FILED
JUN 18 1999
STATE ENGINEER'S OFFICE

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

IN THE MATTER OF APPLICATION NUMBER 64683
FILED BY LINCOLN COUNTY AND VIDLER WATER COMPANY, INC.
OF PIOCHE, STATE OF NEVADA **PROTEST**
ON DECEMBER 11, 1998 TO APPROPRIATE
THE WATERS OF UNDERGROUND

Comes now Charles W. Pettee, on behalf of the United States Department of the Interior, National Park Service, whose post office address is 1201 Oak Ridge Drive, Suite 250, Fort Collins, Colorado, 80525, whose occupation is Chief, Water Rights Branch, Water Resources Division, National Park Service, and protests the granting of Application Number 64683 filed on December 11, 1998, by Lincoln County and Vidler Water Company, Inc. of Pioche, State of Nevada, to appropriate the waters of underground, situated in Lincoln County, State of Nevada, for the following reasons and on the following grounds, to wit:

See Exhibit A attached.

THEREFORE the protestant requests that the application be denied.

Signed _____
Agent or protestant

Charles W. Pettee
Printed or typed name, if agent

Address 1201 Oak Ridge Drive, Suite 250
Street No. or P.O. Box No.

Fort Collins, CO 80525
City, State and Zip Code No.

Subscribed and sworn to before me this 17th day of June, 1999.

_____
Notary Public

State of Colorado

County of Larimer

Flora B. Romero, Notary Public
State of Colorado
My Commission Expires 7/30/2002

My Commission expires ~~My Commission Expires~~ 7/30/2002

IN THE MATTER OF APPLICATION 64683
EXHIBIT A

Protest by Charles W. Pettee
on behalf of the United States, Department of the Interior
National Park Service

GENERAL

I. The mission of the National Park Service (NPS) may be paraphrased from 16 U.S.C. 1, as conserving the scenery, natural and historic objects, and wildlife, and providing for enjoyment of the same in such a manner and by such means as will leave them unimpaired for the enjoyment of future generations. Great Basin National Park (NP) was created by Congressional Act in 1986, to preserve a segment of the Great Basin possessing outstanding resources and significant geologic and scenic values for the benefit and inspiration of the people.

II. In the legislation establishing Great Basin NP, Congress explicitly excluded the establishment of any new Federal reserved water right, but stated that the United States was entitled to reserved rights associated with the initial establishment and withdrawal of Humboldt National Forest and Lehman Caves National Monument. The priority dates for these reserved rights are the dates of initial establishment of National Forest lands and Lehman Caves National Monument. These reserved rights have not been judicially quantified.

III. Water resources at Great Basin NP include lakes, streams, springs, seeps, and ground water. Ground water is thought to play an important role in maintaining the features and ecology of Lehman Caves. The caves contain living limestone formations, such as stalactites, stalagmites, plate-like shields, cave coral, rimstone dykes, curling helictites, flowstone, and draperies. However, little is known about the ecology of the caves and the role played by water. There may be additional caves and cave systems within Great Basin NP that have not yet been discovered.

IV. The NPS holds a water right to Cave Springs (proof 01065), with a priority date of 1890, which was decreed October 1, 1934. By Application Number 20794, Certificate Record No. 7573, the point of diversion, manner and place of use were changed. The point of diversion is within the SW¼ NE¼ Sec. 9, T13N, R69E, MDBM. This right provides water for the current visitor center, picnic area, maintenance area, trailer dump station, and park housing; and for the watering of lawns and an historic orchard.

Located near the town of Baker, in the E½ NW¼ Sec. 9, T13N, R70E, MDBM, is an administrative site, originally on public domain land. The site was withdrawn from entry for use by the United States Forest Service (USFS) and later established as an administrative site for the NPS. The NPS currently uses the site as a ranger station, office and residence, with water supplied by a well developed when the USFS occupied the site.

The United States has Federal reserved water rights for the purposes of the withdrawal, which include use as a ranger station with supporting facilities. The priority dates for the Administrative Site are the dates upon which land was withdrawn. These reserved rights have not been judicially quantified.

The site will likely include administrative offices, a park maintenance facility, and residences for park staff. Adequate facilities of this kind are vital to the protection and management of the nationally important Great Basin NP for the benefit and inspiration of the people. The water supply for the site will, in whole or in part, be obtained from the Town of Baker's water system in the future.

V. Lincoln County and Vidler Water Company, Inc. filed Application No. 64683 to withdraw ground water in Spring Valley for irrigation. Lincoln County and Vidler Water Company, Inc. also filed associated Application No. 64682 to withdraw ground water in Spring Valley for irrigation. The withdrawal rate for

these two applications combined is 20 cubic feet per second. This application may have an annual duty of 7,240 acre-feet per year (afy). The total annual duty for 64682 and 64683 may be as much as 14,480 afy.

VI. In 1998, approximately 80,500 persons visited Great Basin NP, contributing to the local economy.

VII. The NPS reserves the right to amend this exhibit as more information becomes available.

FINDINGS

I. The appropriation proposed by Application 64683 is located in the carbonate-rock province of Nevada. The carbonate-rock province is typified by complex interbasin regional flow systems that include both basin-fill and carbonate-rock aquifers (Harrill and others, 1988, Sheet 1). Ground water flows along complex pathways through basin-fill aquifers, carbonate-rock aquifers, or both, from one basin to another. Ground-water flow system boundaries, and thus interbasin ground-water flows, are poorly defined for most of the carbonate-rock province (Harrill and others, 1988, Sheet 1). (See Prudic and others, 1995, for an additional discussion of regional ground-water flow systems.)

II. The proposed appropriation is located in Spring Valley. Great Basin NP encompasses part of the Snake Range that separates Snake and Spring valleys. Lehman Caves and the NPS's Administrative Site near Baker, Nevada, are positioned along the eastern flank of the range in Snake Valley. Part of the range is composed of carbonate rocks that have been strongly deformed by folding and repetitive faulting. Connected solution cavities and fractures caused by the folding and faulting in the carbonate rock provide conduits for the transmission of ground water through the range.

III. The basin-fill and carbonate aquifers in Snake and Spring valleys are part of a regional ground-water flow system which discharges in the Great Salt Lake Desert (Hood and Rush, 1965; Dettinger, 1989; and Harrill and others, 1988, Sheet 2). A regional ground-water potential map prepared by Harrill and others. (1988, Figure 5, Sheet 1), indicates general regional ground-water movement from Spring Valley to Snake Valley (See also Prudic and others, 1995, Figure 33).

IV. The estimated ground-water recharge rate for Spring Valley is 75,000 acre-feet per year (Rush and Kazmi, 1965). Committed ground-water resources amount to about 19,000 acre-feet per year (Nevada Department of Conservation and Natural Resources, 1999).

V. Rush and Kazmi (1965) estimated that about 4,000 acre-feet per year of ground water moves from Spring Valley to Hamlin Valley through the carbonate rocks in the Snake Range separating these two valleys. Ground water beneath Hamlin Valley moves to Snake Valley (see Hood and Rush, 1965, Plate 1; Harrill and others, 1988, Sheet 2; and Prudic and others, 1995). Where carbonate rocks separate Spring Valley and Snake Valley, other potential areas for the movement of ground water between Spring and Snake valleys occur. Ground-water withdrawals in Spring Valley, if large enough and occurring over a long period of time, will affect the ground-water reservoir in Snake Valley and the water rights and water resources of Great Basin NP.

VI. The Las Vegas Valley Water District (LVVWD) has filed nineteen applications to appropriate 50,000 acre-feet per year of ground water in Spring Valley (Schaefer and Harrill, 1995). White Pine County (WPC) has about 35 applications to appropriate about 26,000 acre-feet per year of ground water from aquifers beneath Spring Valley. Committed ground-water resources and the proposed ground-water appropriations total over 170,000 acre-feet per year and exceed the recharge rate (Nevada Department of Conservation and Natural Resources, 1999). LVVWD also filed 9 applications to withdraw 25,000 acre-feet per year in Snake Valley.

IN THE MATTER OF APPLICATION 64683
EXHIBIT A - CONTINUED

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on behalf of the United States, Department of the Interior
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VII. The appropriation proposed by Application 64683, in combination with proposed appropriations by LVVWD and WPC in Spring and Snake valleys, will: (1) reduce ground-water levels in the aquifers beneath Snake and Spring valleys, (2) modify the direction of ground-water movement in the adjoining hydraulically connected basins, and (3) reduce or eliminate spring and stream discharge. Available scientific literature is not adequate to reasonably assure that the ground-water appropriation proposed by Application 64683, in combination with appropriations proposed by LVVWD and WPC in Snake and Spring valleys, will not impact the water rights, water resources and water-related resources of Great Basin NP and the NPS administrative site near Baker, Nevada.

I. Application 64683 proposes to withdraw water from the unsurveyed ground within the NE¼ SW¼ Section 3, T9N, R68E, MDB&M and to use it on unsurveyed land within the S½ Section 3, Sections 9 and 10, T9N, R68E, MDB&M. This land is administered by the U.S. Bureau of Land Management and is not owned by the applicant. Ruling Number 4548, signed by the Nevada State Engineer on July 25, 1997, states that "...it would not be in the public interest to approve applications for use upon lands where the applicant does not control both the proposed well locations and the proposed places of use." Specific information relating to the need for and use of water under this application is lacking.

IX. The water and water-related resources of Lake Mead NRA are locally and nationally important.

CONCLUSIONS

I. There is no ground water in Spring Valley available for appropriation under this application, because existing appropriations and appropriations sought by senior applications exceed the recharge rate.

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

A. The appropriation proposed by Application 64683, in combination with proposed appropriations by LVVWD and WPC in Snake and Spring valleys, will eventually reduce/eliminate (1) ground-water flow in Lehman Caves, (2) the discharge of Cave Springs, and (3) stream discharge within Great Basin NP. The reduction/elimination will occur through the lowering of ground-water levels and/or alterations in the directions of ground-water movement. The United States' state appropriative and Federally reserved water rights, water resources, and water-related resources will be impaired.

B. Available scientific literature is not adequate to reasonably assure that the proposed appropriation, in combination with proposed appropriations by LVVWD and WPC, will not impact the NPS's water rights at Great Basin NP and the NPS administrative site near Baker, Nevada.

III. The public interest would not be served, by granting a permit to this application, because:

A. The water and water-related resources in the nationally important Great Basin NP would be diminished or impaired, as a result of the appropriation proposed by this application, in combination with proposed appropriations by LVVWD and WPC in Snake and Spring valleys.

B. The water and water-related resources of the park would be diminished, reducing the aesthetic value of the park for the visitor and thus contributions to the local economy.

C. The land which the applicant proposes to withdraw the water and proposes to use the water is not owned by the applicant.

REFERENCES CITED

Dettinger, M.D., 1989, Distribution of carbonate-rock aquifers in southern Nevada and the potential for their development, Summary of Findings, 1985-88: Program for the Study and Testing of Carbonate-Rock Aquifers in Eastern and Southern Nevada Summary Report No. 1, 37 p.

Harrill, J.R., Gates, J.S., and Thomas, J.M., 1988, Major ground-water flow systems in the Great Basin region of Nevada, Utah, and adjacent states: U.S. Geological Survey Hydrologic Investigations Atlas HA-694-C, 2 sheets.

Hood, J.W., and Rush, F.E., 1965, Water-resources appraisal of the Snake Valley area, Utah and Nevada: Utah State Engineer Technical Publication 14, 43 p.

Nevada Department of Conservation and Natural Resources, 1999, June 3, 1999 print out of Hydrographic basin summary for Basin 184, Spring Valley: Division of Water Planning, Carson City, Nevada.

Prudic, D.E., Harrill, J.R., and Burbey, T.J., 1995, Conceptual evaluation of regional ground-water flow in the carbonate-rock province of the Great Basin, Nevada, Utah, and adjacent States: U.S. Geological Survey Professional Paper 1409-D, p. D1-D102.

Rush, F.E., and Kazmi, S.A.T., 1965, Water resources appraisal of Spring Valley, White Pine and Lincoln Counties, Nevada: Nevada Department of Conservation and Natural Resources Water Resources Reconnaissance Series Report 33, 36 p.

Schaefer, D.E., and Harrill, J.R., 1995, Simulated effects of proposed ground-water pumping in 17 basins of east-central and southern Nevada: U.S. Geological Survey