

IN THE OFFICE OF THE STATE ENGINEER

IN THE MATTER OF APPLICATIONS 31510)
THROUGH 31531, INCLUSIVE; 32088; 32089;)
32271 THROUGH 32276, INCLUSIVE; 32400)
THROUGH 32402, INCLUSIVE; 32407)
THROUGH 32419, INCLUSIVE; 33001; 37001)
THROUGH 37004, INCLUSIVE; 37222; 47220)
AND 47320 FILED TO APPROPRIATE THE)
PUBLIC WATERS OF AN UNDERGROUND)
SOURCE IN BIG SMOKY VALLEY - TONOPAH)
FLAT, NYE AND ESMERALDA COUNTIES,)
NEVADA.)

RULING

GENERAL

I.

Application 31510 was filed on May 6, 1977, by Desert Valley Water Co. to appropriate 5.4 c.f.s. of water from an underground source for irrigation and domestic purposes on 320 acres of land within the NW1/4 and NE1/4 Section 6, T.4N., R.41E., M.D.B.&M. The point of diversion is described as being within the NW1/4 NE1/4 Section 6, T.4N., R.41E., M.D.B.&M.¹

Application 31511 was filed on May 6, 1977, by Desert Valley Water Co. to appropriate 5.4 c.f.s. of water from an underground source for irrigation and domestic purposes on 320 acres of land within the SW1/4 and SE1/4 Section 6, T.4N., R.41E., M.D.B.&M. The point of diversion is described as being within the NW1/4 SE1/4 Section 6, T.4N., R.41E., M.D.B.&M.¹

Application 31512 was filed on May 6, 1977, by Desert Valley Water Co. to appropriate 5.4 c.f.s. of water from an underground source for irrigation and domestic purposes on 320 acres of land within the SW1/4 and SE1/4 Section 5, T.4N., R.41E., M.D.B.&M. The point of diversion is described as being within the NW1/4 SE1/4 Section 5, T.4N., R.41E., M.D.B.&M.¹

Application 31513 was filed on May 6, 1977, by Desert Valley Water Co. to appropriate 5.4 c.f.s. of water from an underground source for irrigation and domestic purposes on 320 acres of land within the NW1/4 and NE1/4 Section 5, T.4N., R.41E., M.D.B.&M. The point of diversion is described as being within the NW1/4 NE1/4 Section 5, T.4N., R.41E., M.D.B.&M.¹

Application 31514 was filed on May 6, 1977, by Desert Valley Water Co. to appropriate 5.4 c.f.s. of water from an underground source for irrigation and domestic purposes on 320 acres of land within the NW1/4 and NE1/4 Section 32, T.4N., R.41E., M.D.B.&M. The point of diversion is described as being within the NW1/4 NE1/4 Section 32, T.4N., R.41E., M.D.B.&M.¹

¹ Public record in the office of the State Engineer.

Application 31515 was filed on May 6, 1977, by Desert Valley Water Co. to appropriate 5.4 c.f.s. of water from an underground source for irrigation and domestic purposes on 320 acres of land within the SW1/4 and SE1/4 Section 32, T.4N., R.41E., M.D.B.&M. The point of diversion is described as being within the NW1/4 SE1/4 Section 32, T.4N., R.41E., M.D.B.&M.¹

Application 31516 was filed on May 6, 1977, by Desert Valley Water Co. to appropriate 5.4 c.f.s. of water from an underground source for irrigation and domestic purposes on 320 acres of land within the SW1/4 and SE1/4 Section 31, T.4N., R.41E., M.D.B.&M. The point of diversion is described as being within the NW1/4 SE1/4 Section 31, T.4N., R.41E., M.D.B.&M.¹

Application 31517 was filed on May 6, 1977, by Desert Valley Water Co. to appropriate 5.4 c.f.s. of water from an underground source for irrigation and domestic purposes on 320 acres of land within the NW1/4 and NE1/4 Section 31, T.4N., R.41E., M.D.B.&M. The point of diversion is described as being within the NW1/4 NE1/4 Section 31, T.4N., R.41E., M.D.B.&M.¹

Application 31518 was filed on May 6, 1977, by Desert Valley Water Co. to appropriate 5.4 c.f.s. of water from an underground source for irrigation and domestic purposes on 320 acres of land within the SW1/4 and SE1/4 Section 30, T.4N., R.41E., M.D.B.&M. The point of diversion is described as being within the NW1/4 SE1/4 Section 30, T.4N., R.41E., M.D.B.&M.¹

Application 31519 was filed on May 6, 1977, by Desert Valley Water Co. to appropriate 5.4 c.f.s. of water from an underground source for irrigation and domestic purposes on 320 acres of land within the NW1/4 and NE1/4 Section 30, T.4N., R.41E., M.D.B.&M. The point of diversion is described as being within the NW1/4 NE1/4 Section 30, T.4N., R.41E., M.D.B.&M.¹

Application 31520 was filed on May 6, 1977, by Desert Valley Water Co. to appropriate 5.4 c.f.s. of water from an underground source for irrigation and domestic purposes on 320 acres of land within the NW1/4 and NE1/4 Section 29, T.4N., R.41E., M.D.B.&M. The point of diversion is described as being within the NW1/4 NE1/4 Section 29, T.4N., R.41E., M.D.B.&M.¹

Application 31521 was filed on May 6, 1977, by Desert Valley Water Co. to appropriate 5.4 c.f.s. of water from an underground source for irrigation and domestic purposes on 320 acres of land within the SW1/4 and SE1/4 Section 29, T.4N., R.41E., M.D.B.&M. The point of diversion is described as being within the NW1/4 SE1/4 Section 29, T.4N., R.41E., M.D.B.&M.¹

Application 31522 was filed on May 6, 1977, by Desert Valley Water Co. to appropriate 5.4 c.f.s. of water from an underground source for irrigation and domestic purposes on 320 acres of land within the NW1/4 and NE1/4 Section 17, T.4N., R.41E., M.D.B.&M. The point of diversion is described as being within the NW1/4 NE1/4 Section 17, T.4N., R.41E., M.D.B.&M.¹

Application 31523 was filed on May 6, 1977, by Desert Valley Water Co. to appropriate 5.4 c.f.s. of water from an underground source for irrigation and domestic purposes on 320 acres of land within the SW1/4 and SE1/4 Section 17, T.4N., R.41E., M.D.B.&M. The point of diversion is described as being within the NW1/4 SE1/4 Section 17, T.4N., R.41E., M.D.B.&M.¹

Application 31524 was filed on May 6, 1977, by Desert Valley Water Co. to appropriate 5.4 c.f.s. of water from an underground source for irrigation and domestic purposes on 320 acres of land within the SW1/4 and SE1/4 Section 20, T.4N., R.41E., M.D.B.&M. The point of diversion is described as being within the NW1/4 SE1/4 Section 20, T.4N., R.41E., M.D.B.&M.¹

Application 31525 was filed on May 6, 1977, by Desert Valley Water Co. to appropriate 5.4 c.f.s. of water from an underground source for irrigation and domestic purposes on 320 acres of land within the NW1/4 and NE1/4 Section 20, T.4N., R.41E., M.D.B.&M. The point of diversion is described as being within the NW1/4 NE1/4 Section 20, T.4N., R.41E., M.D.B.&M.¹

Application 31526 was filed on May 6, 1977, by Desert Valley Water Co. to appropriate 5.4 c.f.s. of water from an underground source for irrigation and domestic purposes on 320 acres of land within the NE1/4 and NW1/4 Section 7, T.4N., R.41E., M.D.B.&M. The point of diversion is described as being within the NW1/4 NE1/4 Section 7, T.4N., R.41E., M.D.B.&M.¹

Application 31527 was filed on May 6, 1977, by Desert Valley Water Co. to appropriate 5.4 c.f.s. of water from an underground source for irrigation and domestic purposes on 320 acres of land within the SW1/4 and SE1/4 Section 7, T.4N., R.41E., M.D.B.&M. The point of diversion is described as being within the NW1/4 SE1/4 Section 7, T.4N., R.41E., M.D.B.&M.¹

Application 31528 was filed on May 6, 1977, by Desert Valley Water Co. to appropriate 5.4 c.f.s. of water from an underground source for irrigation and domestic purposes on 320 acres of land within the SW1/4 and SE1/4 Section 18, T.4N., R.41E., M.D.B.&M. The point of diversion is described as being within the NW1/4 SE1/4 Section 18, T.4N., R.41E., M.D.B.&M.¹

Application 31529 was filed on May 6, 1977, by Desert Valley Water Co. to appropriate 5.4 c.f.s. of water from an underground source for irrigation and domestic purposes on 320 acres of land within the NW1/4 and NE1/4 Section 18, T.4N., R.41E., M.D.B.&M. The point of diversion is described as being within the NW1/4 NE1/4 Section 18, T.4N., R.41E., M.D.B.&M.¹

Application 31530 was filed on May 6, 1977, by Desert Valley Water Co. to appropriate 5.4 c.f.s. of water from an underground source for irrigation and domestic purposes on 320 acres of land within the NW1/4 and NE1/4 Section 19, T.4N., R.41E., M.D.B.&M. The point of diversion is described as being within the NW1/4 NE1/4 Section 19, T.4N., R.41E., M.D.B.&M.¹

Application 31531 was filed on May 6, 1977, by Desert Valley Water Co. to appropriate 5.4 c.f.s. of water from an underground source for irrigation and domestic purposes on 320 acres of land within the SW1/4 and SE1/4 Section 19, T.4N., R.41E., M.D.B.&M. The point of diversion is described as being within the NW1/4 SE1/4 Section 19, T.4N., R.41E., M.D.B.&M.¹

Application 32088 was filed on June 15, 1977, by James F. Funda to appropriate 2.7 c.f.s. of water from an underground source for irrigation and domestic purposes on 160 acres of land within the SW1/4 Section 21, T.7N., R.40E., M.D.B.&M. The point of diversion is described as being within the NW1/4 SW1/4 Section 21, T.7N., R.40E., M.D.B.&M.¹

Application 32089 was filed on June 15, 1977, by Lumir E. Funda to appropriate 2.7 c.f.s. of water from an underground source for irrigation and domestic purposes on 160 acres of land within the SW1/4 SE1/4 Section 27; W1/2 NE1/4, SE1/4 NE1/4 Section 34, T.7N., R.40E., M.D.B.&M. The point of diversion is described as being within the SW1/4 SE1/4 Section 27, T.7N., R.40E., M.D.B.&M.¹

Application 32271 was filed on June 24, 1977, by Connie H. Tolmie to appropriate 2.7 c.f.s. of water from an underground source for irrigation and domestic purposes on 160 acres of land within the SE1/4 Section 14, T.6N., R.40E., M.D.B.&M. The point of diversion is described as being within the NW1/4 SE1/4 Section 14, T.6N., R.40E., M.D.B.&M.¹

Application 32272 was filed on June 24, 1977, by Donald E. Tolmie to appropriate 2.7 c.f.s. of water from an underground source for irrigation and domestic purposes on 160 acres of land within the SW1/4 Section 13, T.6N., R.40E., M.D.B.&M. The point of diversion is described as being within the NW1/4 SW1/4 Section 13, T.6N., R.40E., M.D.B.&M.¹

Application 32273 was filed on June 24, 1977, by Warren and Irene Tolmie to appropriate 2.7 c.f.s. of water from an underground source for irrigation and domestic purposes on 160 acres of land within the NW1/4 Section 24, T.6N., R.40E., M.D.B.&M. The point of diversion is described as being within the NW1/4 NW1/4 Section 24, T.6N., R.40E., M.D.B.&M.¹

Application 32274 was filed on June 24, 1977, by Richard W. Tolmie to appropriate 2.7 c.f.s. of water from an underground source for irrigation and domestic purposes on 160 acres of land within the NE1/4 Section 23, T.6N., R.40E., M.D.B.&M. The point of diversion is described as being within the NW1/4 NE1/4 Section 23, T.6N., R.40E., M.D.B.&M.¹

Application 32275 was filed on June 24, 1977, by Kenneth De Leo to appropriate 2.7 c.f.s. of water from an underground source for irrigation and domestic purposes on 160 acres of land within the NE1/4 Section 13, T.6N., R.40E., M.D.B.&M. The point of diversion is described as being within the NW1/4 NE1/4 Section 13, T.6N., R.40E., M.D.B.&M.¹

Application 32276 was filed on June 24, 1977, by Gene Hayes to appropriate 2.7 c.f.s. of water from an underground source for irrigation and domestic purposes on 160 acres of land within the NE1/4 Section 14, T.6N., R.40E., M.D.B.&M. The point of diversion is described as being within the NW1/4 NE1/4 Section 14, T.6N., R.40E., M.D.B.&M.¹

Application 32400 was filed on June 29, 1977, by L. J. Larson to appropriate 2.7 c.f.s. of water from an underground source for irrigation purposes on 160 acres of land within the SW1/4 Section 8, T.7N., R.42E., M.D.B.&M. The point of diversion is described as being within the NW1/4 SW1/4 Section 8, T.7N., R.42E., M.D.B.&M.¹

Application 32401 was filed on June 29, 1977, by Raymond Jenson to appropriate 2.7 c.f.s. of water from an underground source for irrigation purposes on 160 acres of land within the SW1/4 Section 9, T.7N., R.42E., M.D.B.&M. The point of diversion is described as being within the NW1/4 SW1/4 Section 9, T.7N., R.42E., M.D.B.&M.¹

Application 32402 was filed on June 29, 1977, by Pete Bertolino to appropriate 2.7 c.f.s. of water from an underground source for irrigation purposes on 160 acres of land within the SE1/4 Section 8, T.7N., R.42E., M.D.B.&M. The point of diversion is described as being within the NW1/4 SE1/4 Section 8, T.7N., R.42E., M.D.B.&M.¹

Application 32407 was filed on June 29, 1977, by Duna D. Hayes to appropriate 2.7 c.f.s. of water from an underground source for irrigation and domestic purposes on 160 acres of land within the NE1/4 Section 27, T.6N., R.40E., M.D.B.&M. The point of diversion is described as being within the NW1/4 NE1/4 Section 27, T.6N., R.40E., M.D.B.&M.¹

Application 32408 was filed on June 29, 1977, by Joseph D. Hayes to appropriate 2.7 c.f.s. of water from an underground source for irrigation and domestic purposes on 160 acres of land within the NW1/4 Section 26, T.6N., R.40E., M.D.B.&M. The point of diversion is described as being within the NW1/4 NW1/4 Section 26, T.6N., R.40E., M.D.B.&M.¹

Application 32409 was filed on June 29, 1977, by Beulah J. Hayes to appropriate 2.7 c.f.s. of water from an underground source for irrigation and domestic purposes on 160 acres of land within the NE1/4 Section 26, T.6N., R.40E., M.D.B.&M. The point of diversion is described as being within the NW1/4 NE1/4 Section 26, T.6N., R.40E., M.D.B.&M.¹

Application 32410 was filed on June 29, 1977, by James P. Hayes to appropriate 2.7 c.f.s. of water from an underground source for irrigation and domestic purposes on 160 acres of land within the SE1/4 Section 23, T.6N., R.40E., M.D.B.&M. The point of diversion is described as being within the NW1/4 SE1/4 Section 23, T.6N., R.40E., M.D.B.&M.¹

Application 32411 was filed on June 29, 1977, by Eugene F. Hayes, Jr., to appropriate 2.7 c.f.s. of water from an underground source for irrigation and domestic purposes on 160 acres of land within the SW1/4 Section 24, T.6N., R.40E., M.D.B.&M. The point of diversion is described as being within the NW1/4 SW1/4 Section 24, T.6N., R.40E., M.D.B.&M.¹

Application 32412 was filed on June 29, 1977, by Virginia T. Hayes to appropriate 2.7 c.f.s. of water from an underground source for irrigation and domestic purposes on 160 acres of land within the SE1/4 Section 24, T.6N., R.40E., M.D.B.&M. The point of diversion is described as being within the NW1/4 SE1/4 Section 24, T.6N., R.40E., M.D.B.&M.¹

Application 32413 was filed on June 29, 1977, by Rita Aguirre to appropriate 2.7 c.f.s. of water from an underground source for irrigation and domestic purposes on 160 acres of land within the SE1/4 Section 27, T.6N., R.40E., M.D.B.&M. The point of diversion is described as being within the NW1/4 SE1/4 Section 27, T.6N., R.40E., M.D.B.&M.¹

Application 32414 was filed on June 29, 1977, by Jo Ann Hoffman to appropriate 2.7 c.f.s. of water from an underground source for irrigation and domestic purposes on 160 acres of land within the SW1/4 Section 26, T.6N., R.40E., M.D.B.&M. The point of diversion is described as being within the NW1/4 SW1/4 Section 26, T.6N., R.40E., M.D.B.&M.¹

Application 32415 was filed on June 29, 1977, by Leonard Hoffman to appropriate 2.7 c.f.s. of water from an underground source for irrigation and domestic purposes on 160 acres of land within the SE1/4 Section 26, T.6N., R.40E., M.D.B.&M. The point of diversion is described as being within the NW1/4 SE1/4 Section 26, T.6N., R.40E., M.D.B.&M.¹

Application 32416 was filed on June 29, 1977, by Bessie Carroll to appropriate 2.7 c.f.s. of water from an underground source for irrigation and domestic purposes on 160 acres of land within the SW1/4 Section 25, T.6N., R.40E., M.D.B.&M. The point of diversion is described as being within the NW1/4 SW1/4 Section 25, T.6N., R.40E., M.D.B.&M.¹

Application 32417 was filed on June 29, 1977, by William Carroll to appropriate 2.7 c.f.s. of water from an underground source for irrigation and domestic purposes on 160 acres of land within the SE1/4 Section 25, T.6N., R.40E., M.D.B.&M. The point of diversion is described as being within the NW1/4 SE1/4 Section 25, T.6N., R.40E., M.D.B.&M.¹

Application 32418 was filed on June 29, 1977, by Joseph C. Aguirre to appropriate 2.7 c.f.s. of water from an underground source for irrigation and domestic purposes on 160 acres of land within the NE1/4 Section 25, T.6N., R.40E., M.D.B.&M. The point of diversion is described as being within the NW1/4 NE1/4 Section 25, T.6N., R.40E., M.D.B.&M.¹

Application 32419 was filed on June 29, 1977, by Francis W. Aguirre to appropriate 2.7 c.f.s. of water from an underground source for irrigation and domestic purposes on 160 acres of land within the NW1/4 Section 25, T.6N., R.40E., M.D.B.&M. The point of diversion is described as being within the NW1/4 NW1/4 Section 25, T.6N., R.40E., M.D.B.&M.¹

Application 33001 was filed on August 1, 1977, by Viola L. Funda to appropriate 2.7 c.f.s. of water from an underground source for irrigation and domestic purposes on 160 acres of land within the NW1/4 Section 28, T.7N., R.40E., M.D.B.&M. The point of diversion is described as being within the NW1/4 SW1/4 Section 28, T.7N., R.40E., M.D.B.&M.¹

Application 37001 was filed on March 13, 1979, by Ivan E. and Helen M. Nanney to appropriate 5.4 c.f.s. of water from an underground source for irrigation and domestic purposes on 320 acres of land within the SW1/4 Section 18, NW1/4 Section 19, T.6N., R.41E., M.D.B.&M. The point of diversion is described as being within the NW1/4 SW1/4 Section 18, T.6N., R.41E., M.D.B.&M.¹

Application 37002 was filed on March 13, 1979, by Red Warren and Jeanie Thompson to appropriate 5.4 c.f.s. of water from an underground source for irrigation and domestic purposes on 320 acres of land within the SW1/4 Section 28 and NW1/4 Section 33, T.7N., R.40E., M.D.B.&M. The point of diversion is described as being within the NW1/4 SW1/4 Section 28, T.7N., R.40E., M.D.B.&M.¹

Application 37003 was filed on March 13, 1979, by Sandy and Windy Thompson to appropriate 5.4 c.f.s. of water from an underground source for irrigation and domestic purposes on 320 acres of land within the SW1/4 Section 27, NW1/4 Section 34, T.7N., R.40E., M.D.B.&M. The point of diversion is described as being within the NE1/4 NW1/4 Section 34, T.7N., R.40E., M.D.B.&M.¹

Application 37004 was filed on March 13, 1979, by Robert Wayne and Nancy R. Weikel to appropriate 5.4 c.f.s. of water from an underground source for irrigation and domestic purposes on 320 acres of land within the SE1/4 Section 7, NE1/4 Section 18, T.6N., R.41E., M.D.B.&M. The point of diversion is described as being within the NE1/4 SE1/4 Section 7, T.6N., R.41E., M.D.B.&M.¹

Application 37222 was filed on March 26, 1979, by George R. and Darlene Scott to appropriate 5.4 c.f.s. of water from an underground source for irrigation and domestic purposes on 320 acres of land within the SE1/4 Section 20, NE1/4 Section 29, T.7N., R.40E., M.D.B.&M. The point of diversion is described as being within the NW1/4 SE1/4 Section 20, T.7N., R.40E., M.D.B.&M.¹

Application 47220 was filed on August 31, 1983, by J. D. McPherson to appropriate 5.0 c.f.s. of water from an underground source for irrigation purposes on 320 acres of land within the N1/2 Section 8, T.9N., R.43E., M.D.B.&M. The point of diversion is described as being within the SE1/4 NE1/4 Section 8, T.9N., R.43E., M.D.B.&M.¹

Application 47320 was filed on October 13, 1983, by Ann McPherson to appropriate 5.0 c.f.s. of water from an underground source for irrigation purposes on 320 acres of land within the S1/2 Section 8, T.9N., R.43E., M.D.B.&M. The point of diversion is described as being within the SE1/4 SE1/4 Section 8, T.9N., R.43E., M.D.B.&M.¹

II.

Applications 32407 through 32419, inclusive, and 32271 through 32276, inclusive, were protested on April 3, 1978, by the Big Smoky Land and Cattle Company on the following grounds:¹

- 1) We are taxpaying and presently farming in the area on deeded and developed land.
- 2) The general intent of Nevada law is to adjust to perennial yield. According to Water Resources Bulletin #41 of Big Smoky Valley on page 53 the yield is 6000 acre feet supported by table 20 on page 51. The present amount of deeded property in the area will fully utilize available waters.
- 3) We are experienced farmers and have hundreds of thousands of dollars already invested and do not want the water table to drop and cause dry wells as in other parts of the U.S.
- 4) 1/4 section will not support a farm.
- 5) Extra cost to county for further development of roads and etc."

III.

Applications 47220 and 47320 were protested on February 7, 1984, by Robert N. Caldwell, agent for Zimmerman Ranching Corporation, on the following grounds:¹

"Section 8 is within the protestant's grazing allotment which is included in a stewardship program. The highest and best use of the land is considered for livestock grazing and range management. Granting this application for irrigation would also tend to impair the value of the protestant's existing stock water permit 40112."

IV.

Water Resources Bulletin No. 41 titled "Water Resources of Big Smokey Valley, Lander, Nye and Esmeralda Counties, Nevada", was prepared cooperatively by the Geological Survey, U.S. Department of Interior, and the State of Nevada, Department of Conservation and Natural Resources.¹

FINDINGS OF FACT

I.

The State Engineer issued Order No. 725 on May 14, 1979, designating and describing the Big Smokey Valley, Tonopah Flat Ground Water Basin, as a ground water basin coming under the provisions of Chapter 534 NRS (Conservation and Distribution of Underground Water).²

II.

On November 4, 1983, the State Engineer issued Order No. 828 designating municipal, quasi-municipal and domestic uses as preferred uses within a described area in the Big Smokey Valley, Tonopah Flat Ground Water Basin, used by the City of Tonopah for their municipal water supply.³

III.

Big Smokey Valley has two principal valley-fill reservoirs: one in the northern part of the valley and one beneath Tonopah Flat. The boundary between the two reservoirs coincides with the ground water divide, which is near the low alluvial divide in T.9N. The components of inflow to the valley-fill reservoirs are recharge from precipitation, runoff, subsurface inflow from Ione Valley to Tonopah Flat, and percolation to the water table of water imported to Tonopah.⁴

IV.

Average annual precipitation within the Big Smokey Valley Hydrologic Basin ranges from as much as 20 inches in the high mountains to 4 to 7 inches on the valley floor. The northern part receives more precipitation, at a given altitude, than Tonopah Flat. Inflow to the valley-fill reservoirs is mostly recharge from precipitation. Only an estimated 2 percent of the average annual precipitation of 580,000 acre-feet recharges the valley in Tonopah Flat yielding an annual recharge to the ground water system of 12,000 to 15,000 acre-feet.⁴

² Order No. 725 dated May 14, 1979, public record in the office of the State Engineer.

³ Order No. 828 dated November 4, 1983, public record in the office of the State Engineer.

⁴ Water Resources Bulletin No. 41.

Ralston
V.

Inflow from Ione and Royston Valleys, in the form of ground water inflow through the alluvium, is estimated to be on the order of 2,000 acre-feet annually. Leakage of ground water through the consolidated rocks is possible, but there is no field evidence that any such leakage enters the valley-fill reservoir of Tonopah Flat.⁴

VI.

Runoff from the mountains, estimated at the mountain front, to the valley-fill reservoir is estimated to be 5000 acre-feet annually in Tonopah Flat, with virtually all the runoff originating in the Toiyabe Range. Average annual streamflow crossing the east-west line between Townships 4N. and 5N. in Tonopah Flat is estimated to be about 500 acre-feet. Most of the runoff is generated north of this line, but the data indicates that it is greatly dissipated as it flows southward across the valley-fill reservoir.⁴

VII.

Since 1904, water has been imported to Big Smoky Valley from Ralston Valley to supply the Town of Tonopah. In 1968, the assumed recharge of the imported water was on the order of 200 acre-feet annually.⁴

VIII.

The components of outflow from Big Smoky Valley are evapotranspiration, spring discharge, subsurface outflow, irrigation and other consumptive uses. Over the long term, inflow to and outflow from a ground water system are equal. The total inflow to the Big Smoky Valley, Tonopah Flat Hydrologic Ground Water System, is approximately 14,000 acre-feet annually: 12,000 acre-feet from precipitation and 2,000 acre-feet from inflow from Ione Valley.⁴

IX.

The perennial yield of a hydrologic ground water system is the maximum amount of water of usable chemical quality that can be consumed economically each year for an indefinite period of time. For the Big Smoky Valley, Tonopah Flat area, the perennial yield is estimated to be 6,000 acre-feet annually. This figure is based on the outflow estimate of 14,000 acre-feet annually of which 8,000 acre-feet is believed to be lost to outflow to Clayton Valley.⁴

X.

Permits and certificates have been issued under existing rights for more than 24,000 acre-feet annually of ground water within the Big Smoky Valley, Tonopah Flat Hydrologic Basin.¹

XI.

Information available to the State Engineer indicates that Applications 31510 through 31531, inclusive; 32088; 32089; 32271 through 32276, inclusive; 32400 through 32402, inclusive; 32407 through 32419, inclusive; 33001; 37001 through 37004, inclusive; 37222; 47220 and 47320 were filed in support of Carey Act applications.¹

XII.

The approval of the above referenced applications would result in the additional withdrawal of 53,120 acre-feet annually compared to a perennial yield of 6,000 acre-feet annually.¹

XIII.

If the perennial yield of a hydrologic system is continually exceeded, ground water levels will decline until the ground water reservoir is depleted of water of usable quality or until the pumping lifts become uneconomical to maintain. Perennial yield cannot exceed the natural replenishment to an area indefinitely, and ultimately is limited to the maximum amount of natural discharge that can be salvaged for beneficial use.⁵

XIV.

Withdrawals of ground water in excess of the perennial yield contribute to adverse conditions such as water quality degradation, storage depletion, diminishing yield of wells, increased economic pumping lifts, land subsidence and possible reversal of ground water gradients which could result in significant changes in the recharge-discharge relationship. These conditions have developed in several other ground water basins within the State of Nevada where storage depletion and declining water tables have been recorded and documented.⁵

XV.

Should additional water be allowed for appropriation under new applications and subsequent development of ground water pursuant thereto detrimentally affect prior existing rights, the State Engineer is required by law to order withdrawals be restricted to conform to prior rights.⁶

XVI.

Application 31510 through 31531, inclusive, propose points of diversion and places of use within the area in which preferred uses of municipal, quasi-municipal, and domestic were designated by the State Engineer by virtue of Order No. 828.³

CONCLUSIONS

I.

The State Engineer has jurisdiction of the parties and the subject matter of this action and determination.⁷

⁵ See attached Appendix of References.

⁶ NRS 534.100(c).

⁷ NRS Chapters 533 and 534.

II.

The State Engineer is prohibited by law from granting a permit under an application to appropriate the public waters where:⁸

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

III.

The granting of permits under Applications 31510 through 31531, inclusive; 32088; 32089; 32271 through 32276, inclusive; 32400 through 32402, inclusive; 32407 through 32419, inclusive; 33001; 37001 through 37004, inclusive; 37222; 47220 and 47320 would result in the withdrawal of substantial amounts of ground water in excess of the perennial yield of the Big Smoky Valley, Tonopah Flat Ground Water Basin, and would, therefore, adversely affect existing rights and be detrimental to the public interest and welfare.

In addition, the granting of Applications 31510 through 31531, inclusive, for irrigation purposes in an area where the preferred uses of municipal, quasi-municipal and domestic were designated by the State Engineer for the express purpose of protecting the limited supply of ground water used by the City of Tonopah and the residents of Tonopah Flat by virtue of prior rights, would adversely affect existing rights and be detrimental to the public interest and welfare.

RULING

The protests to the granting of Applications 32407 through 32419, inclusive, and 32271 through 32276, inclusive, are herewith upheld and no ruling is made on the protests to the granting of Applications 47220 and 47320. Applications 31510 through 31531, inclusive; 32088; 32089; 32271 through 32276, inclusive; 32400 through 32402, inclusive; 32407 through 32419, inclusive; 33001; 37001 through 37004, inclusive; 37222; 47220 and 47320 are herewith denied on the grounds that the granting thereof would adversely affect existing rights and would be detrimental to the public interest and welfare.

Respectfully submitted,



PETER G. MORROS
State Engineer

PGM/CT/bl

Dated this 19th day of
December, 1985.

⁸ NRS 533.370.

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