

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

FILED
JAN 17 2008
STATE ENGINEER'S OFFICE
2008 JAN 17

IN THE MATTER OF APPLICATION NUMBER 76286
FILED BY LINCOLN COUNTY WATER DISTRICT AND VIDLER
WATER COMPANY, INC. ON SEPTEMBER 17, 2007,
TO APPROPRIATE THE WATERS OF THE STATE OF NEVADA

STATE ENGINEER'S OFFICE

PROTEST

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 Acting Chief, Water Rights Branch, Water Resources Division, National Park Service, and protests the granting of Application Number 76286 filed on September 17, 2007, by Lincoln County Water District and Vidler Water Company, Inc. to appropriate the waters of the State of Nevada, situated in Lincoln County, Nevada, for the following reasons and on the following grounds, to wit:

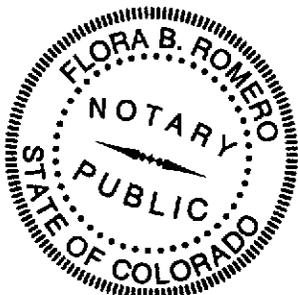
See Exhibit A attached.

THEREFORE the protestant requests that the application be denied.

Signed *Charles W. Pettee*
Agent or protestant

Charles W. Pettee
Printed or typed name, if agent

Address 1201 Oakridge 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 15th day of January, 2008.

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 3/31/2010

OK

**IN THE MATTER OF APPLICATION 76286
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 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 National Recreation Area (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". Springs, including their water-related attributes, and the water-related resource attributes and recreational activities associated with the Virgin River are important features of the Lake Mead NRA. 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 appropriation sought by the applicant. These rights have not been judicially quantified.

- III. Numerous 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 will be affected by up-gradient diversions.

Springs include Blue Point, Rogers, Corral, and Kelsey's springs, and other smaller, unnamed springs.

Desert bighorn sheep are also dependent upon the springs in Lake Mead NRA. A herd of approximately 150 use springs in the northern part of the National Recreation Area.

The relict Las Vegas Valley leopard frog, *Rana onca*, has been found at Rogers, Corral, and Blue Point springs. Current taxonomic studies indicate a high potential for listing of this relict population, previously believed extinct, as protected under the Endangered Species Act.

In 2006, approximately 7,777,000 persons visited Lake Mead NRA, contributing to the local economy.

- IV. The Virgin River provides water for vegetation, wildlife habitat, and a popular waterfowl hunting area within Lake Mead NRA. This area within Lake Mead NRA is leased to the Nevada Department of Wildlife for the Overton Wildlife Management Area. Flow of the Virgin River provides nutrients important for sustaining a recreational fishery in Lake Mead NRA.

- V. Lake Mead NRA has State appropriative water rights for the following springs which could be impaired by the appropriation and diversion proposed by this application, in combination with existing appropriations:

**IN THE MATTER OF APPLICATION 76286
EXHIBIT A - (CONTINUED)**

Protest by Charles W. Pettee
on behalf of the United States, Department of the Interior
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<u>Name</u>	<u>Point of Diversion</u>	<u>Certificate Number</u>
Kelsey's Spring	SW ¼, NW ¼, Sec. 20, T16S, R68E, MDB&M	296
Rogers Spring	SE ¼, SE ¼, Sec. 12, T18S, R67E, MDB&M	4476

- VI. With this application, Lincoln County Water District and Vidler Water Company, Inc. propose to withdraw 5 cubic feet per second for municipal use in the Tule Desert. Lincoln County Water District and Vidler Water Company, Inc. also filed 5 associated applications—Nos. 76285, and 76287-76290—to withdraw 5 cfs each, for a total proposed withdrawal of 30 cubic feet per second (up to 21,720 acre feet per year) of ground water for municipal use.
- VII. The NPS reserves the right to amend this exhibit as more information becomes available.

FINDINGS

- I. The proposed appropriation is within the Tule Desert. The aquifers underlying the Tule Desert are part of a regional ground-water flow system. Ground water in these aquifers exits the Tule Desert Hydrographic Area as underflow to the Virgin Valley, providing ground-water recharge to the Virgin Valley (Harrill and others, 1988). Ground-water withdrawals in the Tule Desert can reduce the ground-water discharge from this area, thereby reducing the recharge to the Virgin Valley aquifers.
- II. The annual ground-water recharge rate of the Tule Desert is approximately 2,100 acre-feet per year (afy), most of which occurs as precipitation within the Tule Desert Hydrographic Area (Glancy and Van Denburgh, 1969, and Harrill and others, 1988). Committed ground-water resources and pending appropriations for the Tule Desert total 22,339 afy (Nevada State Engineer records, obtained November 20, 2007).
- III. The perennial yield of ground water of the Tule Desert is reported to be 1,000 afy (Nevada Department of Conservation and Natural Resources, 1992). Committed ground-water resources and pending appropriations are greater than perennial yield and recharge. The proposed appropriation, if approved, would exceed the amount of ground water that is available.
- IV. In 2002, the Nevada State Engineer issued Ruling #5181 regarding two previous water-rights applications by LCWD and Vidler for 10 cfs (7240 afy) each, for a total of 20 cfs (14,480 afy). The Ruling granted the applicants 2,100 afy, equal to the annual water budget determined by the USGS. The balance of the first application was denied, and the other application was held in abeyance. The State Engineer ruled that unless LCWD and Vidler can show that the annual water budget is greater than the USGS estimate, no more water rights will be granted in this basin.
- V. Ground-water underflow discharging from the Tule Desert acts as ground-water recharge to the Virgin Valley (Harrill and others, 1988). Committed ground-water resources in the Virgin Valley exceed perennial yield and recharge. Thus, there is no ground water available for appropriation in the Virgin Valley.

**IN THE MATTER OF APPLICATION 76286
EXHIBIT A - (CONTINUED)**

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

- VI. The aquifers underlying the Tule Desert and Virgin Valley are part of a regional ground-water flow system which discharges water through springs in Lake Mead NRA, including Rogers, Bluepoint, Corral, and Kelsey's springs (see Prudic and others, 1993; and Pohlmann and others, 1997). These springs, located in the Overton Arm area of Lake Mead NRA, discharge at or near the contact of carbonate rocks and valley fill. The ground water that would be tapped by the proposed point of diversion and those of the associated applications, in combination with all other existing appropriations and pending applications in the regional aquifer system, if approved and developed, could affect the discharge of the springs, if pumping is large enough and occurs over a long period of time.
- VII. The appropriation proposed by the subject application, in combination with associated applications and existing appropriations, if approved and developed, could adversely reduce the discharge of the Virgin River. The reduction would disrupt the loading of nutrients important for sustaining a recreational fishery in Lake Mead NRA and diminish the wildlife habitat and popular wildfowl hunting area within Lake Mead NRA.
- VIII. Ground-water withdrawal rates larger than the annual water budget of the Tule Desert (2,100 afy) would come from storage and constitute ground-water mining. The proposed appropriation, in combination with those of the associated applications, if approved and developed, will mine ground water.
- IX. The water and water-related resources of Lake Mead NRA are locally and nationally important.

CONCLUSIONS

- I. There is no water available for appropriation because committed ground-water resources in Tule Desert and in down-gradient basins exceed ground-water recharge.
- II. The approval and development of the appropriation proposed by this application will impair the water rights of the United States, because:
 - A. The appropriations and withdrawals proposed by Lincoln County and Vidler Water Company, Inc. (Applications 76285 through 76290) in combination with existing appropriations will eventually reduce the flow of the Virgin River. The United States' senior water rights would be impaired, if the appropriations are approved and developed.
 - B. The proposed appropriation, in combination with existing appropriations, 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 this application, because:

**IN THE MATTER OF APPLICATION 76286
EXHIBIT A - (CONTINUED)**

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

- A. The ground-water reservoir in the Tule Desert would be mined.
- B. 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.

LITERATURE CITED

- Brothers, K., Katzer, T., Mojib, R.M., Grinnell, G., Bernholz, A., and Johnson, M., 1993, Addendum to hydrology and interactive computer modeling of ground and surface water in the lower Virgin River valley, primarily in Clark County, Nevada: Las Vegas Valley Water District, Cooperative Water Project, Water for Nevada's Future, Report No. 1a, Hydrographic Basin 222, 90 p.
- Glancy, P.A., and Van Denburgh, A.S., 1969, Water-resources appraisal of the lower Virgin River valley area, Nevada, Arizona, and Utah: Nevada Department of Conservation and Natural Resources, Division of Water Resources, Water Resources – Reconnaissance Series Report 51, 87 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.
- Las Vegas Valley Water District and The MARK Group, Engineers & Geologists, Inc., 1992, Hydrology and interactive computer modeling of ground and surface-water in the lower Virgin River valley, primarily in Clark County, Nevada: Las Vegas Valley Water District, Cooperative Water Project, Water for Nevada's Future, Report No. 1, Hydrographic Basin 222, 90 p.
- Nevada Department of Conservation and Natural Resources, 1992, Hydrographic Area Summary, Hydrographic Area 222, Division of Water Planning, Carson City, Nevada.
- Pohlmann, K.F., Campagna, D.J., Chapman, J.B., and Earman, S., 1997, Investigation of the origins of springs in the Lake Mead National Recreation Area: draft report prepared for the National Park Service, Desert Research Institute, Water Resources Center, Las Vegas, Nevada, 48 p. with appendices.
- Prudic, D.E., Harrill, J.R., and Burbey, T.J., 1993, 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 Open-File Report 93-170, 103 p.