

FILED
NOV 25 1998
STATE ENGINEER'S OFFICE

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

IN THE MATTER OF APPLICATION NUMBER 64289
FILED BY ROBERT J. MATHEWS
OF PANACA, STATE OF NEVADA
ON JULY 9, 1998 TO APPROPRIATE
THE WATERS OF UNDERGROUND

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 Chief, Water Rights Branch, Water Resources Division, National Park Service, and protests the granting of Application Number 64289 filed on July 9, 1998, by Robert J. Mathews of Panaca, 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. The National Park Service will reconsider its protest if it can be shown that the proposed appropriation, in combination with existing and pending appropriations, if approved and developed, will not affect the water resources and water rights of Lake Mead National Recreation Area.

Signed *Charles W. Pettee*
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 24th day of November, 1998.
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

FLAD

IN THE MATTER OF APPLICATION 64289
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 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 Robert J. Mathews. 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 SE ¹/₄, 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 upgradient 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

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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.

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 SW $\frac{1}{4}$ NW $\frac{1}{4}$, Sec 20, T.16 S., R.68 E., M.D.B.M., Certificate No. 296; and Rogers Spring, located in SE $\frac{1}{4}$ SE $\frac{1}{4}$, Sec. 12, T.18 S., R.67 E., M.D.B.M., Certificate No. 4476.

- VI. Robert J. Mathews filed Application, No. 64289 to withdraw 7.0 cubic feet per second (5,069 acre-feet per year) of ground water in Patterson Valley to irrigate 320 acres.
- VII. The NPS reserves the right to amend this exhibit as more information becomes available.

FINDINGS

- I. The proposed appropriation is within Patterson Valley. Committed ground water resources within the valley total 5,435 acre-feet per year (afy), which exceeds the perennial yield of 4,500 afy (Nevada Department of Conservation and Natural Resources, 1992). Thus, the basin is over-appropriated. Las Vegas Valley Water District (LVVWD) has filed four applications (Nos. 54031, 54032, 54033, and 54034) to appropriate a total of 4,000 afy from Patterson Valley. Application No. 64289, which is junior to those of LVVWD, proposes to withdraw 5,069 afy.
- II. Patterson Valley is within the White River ground water subregion of the Colorado River ground water region (Prudic, et al., 1993) which encompasses about 12,800 square miles. Ground water is discharged from the White River subregion by evapotranspiration and flow from springs within the subregion, by flow from the Muddy River Springs which form the headwaters of the Muddy River, by outflow from Lower Meadow Valley Wash to the Muddy River, and by outflow to adjacent subregions.

Ground water was simulated by Prudic, et al., (1993) to flow from Patterson Valley southward to Panaca Valley and then toward the Muddy River Springs as underflow along Meadow Valley Wash. An additional 7,000 afy of ground water may be

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discharged in the Muddy River area from Lower Meadow Valley Wash (Rush, 1964). The proposed appropriation, in combination with existing appropriations, will result in a decrease in the outflow to the Muddy River.

- III. 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).
- IV. This proposed appropriation, when combined with existing appropriations and applications by the LVVWD, will impair the senior water rights, water resources, and water-related resource attributes of Lake Mead NRA.
- V. Existing committed ground-water resources and spring discharge in the greater Muddy River area¹ are larger than the recharge rate. Any additional ground-water appropriations will further reduce the discharge of the Muddy River. (See Schaefer and Harrill, 1995, for discussion of potential effects of large withdrawals from the regional ground-water flow system.) Ground-water withdrawals larger than the recharge rates in the hydrographic areas within the greater Muddy River area would come from storage and constitute ground-water mining.
- VI. The springs within Lake Mead NRA are discharge points for a regional ground water flow system. Combined applications in the White River subregion request over 200,000 afy. The National Park Service is concerned that these proposed withdrawals by Robert J. Mathews and other entities (LVVWD, Nevada Power Company, Blue Nugget Water Company, Dry Lake Water Company, Aerojet, Moapa Valley Water District), if developed, in conjunction with existing ground water uses in the Muddy River area, 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. In Ruling No. 4548, the Nevada State Engineer states "...that it is not in the public interest to approve applications for use on lands where the applicant does not control both the

¹ Includes Pahrnagat Valley, Coyote Spring Valley, Hidden Valley, Garnet Valley, California Wash, Lower Meadow Valley Wash, Black Mountains Area, and Muddy River Springs Area.

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EXHIBIT A - CONTINUED**

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proposed well locations and the proposed places of use.” The proposed point of diversion and the place of use of the application appear to be located on land controlled by the Bureau of Land Management (see surface-management map of the State of Nevada prepared by the Bureau of Land Management, 1990).

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

CONCLUSIONS

- I. The approval and development of the appropriation proposed by this application will impair the water rights of the United States, because:
- A. The appropriation and withdrawal proposed by Robert J. Mathews 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 Muddy River area (including those of the LVVWD, Nevada Power Company, Blue Nugget Water Company, Dry Lake Water Company, Aerojet, and Moapa Valley Water District), 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 (including those of the Las Vegas Valley Water District, Nevada Power Company, Blue Nugget Water Company, Dry Lake Water Company, Aerojet, and Moapa Valley Water District), 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.
- II. The public interest would not be served by granting this application, because:

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EXHIBIT A - CONTINUED**

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- 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.

- B. The application is for using water on lands where the applicant does not appear to control either the proposed well location or the proposed place of use.

LITERATURE CITED

- Muddy Valley Irrigation Company, 1938, Protest of the Muddy Valley Irrigation Company in the Matter of Application No. 10188 by the United States Department of Agriculture, Bureau of Biological Survey, for Permission to Appropriate Water From Muddy Creek, Filed March 9, 1938: Nevada State Engineer's Office, Carson City, Nevada, 2 p.
- 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.
- Rush, F.E., 1964, Ground-water appraisal of the Meadow Valley area, Lincoln and Clark Counties, Nevada: Nevada Department of Conservation and Natural Resources Ground-Water Resources-Reconnaissance Series Report 27, 43 p.
- Schaefer, D.H., and Harrill, J.R., 1995, Simulated effects of proposed pumping in 17 basins of east-central and southern Nevada: U.S. Geological Survey Water-Resources Investigations Report 95-4173, 71 p.
- State of Nevada, 1992, Hydrologic area summaries: Nevada Department of Conservation and Natural Resources, Nevada Division of Planning, Carson City, Nevada.