FILED
APR 30 2010
STATE ENGINEER'S OFFICE

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

IN THE MATTER OF APPLICATION NUMBER 79632
FILED BY Moapa Valley WD
ON February 22, 2010
TO APPROPRIATE WATER

PROTEST

Comes now Charles 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 79632, filed on February 22, 2010, by Moapa Valley WD to appropriate water, situated in Clark 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.

RECEIVED
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STATE ENGINEERS OFFICE

Signed: _____
Agent or protestant

Charles W. Pettee
Printed or typed name, if agent

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

Fort Collins, CO 80525
City, State and Zip Code

FLORA B. ROMERO NOTARY PUBLIC STATE OF COLORADO

Subscribed and sworn to before me this 27th day of April, 2010.

_____
Notary Public

State of Colorado
County of Larimer

Flora B. Romero, Notary Public
State of Colorado
My Commission Expires 7/31/2010

My Commission expires _____.

IN THE MATTER OF APPLICATION 79632
EXHIBIT A

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

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."

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 appropriation sought by the applicant. These rights have not been judicially quantified.

IV. The Muddy River, which originates from large discharge springs located northwest of Moapa, Nevada, flows into Lake Mead NRA at the north end of the lake's 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. The United States has a State appropriative water right to water in the Muddy River, Certificate No. 5126. The point of diversion is located in the NW1/4 SE1/4, Sec. 19, T. 16 S., R. 68 E., M.D.B.M.

V. 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 up-gradient 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/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

IN THE MATTER OF APPLICATION 79632
EXHIBIT A (CONTINUED)

Protest by Charles W. Pettee on behalf
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Endangered Species Act.

The United States has State appropriative water rights to two springs near the mouth of the Muddy River, which could be impaired by the appropriation and diversion proposed by this application: Kelsey's Springs, located in the SW1/4 NW1/4, Sec 20, T.16 S., R.68 E., M.D.B.M., Certificate No. 296; and Rogers Spring, located in SE1/4 SE1/4, Sec. 12, T.18 S., R.67 E., M.D.B.M., Certificate No. 4476.

VI. Moapa Valley Water District (MVWD) filed Application No. 79632 to withdraw 6.0 cubic feet per second (cfs) or 4,345 acre-feet per year (afy) of ground water in Lower Meadow Valley Wash. MVWD also filed two other applications, nos. 79633 and 79634, each also requesting 6 cfs. The total amount requested by these applications is 18 cfs or 13,035 afy of ground water in the valley. In 1997, Moapa Water District filed three applications—63379, 63380, and 63381—in the Lower Meadow Valley Wash seeking the identical amounts as 79632, 79633, and 79634. In Ruling #6031 the Nevada State Engineer denied applications 63379, 63380, and 63381 after concluding there was insufficient water available to satisfy those applications.

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

FINDINGS

I. Lower Meadow Valley Wash (Hydrographic Basin #205) is located within the Colorado Regional Groundwater Flow System (Prudic and others, 1995). Total recharge to Lower Meadow Valley Wash is estimated to be 12,400 afy. Harrill and others (1988) estimated that the recharge derived from precipitation is about 1,500 afy (numbers based on Rush (1964)). Thus, about 10,900 afy of groundwater enters Lower Meadow Valley Wash from upgradient areas. Committed groundwater resources in the Lower Meadow Valley Wash amount to 23,600 acre-feet. (Ruling #6031). The committed groundwater resources exceed the estimated annual groundwater recharge of the basin, and there is no water available for appropriation. In Ruling #6031, the Nevada State Engineer concluded there was insufficient water available to satisfy three previous applications—63379, 63380, and 63381—filed by Moapa Valley Water District, and denied those previous applications.

II. The aquifers in Lower Meadow Valley Wash are tributary to the Muddy River. Rush

(1968) estimated that underflow from Lower Meadow Valley Wash into the Muddy River drainage is 7,000 afy.

III. Evapotranspiration from Lower Meadow Valley Wash is estimated to be about 5,400 afy (12,400 afy of recharge less 7,000 afy of outflow). Groundwater use in Lower Meadow Valley Wash was about 7,500 afy in 1975 (Bedinger and others, 1984). Thus, groundwater use exceeds the rate of evapotranspiration in the valley.

IV. Rights to water in the Muddy River were decreed by the Tenth Judicial Court of the State of Nevada in the case entitled *Muddy Valley Irrigation Company vs. Moapa and Salt Lake Produce Company*. According to the January 21, 1920, Order of Determination and the March 11, 1920, Further and Supplemental Order of Determination of the Nevada State Engineer, there is no water available for appropriation in the Muddy River, its headwaters, sources of supply, and tributaries (Muddy Valley Irrigation Company, 1938).

V. The groundwater withdrawal proposed by this application and associated applications, if approved and developed, in combination with existing appropriations in Lower Meadow Valley Wash, will capture groundwater that naturally discharges into the Muddy River and thus will reduce the discharge of the river, impairing existing water rights.

VI. The springs within Lake Mead NRA are discharge points from the regional groundwater flow system, and may be affected by the proposed appropriation. The National Park Service is concerned that the groundwater withdrawal proposed by this application and associated applications, if approved and developed, in combination with existing appropriations in the regional carbonate-rock aquifer system, will reduce or eliminate the discharge of the springs within Lake Mead NRA by capturing water destined for the springs, given that pumping occurs over a long period of time.

VII. Ground-water withdrawal rates larger than the recharge rate of Lower Meadow Valley Wash (12,400 afy) would come from storage and constitute groundwater mining. Existing committed groundwater resources are 23,600 afy. The appropriation, if approved and developed, will mine groundwater.

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

IN THE MATTER OF APPLICATION 79632
EXHIBIT A (CONTINUED)

Protest by Charles W. Pettee on behalf
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CONCLUSIONS

I. There is no water available for appropriation because committed water resources exceed the renewable water resources in Lower Meadow Valley Wash.

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

A. The proposed appropriations by MVWD 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 and associated appropriations, if approved and developed, in combination with existing appropriations in the regional carbonate-rock aquifer system, will reduce or eliminate the discharge of the springs within Lake Mead NRA by capturing water destined for the springs, given that pumping occurs over a long period of time. The drawdown caused by such large withdrawals would extend to capture ground water that naturally discharges through the springs.

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

A. The ground-water reservoir in Lower Meadow Valley Wash 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

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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.

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