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

FILED
APR 26 2012
STATE ENGINEER'S OFFICE

IN THE MATTER OF APPLICATION NUMBER 81619
FILED BY LINCOLN COUNTY WATER DISTRICT and
VIDLER WATER COMPANY, INC.
ON FEBRUARY 28, 2012
TO CHANGE THE POINT OF DIVERSION OF WATER
HERETOFORE APPROPRIATED

PROTEST

Comes now Christine Lehnertz, on behalf of the United States Department of Interior, National Park Service, whose post office address is 333 Bush Street, Suite 500, San Francisco, California, 94104-2828, whose occupation is Regional Director, Pacific West Region, National Park Service, to protest the granting of Application Number 81619 filed on February 28, 2012 by Lincoln County Water District and Vidler Water Company, Inc. for the waters of an underground source 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.

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Signed: _____
Agent or protestant

CHRISTINE S. LEHNERTZ
Printed or typed name, if agent

Address: 333 Bush Street, Suite 500
Street No. or P.O. Box No.

San Francisco, CA 94104-2828
City, State and Zip Code No.

Subscribed and sworn to before me this 25 day of April, 2012.

_____
Notary Public

State of California County of San Francisco

ANDREW F. ALBRIGHT
COMM. #1966230
NOTARY PUBLIC-CALIFORNIA
SAN FRANCISCO COUNTY
My Comm. Expires Feb. 7, 2016

My Commission expires 2-7-2016

IN THE MATTER OF APPLICATION 81619
EXHIBIT A

Protest by Christine Lehnertz
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 (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 water-related resource attributes and recreational activities associated with springs and 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.

IV. Numerous springs in Lake Mead NRA provide water for vegetation and wildlife habitat and create an environment that many visitors use and enjoy. Many springs are fed by groundwater from the regional carbonate-rock groundwater flow system and could be affected by upgradient groundwater diversions.

Springs include Blue Point, Rogers, Corral, and Kelsey's springs, and other smaller, unnamed springs. Visitation to Blue Point and Rogers Springs has been estimated at 5,000 visitors per year. 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 THE MATTER OF APPLICATION 81619
EXHIBIT A - (CONTINUED)

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The United States has State appropriative water rights to Rogers Spring, located in SE¼ SE ¼, Sec. 12, T.18 S., R.67 E., M.D.B.M., Certificate No. 4476.

V. The Virgin River flows into Lake Mead NRA at the north end of the Overton Arm of Lake Mead and provides water for vegetation, wildlife habitat, and a popular waterfowl hunting area within Lake Mead NRA. The State of Nevada, Department of Wildlife, is leasing part of Lake Mead NRA adjoining the Virgin River for the purposes of the Overton Wildlife Management Area. Flow of the Virgin River also provides nutrients important for sustaining a recreational fishery in Lake Mead NRA.

VI. With this application, Lincoln County Water District and Vidler Water Company, Inc. (LCWD and Vidler) propose to change the existing point of diversion designated under Application 64692. Under Application 64692, LCWD and Vidler were conditionally granted the right to withdraw groundwater at an instantaneous rate of 10 cubic feet per second (cfs) for municipal use in the Tule Desert. The total annual duty for this same application is 7,240 acre-feet per year (afy).

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

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FINDINGS

I. The proposed appropriation is within the Tule Desert (Hydrographic Area 221). The aquifers underlying the Tule Desert likely are part of a regional, groundwater flow system. The initial estimate of the groundwater recharge rate of the Tule Desert was 2,100 afy, most of which occurs as precipitation infiltrating within the Tule Desert hydrographic area [Glancy and Van Denburgh, 1969, and Harrill and others, 1988]. Natural discharge of groundwater by evapotranspiration (ET) has not been observed to occur in the Tule Desert [Glancy and Van Denburgh, 1969, and DeMeo and others, 2008]. As a result, groundwater discharge from these aquifers is believed to exit the Tule Desert as subsurface outflow to the Virgin River Valley (Hydrographic Area 222), providing a component of groundwater recharge to the Virgin River Valley [Harrill and others, 1988, and Van Liew, 2006]. In its technical review of water resource investigations of the Tule Desert (Berger and others, 2008), the USGS determined that nearly all groundwater discharge from the Tule Desert occurs as subsurface outflow, and that recharge in the Tule Desert is less than the average regional groundwater discharge to Beaver Dam Wash and Virgin River despite any uncertainty. Consequently, groundwater withdrawals in the Tule Desert may reduce or capture the natural subsurface outflow from this area, thereby reduce or eliminate a component of groundwater recharge to the Virgin River Valley. This could reduce the discharge of the Virgin River and/or springs at Lake Mead NRA.

II. The groundwater perennial yield of the Tule Desert was originally recognized by the Nevada Department of Conservation and Natural Resources to be 2,100 afy, which was consistent with the perennial yield and in-basin recharge estimates proposed in Reconnaissance Report No. 51 (Glancy and Van Denburgh, 1969). The perennial yield estimate was modified by the Nevada State Engineer to 2,500 afy, as a result of Ruling 5986. The committed groundwater resources are currently reported to be about 5,003 afy in the State Engineer's database (Nevada Department of Conservation and Natural Resources, 2012), which is greater than the original and current estimates of perennial yield and recharge for this basin. Based on these estimates, there is no additional groundwater available for appropriation in the Tule Desert.

III. In 2002, the Nevada State Engineer issued Ruling 5181 regarding two previous water-rights applications by LCWD and Vidler for 10 cfs (up to 7,240 afy) each, for a total of 20 cfs (up to 14,480 afy). The Ruling granted LCWD and Vidler 2,100 afy of water on the first application (Application 64693 changed by Application 66932), equal to the annual

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in-basin recharge originally estimated by the USGS for this basin. The balance of the first application was denied, and the second application (Application 64692) was held in abeyance. The State Engineer ruled that unless LCWD and Vidler can show that the annual water budget is greater than the earlier USGS estimate, and the new estimate is confirmed by the USGS, no more water rights would be granted in this basin.

IV. In 2009, the Nevada State Engineer issued Ruling 5986 regarding the second water-rights application by LCWD and Vidler for 10 cfs (up to 7,240 afy) that was held in abeyance under Ruling 5181. Ruling 5986 granted LCWD and Vidler 396 afy of water on the second application (Application 64692), with the balance of the second application being denied. In the second ruling, the Nevada State Engineer effectively revised the perennial yield of the Tule Desert to 2,500 afy. As a result of this ruling, the basin continued to be fully appropriated, with no additional groundwater available for appropriation in the Tule Desert.

V. In May 2009, LCWD and Vidler appealed Ruling 5986 to the Seventh Judicial District Court of the State of Nevada in Case No. CV-0518009 entitled *Lincoln County Water District and Vidler Water Company v. State Engineer, State of Nevada.* In July 2009, LCWD and Vidler sued State Engineer Tracy Taylor and Acting State Engineer King in the United States District Court for the District of Nevada in Case No. CV00392-LRH-VPC entitled *Lincoln County Water District and Vidler Water Company v. Tracy Taylor, P.E. and Jason King, P.E.* On April 1, 2010, the parties settled the two lawsuits by entering into the *Settlement Agreement Among the State Engineer, State of Nevada, Tracy Taylor, P.E., Nevada State Engineer, Jason King P.E., Acting Nevada State Engineer, Lincoln County Water District and Vidler Water Company*, "in order to avoid the expense and uncertainty of litigation." Under this settlement agreement, the State Engineer conditionally granted Application 64692 in the amount of 7,240 afy, with 2,900 afy immediately available for use and the remainder subject to staged development. The total combined duty for Applications 64692 and 66932 shall not exceed 9,340 afy.

VI. The groundwater perennial yield of the Virgin River Valley is recognized by the Nevada State Engineer to be 3,600 afy (Nevada Department of Conservation and Natural Resources, 2012), which is consistent with the perennial yield and in-basin recharge estimates originally proposed in Reconnaissance Report No. 51 (Glancy and Van Denburgh, 1969). Committed groundwater resources in the Virgin River Valley are estimated by the NPS to be about 12,342 afy (Nevada Department of Conservation and Natural Resources, 2012).

The committed groundwater resources in this basin already exceed the perennial yield by 8,742 afy. Assuming the Virgin River Valley is fully appropriated at this time, any additional rights granted in the Tule Desert basin, combined with committed and pending applications for surface water and groundwater resources in the Virgin River Valley system, could reduce the discharge of the Virgin River. The change in the point of diversion sought by LCWD and Vidler in Application No. 81619 moves the point of diversion closer to surface water and groundwater resources in the Virgin River Valley system, which could increase the degree of pumping impact on these water resources.

VII. The aquifers underlying the Tule Desert are part of a regional, groundwater flow system that discharges a portion of its water through Paleozoic-aged carbonate rocks from several warm springs in Lake Mead NRA, including Rogers, Blue Point, Corral, and Kelsey's Springs (see Prudic and others, 1995; Pohlmann and others, 1998; and Page and others, 2011). These springs, located in the Overton Arm area of Lake Mead NRA, discharge at or near the contact of local, Paleozoic-aged carbonate rocks and basin fill sediments. If this change application in the Tule Desert is approved and fully developed, groundwater withdrawn by LCWD and Vidler will come directly from the regional, Paleozoic carbonate-rock aquifer at a new point of diversion (existing production well PW-2) that will be closer in proximity to the subject springs at Lake Mead NRA. In combination with withdrawals associated with existing appropriations and those proposed by others in adjacent basins, pumping could affect the discharge of the subject springs in Lake Mead NRA, if pumping is large enough and occurs over a long enough period of time.

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

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EXHIBIT A - (CONTINUED)

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CONCLUSIONS

I. There is no water available for appropriation because the perennial yield for Tule Desert and the down-gradient Virgin River Valley basin is fully appropriated.

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

A. The appropriations and withdrawals proposed by LCWD and Vidler under this change application (81619) and Application 66932, if approved and fully developed in combination with existing appropriations in the regional, carbonate-rock groundwater flow system, would reduce the discharge of warm springs within Lake Mead NRA that are discharging from the regional, Paleozoic carbonate-rock aquifer, if pumping continues long enough at the large rates proposed. The change in the point of diversion sought under this application will withdraw groundwater directly from the regional, Paleozoic carbonate-rock aquifer at a new location that will be closer in proximity to the subject springs at Lake Mead NRA. The drawdown caused by such large withdrawals would extend to capture or re-direct groundwater that naturally discharges from the springs.

B. The appropriations and withdrawals proposed by LCWD and Vidler in Tule Desert, if approved and developed in combination with existing groundwater and surface water appropriations in the Tule Desert and the Virgin River Valley, and proposed surface water appropriations by SNWA in the Virgin River Valley, would eventually reduce the flow of the Virgin River. The change in the point of diversion sought under this application moves the point of diversion closer to surface water and groundwater resources in the Virgin River Valley system, which could increase the degree of pumping impact on these water resources.

III. The public interest would not be served by granting this application, because the water rights 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.

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EXHIBIT A - (CONTINUED)

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