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

IN THE MATTER OF PROTESTED APPLICATION 63359 FILED TO APPROPRIATE THE PUBLIC WATERS OF AN UNDERGROUND SOURCE WITHIN THE PAHRANAGAT VALLEY HYDROGRAPHIC BASIN (209), LINCOLN COUNTY, NEVADA.	)	**RULING** **#5560**

GENERAL

I.

Application 63359 was filed on August 27, 1997, by Hi-Desert Springs, LLC, to appropriate 2.7 cubic feet per second (cfs), not to exceed 500.00 acre-feet annually, of the underground water from the Pahranagat Valley Hydrographic Basin for quasi-municipal purposes, i.e., a proposed Ash Springs Resort development including a casino, motel, spa, RV park, golf course, airport, museum, nature exhibits, outdoor amphitheater and other amenities. The remarks section of the application indicates that the applicant has entered into an agreement with the United States Bureau of Land Management for the purchase of public lands that make up a portion of the proposed place of use. The proposed place of use is described as being located within portions of the NE¼ NE¼, SE¼ NE¼ of Section 1, T.6S., R.60E., M.D.B.&M., and portions of the NW¼ SW¼, SW¼ SW¼ of Section 5, the SW¼ NW¼ NW¼, SW¼ NW¼ and S½ of Section 6, the NW¼ NE¼ NW¼, E½ NE¼ NW¼, N½ NE¼ of Section 7, and portions of the NW¼ NW¼ of Section 8, all within T.6S., R.61E., M.D.B.&M. The proposed point of diversion is described as being located within the NW¼ SW¼ of Section 6, T.6S., R.61E., M.D.B.&M.[1]

II.

Application 63359 was timely protested by United States Department of the Interior, National Park Service on the grounds that:

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[1] File No. 63359, official records of the Office of the State Engineer.

1. There is no water available for appropriation because the committed water resources exceed groundwater recharge.

2. The approval and development of the appropriation proposed by this application will impair the water rights of the United States because:

A. The appropriation would further reduce the discharge of the Muddy River impairing the United States' senior water rights and other existing rights to the Muddy River;

B. The proposed appropriation in combination with other existing and proposed appropriations could reduce the discharge of the Lake Mead National Recreation Area springs;

C. The effect of the proposed appropriation, when combined with other existing and proposed appropriations, could impair the senior water rights of the Lake Mead National Recreation Area more quickly and/or to a degree greater than the withdrawal proposed under this application alone.

3. The public interest would not be served because:

A. The groundwater reservoir in Pahranagat Valley would be mined;

B. The application is for using water on lands where the applicant does not control both the proposed well location and the proposed place of use;

C. The water and water-related resources of the nationally important Lake Mead National Recreation Area would be diminished or impaired.[1]

III.

Application 63359 was timely protested by U.S. Fish and Wildlife Service on the grounds that:

1. Granting the application would cause injury to the Service-owned senior water rights for the Pahranagat National Wildlife Refuge.

2. Granting the application would threaten to prove detrimental to the public interest because the appropriation of the water may jeopardize habitat for species that depend on the wetland and water resources of the area, including threatened and endangered species.[1]

FINDINGS OF FACT

I.

Ash Springs is described as being located near the northwest corner of Section 6, T.6S., R.61E., M.D.B.&M. The right to the use of water from Hiko, Crystal and Ash Springs was decreed by the Pahranagat Lake Decree of October 1929, as amended by the Nevada Supreme Court in *Alamo Irrigation Company, Inc. v. United States of America*, 81 Nev. 390 (1965). Said decree provides that the Hiko, Crystal and Ash Springs are fully appropriated. The State Engineer finds the proposed point of diversion under Application 63359 is less than one-half mile south of Ash Springs and less than one-quarter mile east of Pahranagat Creek, and a State Engineer has previously denied an application that had a point of diversion approximately one-half mile from Crystal Springs.[2]

II.

> Ground water in the Pahranagat Valley Basin is stored and transmitted in the Paleozoic carbonate rocks beneath the valley fill. Hiko, Crystal and Ash Springs issue from the Paleozoic carbonate rocks and play a dominant role in the economy of Pahranagat Valley. The magnitude of the combined discharge, averaging 35.0 cfs (25,000 acre-feet annually), is far in excess of the amount that might be supplied by recharge from precipitation within the defined surficial area of the valley (estimated average 1,800 acre-feet annually). This indicates that much of the ground water discharged by the springs is derived from beyond the drainage divide of the valley. The general hydraulic gradient tends to slope southward and towards the White River

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[2] State Engineer's Ruling No. 3225, dated August 14, 1985, official records in the Office of the State Engineer.

Channel, of which Ash, Crystal and Hiko springs are located along said course.[3]

That the existing fractures or solution openings have extensive hydraulic connection throughout the area, is demonstrated by the regional hydrology. Ground water movement through carbonate rocks in this region occurs through both fractures and solution opening. Solution openings developed near sources of recharge where carbon dioxide carried by rain water penetrate the rocks, or where organic and other acids derived from decaying vegetation and other sources were carried by water into contact with carbonate rocks. The principle significance of solution openings is that they greatly facilitate movement of ground water through carbonate rocks. Certainly, the large quantity of ground water issuing from factures and solution openings, such as those of Ash, Crystal and Hiko Springs in Pahranagat Valley, is a dramatic demonstration that ground water moves through Paleozoic carbonate rocks in this region of Nevada.[4]

Water Resources Reconnaissance Series Report No. 21 provides information as to the occurrence and movement of ground water.

The occurrence of ground water in Pahranagat and Pahroc Valleys is one of contrast. The depth to ground water in most of Pahroc Valley is generally more than 200 feet. In Pahranagat Valley, however, the depth to water along the White River channel from the vicinity of Hiko Spring to Maynard Lake is at or within a few feet of land surface. Northward from Hiko along the lowland the depth to water increases; at the north end of Pahroc Valley it apparently is on the order of 250 feet or more. In most of Pahranagat Valley the younger valley fill along the White River channel is saturated to or nearly to land surface. Toward the mountains the depth to water increases.[5]

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[3] State Engineer's Ruling No. 3225, dated August 14, 1985, official records in the Office of the State Engineer and T. Eakin, *Ground-water Resources - Reconnaissance Series Report 21, Ground-water Appraisal of Pahranagat and Pahroc Valleys, Lincoln and Nye Counties, Nevada*, pp.13-15 (1963).

[4] State Engineer's Ruling No. 3225, dated August 14, 1985, official records in the Office of the State Engineer and Water Resources Reconnaissance Series Report No. 21, p.11.

[5] Water Resources Reconnaissance Series Report No. 21, p.12.

"Thus, based on the potential hydraulic gradients, ground water probably moves from the northwest, north, and northeast toward the principal carbonate springs in Pahranagat Valley."[6]

Present development in Pahranagat Valley is using nearly all of the natural spring discharge of about 25,000 acre-feet per year.[7] The ground water in the Pahranagat Valley is stored and transmitted in the Paleozoic carbonate rocks beneath the valley fill. From this carbonate flow, Hiko, Crystal and Ash Springs issue and play a dominant role in the economy of Pahranagat Valley.[8] The right to use the water of Hiko, Crystal and Ash Springs was decreed by the Pahranagat Lake Decree of October 1929, amended by the Nevada Supreme Court in *Alamo Irrigation Company, Inc. v. United States of America*, 81 Nev. 390 (1965).

The State Engineer finds the hydraulic gradient indicates that groundwater flow is southward from the northern portion of Pahranagat Valley towards the White River Channel along which are located Ash, Crystal and Hiko Springs and Upper and Lower Pahranagat Lake. The State Engineer finds the proximity of the point of diversion under this application to Ash Springs and the path of the White River Flow System indicates that to grant a permit under Application 63359 would interfere with existing rights and thereby threaten to prove detrimental to the public interest.

CONCLUSIONS OF LAW

I.

The State Engineer has jurisdiction over the parties and subject matter of this action and determination.[9]

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[6] Id. at 15.
[7] Id. at 1.
[8] Water Resources Reconnaissance Series Report No. 21, pp.13-15.
[9] 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:[10]

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 protectible 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.

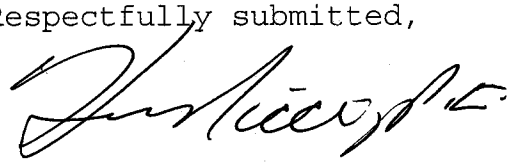
III.

The State Engineer concludes that to permit the appropriation of ground water under Application 63359 would interfere with existing water rights thereby threatening to prove detrimental to the public interest.

RULING

Application 63359 is hereby denied on the grounds that to permit the appropriation of water under the application would interfere with existing rights and threaten to prove detrimental to the public interest. No ruling is made on the merits of the protests.

Respectfully submitted,



HUGH RICCI, P.E.
State Engineer

HR/SJT/jm

Dated this 9th day of February, 2006.

[10] NRS § 533.370(4).