

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

FILED  
MAY 03 2002  
STATE ENGINEER'S OFFICE

IN THE MATTER OF APPLICATION NUMBER 68487  
FILED BY PAMELA G. JENSEN  
OF LUND, NEVADA  
ON FEBRUARY 11, 2002  
TO APPROPRIATE THE WATERS OF UNDERGROUND

PROTEST

Comes now Daniel J. McGlothlin, on behalf of the United States Department of the Interior, National Park Service, whose post office address is 1201 Oakridge Drive, Suite 250, Fort Collins, Colorado, 80525, whose occupation is Acting Chief, Water Rights Branch, Water Resources Division, National Park Service, to protest the granting of Application Number 68487 filed on February 11, 2002 by Pamela G. Jensen of Lund, Nevada to appropriate the waters of underground, for the following reasons and on the following grounds:

See Exhibit A attached.

THEREFORE the protestant requests that the application be denied. If it can be shown that the proposed appropriation, in combination with existing and pending appropriations, will not affect the water resources and water rights of Lake Mead National Recreation Area the protest will be withdrawn.

Signed *Daniel J. McGlothlin*  
Agent or protestant  
Daniel J. McGlothlin

Address 1201 Oak Ridge Drive, Suite 250  
Street No. or P.O. Box  
Fort Collins, CO 80525  
City, State and Zip Code

RECEIVED  
02 MAY -3 AM 9:54  
STATE ENGINEER'S OFFICE

Subscribed and sworn to before me this 2nd day of May, 2002.

*Flora B. Romero*  
Notary Public  
State of Colorado  
County of Larimer

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

52 a?

**IN THE MATTER OF APPLICATION 68487**  
**EXHIBIT A**

Protest by Daniel J. McGlothlin 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 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.
- II. Since 1936, the National Park Service has managed the recreational activities within the Boulder Canyon Project area now known as Lake Mead NRA. Lake Mead NRA was established on October 8, 1964 (78 Stat. 1039) to be administered for "...general purposes of public recreation, benefit, and use, and in a manner that will preserve, develop, and enhance, so far as practicable, the recreation potential, and in a manner that will preserve the scenic, historic, scientific, and other important features of the area.... The Secretary shall permit hunting, fishing, and trapping on the lands and waters under his jurisdiction within the recreation area."
- III. The NPS is entitled to Federal reserved water rights for reserved lands within Lake Mead NRA. The priority dates for these reserved rights are the dates when the lands were reserved and are senior to the proposed appropriation. These rights have not been judicially quantified.
- IV. The Muddy River, which originates in the Muddy River Springs area located northwest of Moapa, Nevada, flows into Lake Mead NRA at the north end of the Overton Arm. The State of Nevada, Department of Wildlife, is leasing part of Lake Mead NRA adjoining the Muddy River for the purposes of the Overton Wildlife Management Area. This area supports a variety of waterfowl and vegetation.
- V. The United States has a State appropriative water right to water in the Muddy River, under Certificate No. 5126.
- VI. Springs and water related resource attributes are important features of Lake Mead NRA. The springs provide water for vegetation and wildlife habitat and create an environment that many visitors use and enjoy. Most springs are not fed by water from Lake Mead and could be affected by upgradient diversions.
- VII. The United States has State appropriative water rights to springs in the Lake Mead NRA under Certificate No. 4476.

**IN THE MATTER OF APPLICATION 68487  
EXHIBIT A - CONTINUED**

Protest by Daniel J. McGlothlin on behalf of  
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National Park Service

- VIII. Pamela G. Jensen of Lund, Nevada filed Application No. 68487 to withdraw 3.5 cubic feet per second of underground water in Cave Valley for irrigation purposes.
- IX. The NPS reserves the right to amend this exhibit as more information becomes available.

**FINDINGS**

- I. The proposed withdrawal is most likely located in Cave Valley. However, there is a discrepancy in Item No. 5 of the application describing the point of diversion. The point of diversion needs to be clarified. It cannot be within Township 7 N Range 63 East and also at a point northeast of Township 8 N Range 64 East.
- II. The aquifers in Cave Valley are part of a regional groundwater flow system that is informally called the White River groundwater flow system (Eakin, 1962). Development of groundwater could divert throughflow that leaves Cave Valley as underflow to downgradient areas.
- III. Groundwater recharge in Cave Valley was estimated at about 14,000 acre-feet/year (afy) from precipitation (Eakin, 1962). Most of the recharge results from runoff in the mountains or percolation into bedrock in the mountains (Eakin, 1962).
- IV. Discharge from Cave Valley occurs mostly as underflow to downgradient basins with very little discharge from evapotranspiration (Eakin, 1962). Harrill and others (1988) estimated that 14,000 acre-ft/year leaves Cave Valley as underflow to White River Valley.
- V. Perennial yield for Cave Valley is listed as 2,000 afy (Nevada Division of Water Resources and Water Planning, 1992).
- VI. The combined total of senior pending applications, including but not limited to those submitted by both Las Vegas Valley Water District and Lincoln County and Vidler Water Company, exceed 16,000 acre-ft/year.
- VII. Ground-water withdrawal rates larger than the recharge to Cave Valley would come from storage and constitute ground-water mining. This application, in combination with senior pending applications filed by Las Vegas Valley Water District, Lincoln County and Vidler Water Company, and Pamela and Bruce Jensen, will mine ground-water.

**IN THE MATTER OF APPLICATION 68487  
EXHIBIT A - CONTINUED**

Protest by Daniel J. McGlothlin on behalf of  
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- VIII. In Ruling 5115, the State Engineer found that little is known as to what yield exists from the carbonate rock aquifer, if any, and that the currently available scientific literature is not adequate to address potential impacts to water rights and water resources. However, the State Engineer also noted that development of small quantities of water in staged increments with plans for mitigation of impacts if necessary will not prove detrimental to the public interest.

**CONCLUSIONS**

- I. The proposed appropriation, in combination with senior pending applications, exceed the water available for appropriation in Cave Valley.
- II. The approval and development of the appropriation proposed by this application will impair the water rights of the United States, because:
- A. The appropriation, in combination with other appropriations and withdrawals proposed by Las Vegas Valley Water District, Lincoln County and Vidler Water Company will further reduce the discharge of the Muddy River. The United States' senior water right and other existing rights to the Muddy River would be impaired, if the appropriation is approved and developed.
- B. The proposed appropriation, in combination with existing appropriations and pending applications in the White River ground-water flow system, if approved and developed, could reduce the discharge of Lake Mead NRA springs, because of the large potential withdrawal rate. The drawdown caused by such large withdrawals would extend to capture ground water that naturally discharges through the springs.
- C. The effects of the appropriation proposed by this application, when combined with other existing and proposed appropriations, could impair the senior water rights of Lake Mead NRA more quickly and/or to a degree greater than the withdrawal proposed under this application alone.
- III. The public interest would not be served, by granting a permit to this application, because:

**IN THE MATTER OF APPLICATION 68487  
EXHIBIT A - CONTINUED**

Protest by Daniel J. McGlothlin on behalf of  
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National Park Service

- A. The water and water-related resources in the nationally important Lake Mead NRA would be diminished or impaired, as a result of the appropriation proposed by this application.

**BIBLIOGRAPHY**

- Eakin, T.E., 1963, Ground-water appraisal of Pahrangat and Pahroc Valleys, Lincoln and Nye Counties, Nevada: Nevada Department of Conservation and Natural Resources Ground-Water Resources-Reconnaissance Series Report 21, 36 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.
- Nevada Division of Water Resources, 2000, Water Rights Database, Special Hydrographic Abstract, and Hydrographic Basin Summary. Printouts as of February 2 and 3, 2000.
- 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, pp. D1-D102.
- State of Nevada, 1992, Hydrologic area summaries: State of Nevada Department of Conservation and Natural Resources, Division of Water Resources and Water Planning, Carson City, Nevada.