

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

IN THE MATTER OF APPLICATION 57527,)
APPLICATION 58006 AND APPLICATION)
58007 FILED TO APPROPRIATE THE)
WATERS OF AN UNDERGROUND SOURCE)
WITHIN THE LOVELOCK VALLEY GROUND)
WATER BASIN, PERSHING COUNTY,)
NEVADA.)

INTERIM
RULING

4036

GENERAL

I.

Application 57527 was filed on April 28, 1992 by Thomas and Darlene Moura to appropriate 5.0 c.f.s. of water for irrigation of 200 acres located within the SE $\frac{1}{4}$ of Section 31, T.28N., R.32E., M.D.B.&M., all of lots 1 and 2, E $\frac{1}{2}$ of Lot 3, E $\frac{1}{2}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$, E $\frac{1}{2}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$ and portions of the SE $\frac{1}{4}$ lying west of the Humboldt River within Section 6, T.27N., R.32E., M.D.B.&M., and portions of the NE $\frac{1}{4}$ of Section 7 which lies north of the Southern Pacific Railroad right-of-way and west of the Humboldt River within T.27N., R.32E., M.D.B.&M. Presently, this land receives decreed waters from the Humboldt River. The water requested in Application 57527, would be supplemental to those decreed waters. The point of diversion is described as being within the SW $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 31, T.28N., R.32E., M.D.B.&M.¹

II.

Application 58006 was filed on August 26, 1992 by Bingo G. Wesner to appropriate 2.85 c.f.s. of water for the irrigation of 256 acres within portions of the NW $\frac{1}{4}$ NE $\frac{1}{4}$, SW $\frac{1}{4}$ NE $\frac{1}{4}$, NW $\frac{1}{4}$, NE $\frac{1}{4}$ SW $\frac{1}{4}$, NW $\frac{1}{4}$ SW $\frac{1}{4}$ and the SW $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 32, T.28N., R.32E., M.D.B.&M. The point of diversion is described as being within the SW $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 32, T.28N., R.32E., M.D.B.&M.²

¹ Public record in the office of the State Engineer under File No. 57527.

² Public record in the office of the State Engineer under File No. 58006.

III.

Application 58007 was filed on August 26, 1992 by Bingo G. Wesner to appropriate 2.28 c.f.s. of water for the irrigation of 205 acres within portions of the SE $\frac{1}{4}$ NE $\frac{1}{4}$, SW $\frac{1}{4}$ NE $\frac{1}{4}$, NW $\frac{1}{4}$ NE $\frac{1}{4}$ and the NW $\frac{1}{4}$ of Section 29, T.28N., R.32E., M.D.B.&M. The point of diversion is described as being within the NW $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 29, T.28N., R.32E., M.D.B.&M.³

IV.

Application 57527 and Applications 58006 and 58007 were timely protested on July 17, 1992 and October 8, 1992 respectively, by the Pershing County Water Conservation District of Nevada for the following reason and on the following grounds to wit: "That the granting of said application(s) will affect the water table and drainage and adversely affect the decreed waters of the Humboldt River." The protestant requests that Applications 57527, 58006 and 58007 be denied.⁴

V.

After proper notice was given to all parties with standing, an administrative hearing in the matter of the subject applications was held on January 21, 1993 in Lovelock, Nevada before representatives of the State Engineer.⁵

FINDINGS OF FACT

I.

The protestant claims that the wells proposed under Applications 57527, 58006 and 58007 may actually pump water, the

³ Public record in the office of the State Engineer under File No. 58007.

⁴ Exhibits 5, 6 and 7, Public Administrative Hearing before the State Engineer, January 21, 1993.

⁵ Exhibit 1, Public Administrative Hearing before the State Engineer, January 21, 1993.

source of which is the Humboldt River.⁶ The applicants provided evidence that there exists an underground clay layer which prevents direct communication between the Humboldt River and the aquifer from which the proposed wells would draw water.⁷ After reviewing the well logs presented by the applicants⁸ and consulting several technical reports on surface and underground hydrology of the Lovelock Valley,⁹ the State Engineer finds that the evidence suggests there is an impermeable clay layer underlying the Humboldt River and the area where the proposed wells are located. The State Engineer further finds that requiring a grout seal to a point below the clay layer encountered in the drilling of each well will insure that the water will be pumped from the aquifer located below the clay layer.

II.

There are uncertainties regarding the extent and integrity of the underground soil barrier.⁹ While the evidence indicates the clay layer exists in the vicinity of the proposed wells, there is no evidence or testimony on the record regarding the areal extent of the underground clay layer or the presence or absence of fissures, faults, or other discontinuities in the clay layer that

⁶ Transcript p. 8, Public Administrative Hearing before the State Engineer, January 21, 1993.

⁷ Exhibits 12, 13 and 14, Public Administrative Hearing before the State Engineer, January 21, 1993.

⁸ Exhibits 12 and 13, Public administrative Hearing before the State Engineer, January 21, 1993.

⁹ Official records in the office of the State Engineer, specific reports consulted are: Water Resources Bulletin No. 2, "Ground Water in Lovelock Valley, Nevada," 1946; Water Resources Bulletin No. 21, "Hydrogeology of the Lower Humboldt River Basin, Nevada," 1963; Water Resources-Reconnaissance Series Report 32, "Water Resources appraisal of Lovelock Valley, Pershing County, Nevada," 1965; Humboldt River Basin Report No. 11, "Lovelock Sub-basin," 1965; Water Resources Bulletin No. 32, "Hydrologic Reconnaissance of the Humboldt River Basin, Nevada," 1966.

could allow Humboldt River water to migrate downward into the aquifer in question.¹⁰ Additionally, there is no evidence whether the source of water in the aquifer in question is the Humboldt River or the natural underground recharge from the runoff from the adjacent mountains. Therefore, the State Engineer finds that additional information is necessary to insure that the water pumped from the proposed wells is not Humboldt River water. The State Engineer finds that the following items must be completed in order to make a decision on Applications 57527, 58006 and 58007:

1. A pump test, supervised by a professional engineer experienced in groundwater hydrology and pump tests, must be performed at the site of each proposed well. Note: The existing well under Permit 15139 cannot be used for test well under Application 58007.
2. The pump test shall include measurements of the piezometric surface in the shallow aquifer above the clay layer and in the aquifer below the clay layer, as measured in a monitoring well located at an appropriate point between the test well and the Humboldt River.
3. A work plan must be submitted to the State Engineer prior to the start of any work. The plan shall contain a proposed schedule, locations of the test wells and monitoring wells, details of the pump test, i.e., estimated pumping rate, duration of test, monitoring well measurement schedule, etc.
4. After review of the engineer's work plan, the State Engineer shall issue an approval to drill the test well and the monitor well for each of Applications 57527, 58006 and 58007. The test wells may be constructed in such a manner that they may be converted to production wells at a later date.
5. A final report must be prepared by the professional engineer and submitted to the State Engineer which contains the results of each pump test. The State Engineer shall review the report and make a final decision as to whether to approve or deny each application.

¹⁰ Transcript pp. 14-15, 25, Public Administrative Hearing before the State Engineer, January 21, 1993.

6. If any of Applications 57527, 58006 or 58007 are denied, then the test wells and the monitoring wells for the denied applications must be plugged in accordance with the requirements of NAC 534.

III.

The period of use requested in Application 57527 is January 1 to December 31 of each year.¹ The water under this application is to be used for irrigation of decreed land as described in the Humboldt River Decree, and therefore, would be supplemental to waters received under the decree. The State Engineer finds that the period of use under Application 57527 should be consistent with the Humboldt River Decree. The decreed season begins on March 15, in Pershing County and runs for approximately 180 days for Class A lands, 90 days for Class B lands, and 45 days for Class C lands.¹¹

IV.

The period of use requested in Applications 58006 and 58007 is January 1 to December 31 of each year.^{2,3} These applications are applications to appropriate groundwater for irrigation of land not included in the Humboldt River Decree. However, during the adjudication of the waters of the Humboldt River, much testimony and evidence was received regarding the growing season in the lower Humboldt River area. The State Engineer finds that there is no reason to deviate from the findings of the Humboldt River Adjudication with respect to growing season. Therefore, the State Engineer finds that the period of use under Applications 58006 and 58007 should be the same as that decreed in the Humboldt River Adjudication.

V.

Considering the Lovelock Valley groundwater basin as a whole, the perennial yield is 43,000 acre feet per year, of which 4,062

¹¹ The Humboldt River Adjudication, 1923-1938, compiled by Gary Mashburn and W.T. Mathews, State Printing Office, Carson City, NV, 1943.

acre feet per year is committed.¹² The State Engineer finds that there is unappropriated water in the Lovelock Valley Groundwater Basin.

CONCLUSIONS

I.

The State Engineer has jurisdiction over the subject matter.¹³

II.

The State Engineer is prohibited by law from granting a permit under an application to appropriate the public waters where:¹⁴

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

III.

There are uncertainties regarding the extent and integrity of the underground soil barrier separating the waters of the Humboldt River from the underground aquifer. Therefore, the final conclusion whether or not the proposed wells under Applications 57527, 58006 and 58007 will interfere with the waters of the Humboldt River, cannot be made until the results of the pump tests are available.

IV.

The State Engineer concludes that the period of use of water under Applications 57527, 58006 and 58007 should be consistent with that decreed in the Humboldt River Adjudication.

¹² Official records in the office of the State Engineer: Hydrologic Basin Abstract for Basin No. 4-73.

¹³ NRS 533 and 534.

¹⁴ NRS 533.370.

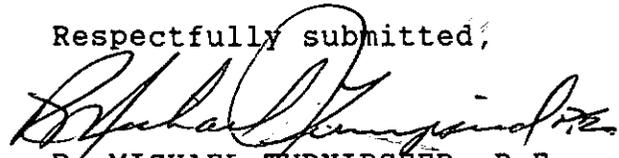
v.

The State Engineer concludes that there is unappropriated water in the Lovelock Valley Groundwater Basin.

INTERIM RULING

The Applicants are required to submit the results of pump tests as described in the Findings of Fact within two years of the date of this Ruling. A final ruling will be made after review of the pump test results.

Respectfully submitted,



R. MICHAEL TURNIPSEED, P.E.
State Engineer

RMT/MB/pm

Dated this 1st day of
September, 1993.