

IN THE MATTER OF APPLICATIONS NOS. 12563 AND 12564)
FILED BY F. M. FULSTONE, INC. TO APPROPRIATE WATER : RULING
FROM UNDERGROUND SOURCES FOR IRRIGATION PURPOSES IN :
LYON COUNTY, NEVADA.)

Description of Applications:

Application No. 12563 was filed on July 30, 1948, by F. M. Fulstone, Inc. to appropriate 5.0 c.f.s. of water from an underground source for irrigation purposes. The point of diversion is described as being within the NE $\frac{1}{4}$ SW $\frac{1}{4}$ Section 8, T. 10 N., R. 24 E., M.D.B.&M., and the place of use consists of 780 acres of land within portions of the N $\frac{1}{2}$ SW $\frac{1}{4}$, NW $\frac{1}{4}$, Section 8; SW $\frac{1}{4}$ SW $\frac{1}{4}$ Section 5; all of Section 6, T. 10 N., R. 24 E.; and SE $\frac{1}{4}$ SW $\frac{1}{4}$ Section 31, T. 11 N., R. 24 E., M.D.B.&M. The period of use is from March 1st to November 1st of each year.

Application No. 12564 was filed on July 30, 1948 by F. M. Fulstone, Inc. to appropriate 5.0 c.f.s. of water from an underground source for irrigation purposes. The point of diversion is described as being within the SE $\frac{1}{4}$ NE $\frac{1}{4}$ Section 8, T. 10 N., R. 24 E., M.D.B.&M. The place of use consists of 400 acres of land within portions of S $\frac{1}{2}$ NE $\frac{1}{4}$, N $\frac{1}{2}$ NE $\frac{1}{4}$ and NW $\frac{1}{4}$ SE $\frac{1}{4}$ Section 8, and SE $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$ and NE $\frac{1}{4}$ SW $\frac{1}{4}$ Section 5, T. 10 N., R. 24 E., M.D.B.&M. The period of use is from March 1st to November 1st of each year.

Protests to the granting of these applications were filed as follows:

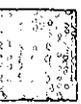
On December 8, 1948 by H. E. Rowntree on grounds that the waters of this source are appropriated by virtue of permits for small irrigation and domestic wells and by two large irrigation wells; that pumping tests prove that lifts are high and pumping costs near marginal figures from present water table levels, and that further development should be denied pending a survey to determine if present use equals or exceeds the recharge rate.

On January 7, 1949 by Bruno Fenili on grounds that there is not sufficient water in the underground source for the wells and that the proposed pumping would interfere with his artesian well.

On January 7, 1949 by A. Nuti on grounds that additional wells will lower the water table and stop the flow in artesian wells resulting in more pumping expense for everyone.

On January 7, 1949 by Frances R. Sanders and Louise Lerge on grounds similar to those under the protest of H. E. Rowntree.

On January 7, 1949 by Ernest Alpers on grounds similar to those under the protest of H. E. Rowntree.



On January 8, 1949 by Dugan S. Albright on grounds similar to those under the protest of H. E. Rowntree.

General:

The proposed wells under Applications Nos. 12563 and 12569 are located in the southern end of Smith Valley on the Desert Creek fan near the Saroni Canal.

There are three irrigation wells in the near vicinity of the proposed wells. These wells are described as follows:

Permit No. 13494 was issued to H. E. Rowntree to change the point of diversion and place of use under Permit No. 12242 of 2.2 c.f.s. of water for irrigation and domestic purposes. The point of diversion is within the SE $\frac{1}{4}$ SW $\frac{1}{4}$ Section 4, T. 10 N., R. 24 E., M.D.B.&M. The well is 14 inches in diameter and 250 feet deep with the static water level at 38 feet from the surface. Specific capacity after several months pumping was about 11 g.p.m. per foot of drawdown. This well has been assigned to Louis Cordone. The well under Permit No. 13494 is located approximately 5,450 feet northeast of Application No. 12563 and 3,750 feet northeast of Application No. 12564.

Certificate No. 3887 was issued under Permit No. 12278 to F. M. Fulstone, Inc. for 0.20 c.f.s. of water for irrigation and domestic purposes. The point of diversion is within the NW $\frac{1}{4}$ SW $\frac{1}{4}$ Section 5, T. 10 N., R. 24 E., M.D.B.&M. This well was hand-dug to a depth of 60 feet prior to 1919. In later years it was drilled to a depth of 485 feet and cased with 8 inch casing. Under the proof of beneficial use, the applicant claimed that 90 g.p.m. were being pumped with the equipment on the well at that time. The static water level is approximately 54 feet from the surface. The well under Certificate No. 3887 is located approximately 6,100 feet north of Application No. 12563 and approximately 5,800 feet north of Application No. 12564.

Permit No. 14987 was issued to Louis Cordone to appropriate 4.0 c.f.s. of water for irrigation purposes. The point of diversion is within the SW $\frac{1}{4}$ NW $\frac{1}{4}$ Section 9, T. 10 N., R. 24 E., M.D.B.&M. The well was drilled to a depth of 525 feet. No additional information is available on this well. The well under Permit No. 14987 is located approximately 3,600 feet northeast of Application No. 12563 and approximately 1,800 feet northeast of Application No. 12564.

From Geological Survey Water Supply Paper 1228 entitled "Geology and Water Resources of Smith Valley, Lyon and Douglas Counties, Nevada", it has been estimated that about 18,000 acre-feet of ground water is being discharged into the West Walker River, the greatest portion coming from the area south of the river. Although it would not be practical to try to salvage all of this water, due to possible interference with existing artesian wells, several thousand acre-feet of water can probably be developed south of the river without seriously lowering the piezometric surface, provided that the withdrawal is not concentrated in a small area.

Since completion of the Topaz Reservoir in 1922, there has been much more water available during the irrigation season and the increased diversion from the West Walker River has caused a general rise in ground water levels and artesian pressures in Smith Valley. The rise in the water levels has been beneficial in improving artesian flow, but it has risen to such an extent that some of the irrigated land has become water-logged.

The development of ground water, providing it is kept within safe limits, will be beneficial to the valley in that it will tend to alleviate the present excessively high water table conditions.

Interference with existing wells must also be considered in granting permits under Applications Nos. 12563 and 12564. If interference develops, it is most likely to develop between the proposed wells under Applications Nos. 12563 and 12564; between the proposed well under Application No. 12564, and the existing well under Permit No. 14987. These wells will all be located approximately 1,800 feet apart. A study of interference curves, which are most likely to represent the ground water conditions in this area, indicates that the interference between these wells will be small. The other wells in the vicinity are located at a great enough distance from the proposed wells that little or no interference should occur.

Opinion:

It is the opinion of this office that the granting of Applications Nos. 12563 and 12564 would not impair the value of existing rights in Smith Valley and that the amount of appropriation that will be made under these applications will not exceed the safe limits of ground water development in the southern portion of the valley. However, additional ground water development in this area for irrigation purposes will be restricted until the present development has been completed and this office has had an opportunity to observe the general results of the water table.

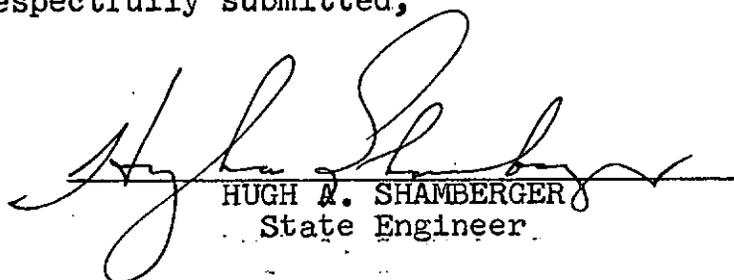
It is also the opinion of this office that there will not be sufficient interference between the proposed wells under Applications Nos. 12563 and 12564 and existing wells in the valley to warrant any restrictions.

RULING

The protests to the granting of Applications Nos. 12563 and 12564 are herewith overruled on grounds that the granting thereof will not impair the value of existing rights or be detrimental to the public welfare. Permits will be issued under these applications upon receipt of the statutory permit fees. Said permits will be issued subject to the following provisions:

- (1) A substantial measuring device, preferably a Parshall flume, shall be placed near the discharge pipe of each well to facilitate the measurement of water.
- (2) The permittee shall keep an accurate record of water use and shall provide an airline and an opening in the well to facilitate the measuring of the water depth.
- (3) The amount of water used from all sources shall not exceed a yearly duty of 4 acre-feet per acre of land irrigated.
- (4) These permits will be issued subject to existing rights on the source and will be limited to whatever water each well will produce, but not to exceed 5.0 c.f.s. diversion from each well.

Respectfully submitted,


HUGH A. SHAMBERGER
State Engineer

Dated this 11th day of
April, 1955.