interference effects of pumpage under the proposed applications on protestants water levels would be substantial and the State Engineer concludes the water level drop would be unreasonable and therefore conflict with Protestant IMV's prior water rights.

IV.

The granting of the subject applications would prove detrimental to the public interest, as protestants prior rights would be adversely effected.

¹⁰ Transcript, pg. 57, L. 8 through pg. 59, line 8; See Exhibit #21, page 9.

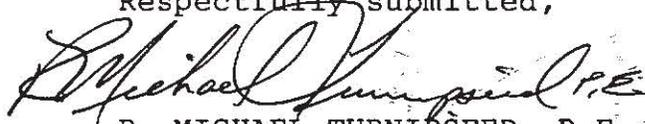
¹¹ NRS 533 and 534.

¹² NRS 533.370(3).

RULING

For the foregoing reasons, the protests to Applications 36761, 36762, 36763, 36764, 36765, 36766, 36767, 36768, 36769, 36770, 36771, 36772, 36773, 36774, 36775 and 36776 are hereby upheld and said applications are denied on the grounds that the appropriation of underground water for irrigation purposes, as applied for, would conflict with and tend to impair the value of existing rights and be detrimental to the public interest and welfare.

Respectfully submitted,



R. MICHAEL TURNIPSEED, P.E.
State Engineer

RMT/TKG/pm

Date this 30th day of

May, 1990