

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

FILED
SEP 21 2000
STATE ENGINEER'S OFFICE

IN THE MATTER OF APPLICATION NUMBER 66080
FILED BY NYE COUNTY BOARD OF COMMISSIONERS
OF NYE COUNTY, STATE OF NEVADA
ON FEBRUARY 16, 2000
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 66080 filed on February 16, 2000 by Nye County Board of Commissioners, Nye County, State of Nevada, to appropriate the waters of underground, situated in Nye 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 20th day of September, 2000.

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

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EXHIBIT A

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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. Death Valley National Monument was created by Presidential Proclamation in 1933 to preserve unusual features of scenic, scientific, and educational interest. The proclamation warned unauthorized persons to not appropriate, injure, destroy, or remove any feature of the monument. Springs and water-related resources are important features.

In 1952, a forty-acre tract of public land surrounding Devil's Hole was withdrawn, creating a detached component of Death Valley National Monument through Proclamation No. 2961, 3 CFR 147 [1949-1953 Comp.]. The proclamation recognized that the "subterranean pool [Devil's Hole] is an integral part of the hydrographic history of the Death Valley region," and that the pool is the home of "a peculiar race of desert fish...evolved only after the gradual drying up of the Death Valley Lake System...." *Id.* Because of the pool's "outstanding scientific importance...it should be given special protection...." *Id.*

In 1994, the status of Death Valley National Monument was changed to that of a National Park through enactment of the California Desert Protection Act. The Act acknowledged Death Valley's extraordinary and inestimable value and increased the total land area. The Act specifically charged the Secretary of the Interior and all other officers of the United States to take all steps necessary to protect the reserved water rights and water resources of the Park.

- III. The NPS is entitled to Federal reserved water rights for reserved lands within Death Valley National Park (Death Valley NP). The priority dates for reserved rights are senior to the appropriation sought by this application. These rights have not been judicially quantified.
- IV. A unique and endangered species of pupfish exists at Devil's Hole, a detached unit of Death Valley NP in Nevada. Groundwater withdrawals near the unit previously caused a decline in the water level of the pool, exposing a rock shelf vital to the spawning of the pupfish (Dudley and Larson, 1976). Subsequently, a decision by the U.S. Supreme Court (later refined by the U.S. District Court) determined that a Federal reserved water right exists at Devil's Hole for the purpose of maintaining a water level sufficient to inundate the shelf on which the pupfish spawns (Cappaert v. United States, 1976).

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In addition, the Endangered Species Act and its amendments impose obligations on Federal agencies to conserve endangered species such as the Devil's Hole pupfish.

V. Many of the "unusual features of scenic, scientific, and educational interest" within Death Valley NP are largely shaped by the hydrologic regime of the area (Hunt et al., 1966). The hydrologic regime is essential to the values that are preserved in the public interest. Thus, protection of the hydrologic regime is in the public interest. The importance of water within the Park is illustrated by the following:

A. In the eastern part of the Park, Grapevine, Keane Wonder, Nevares, Texas, Travertine, and Saratoga Springs provide water for park facilities, domestic use, public campgrounds, resorts, vegetation, wildlife, public enjoyment, scenic value and other needs. Nevares, Texas, and Travertine Springs collectively discharge about 2,000 gallons per minute and are critical for domestic and commercial use.

B. Public visitation to the Park for 1985-1999 was as follows:

1985 - 601,000	1990 - 720,000	1995 - 1,150,000
1986 - 611,000	1991 - 775,000	1996 - 1,234,000
1987 - 693,000	1992 - 905,000	1997 - 1,234,000
1988 - 721,000	1993 - 1,037,000	1998 - 1,222,000
1989 - 692,000	1994 - 1,009,000	1999 - 1,268,000

The increasing levels of visitation reveal the economic importance of Death Valley National Park to the area, and the increasing demand on water resources. The Park supplies water for visitors and employees from the Texas, Travertine, Grapevine and Nevares springs.

C. At least three biologically significant springs or spring complexes are located in Death Valley NP in proximity to the Amargosa Desert. These water sources include Travertine and Nevares Springs (wetlands) and Devil's Hole. These springs provide water for 18 animal species which are federally listed as endangered, threatened or rare. These species are: Devils Hole pupfish, least Bell's vireo, bank swallow, western least bittern, white-faced ibis, mountain plover, black tern, loggerhead shrike, tricolored blackbird, Furnace Creek riffle beetle, unnamed riffle beetle, Devils Hole riffle beetle, Furnace Creek naucorid bug, badwater snail, robust tryonia, Amargosa tryonia, Texas Spring amphipod, and the Travertine Springs amphipod. These springs also provide water for an additional

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17 species of birds that are listed by the State of California as either endangered, threatened, or of special concern due to population declines or habitat loss.

- D. Desert bighorn sheep also have historically used Travertine and Nevares Springs as a water source. This animal is relatively rare in the local area, and is critically dependent on a permanent water supply during the summer months.

FINDINGS

- I. This application proposes to appropriate water from the Crater Flat Hydrographic Basin (Basin 229). In Ruling 3870, the State Engineer reported the perennial yield of Crater Flat to be 900 afy. Existing permitted and certificated rights in Crater Flat total 1,239 afy (Nevada Division of Water Resources, 2000). Withdrawals proposed by this application could be as large as 1,448 afy, and would further deplete the groundwater resource in Crater Flat. Thus, there is no water available for appropriation in Crater Flat.
- II. In Ruling 4327 the State Engineer described the Crater Flat Hydrographic Basin to be within the Pahute Mesa Groundwater Subsystem. Rush (1970) defined the Pahute Mesa Groundwater Subsystem as including Gold Flat (Basin 147), Kawich Valley (Basin 157), Buckboard Mesa (Basin 227B), Crater Flat (Basin 229), Oasis Valley (Basin 228), the western 2/3 of Jackass Flats (Basin 227A), the portion of the Amargosa Desert (Basin 230) west of the Ash Meadows fault, and possibly the southern portion of Reveille Valley a.k.a. Southern Railroad Valley (Basin 173A). Some water in the Ash Meadows and Pahute Mesa Groundwater Subsystems moves southward as underflow to Death Valley NP through the Funeral Range (Ruling 4327).

The perennial yield, certificated and permitted water rights, and senior water right applications for hydrographic basins in the Pahute Mesa Groundwater Subsystem have been determined by the Nevada Department of Natural Resources and Conservation and the Division of Water Resources (Table 1). Existing permits and certificates, in combination with senior water right applications, total 66,971 afy and exceed the perennial yield of the Pahute Mesa Groundwater Subsystem by 42,971 afy. Therefore, there is no groundwater available for appropriation.

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Table 1. Perennial Yield and Water Rights in the Hydrographic Basins of the Pahute Mesa Groundwater Subsystem.

BASIN NAME	PERENNIAL YIELD ¹ (AFY)	CERTIFICATED AND PERMITTED RIGHTS ² (AFY)	SENIOR APPLICATIONS (AFY)
Reveille Valley	2,800	5,329	46 ³
Gold Flat	1,900	457	0
Kawich Valley	2,200	0	0
Oasis Valley	2,000	1,727	200
Buckboard Mesa	3,600	7	0
Crater Flat	900	1,239	0
Jackass Flat	4,000	56	521
Amargosa Desert	24,000	25,591	31,798
Total	24,000⁴	34,406	32,565

¹ Nevada Department of Conservation and Natural Resources, 1992.

² Nevada Division of Water Resources Water Rights Database, printed in February - March, 2000.

³ The annual duty for 29 applications for 5.4 cfs each was not specified and is therefore not included.

⁴ Ruling 4327 stated that the best estimate for the entire Pahute Mesa Subsystem is 24,000 afy.

Ruling 4327 also stated that recharge values for the Pahute Mesa Groundwater System ranged from 12,000 to 26,000 afy. The existing certificates and permitted water rights exceed the recharge for this system. Therefore, there is no groundwater available for appropriation.

- III. Winograd and Thordarson (1975) stated that the major springs in Death Valley NP are likely fed by interbasin movement of water from central and south-central Amargosa Desert. Estimates of subsurface discharge from the Amargosa Desert to Death Valley NP range from 3,000 afy to 8,300 afy (Prudic et. al., 1995 and Burbey, 1997).

According to the Nevada Division of Water Resources (2000), water right certificates and permits in the Amargosa Desert are 25,592 afy. Pending applications total 31,677 afy. The perennial yield for Basin 230 is 24,000 afy (Ruling 3870 and Nevada Department of Conservation and Natural Resources, 1992).

Water level declines in the Amargosa Desert have been documented for the period from

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1952 through 1987 (Kilroy, 1991). Approximately 30 feet of drawdown in the potentiometric surface has occurred since the 1950's.

This application, in combination with applications 66072 through 66081, proposes to divert more than 34,000 afy from the basins contributing to the Amargosa Desert. The withdrawals proposed by these applications and pending applications in the Amargosa Desert would further diminish the groundwater resources of the Amargosa Desert, and thereby reduce underflow to Death Valley NP.

- IV. Prudic and others (1995) state that flow to the springs at Furnace Creek in Death Valley NP is initially recharged in the Kawich Range, Pahute Mesa, Yucca Mountain, the Belted Range and to a much smaller degree, the Funeral Mountains. This area encompasses the Pahute Mesa Groundwater Subsystem described by Rush (1970). Groundwater flow is generally south towards the Amargosa Desert (Harill et. al., 1988). The withdrawals proposed by this application, in combination with applications 66072 through 66081, will capture water that would otherwise contribute to underflow to Death Valley NP.
- V. Prudic and others (1995) show that 17,000 afy discharges as evapotranspiration from regional springs (from the regional carbonate-rock aquifer) in Ash Meadows and another 9,000 afy discharges as evapotranspiration from the shallower alluvial aquifers in the Amargosa Desert. Therefore, the total estimate of evapotranspiration for the Amargosa Desert is 26,000 afy.

The combined annual duty requested in applications 66072 through 66081 exceeds the estimates of total discharge by evapotranspiration in the Amargosa Desert. Since the Pahute Mesa Groundwater Subsystem contributes groundwater to the Amargosa Desert, the withdrawal proposed by this application, would further diminish the groundwater resources of the Amargosa Desert. Therefore, the total withdrawals proposed by the applicant, in combination with existing appropriations, will capture water that would otherwise discharge as evapotranspiration, and will reduce underflow to Death Valley NP.

- VI. The "public interest," as it relates to Death Valley NP and its water resources, is of critical concern to both the federal government and the State of Nevada (through the state engineer). Approval of this application would be contrary to the "public interest" set forth by federal proclamation and by guidelines promulgated by the Nevada State Engineer.

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- VII. In 1996, the Nevada State Engineer established guidelines designed to protect the public interest, and these guidelines were gleaned from statutes promulgated by the Nevada legislature. The Nevada Supreme Court reviewed and approved these guidelines defining the public interest (*Pyramid Lake Paiute Tribe v. Washoe Co.*, 918 P.2d 697 (Nev. 1996), *citing* State Engineer's Supplemental Ruling Nos. 3786A and 3787A). This application fails to meet the state engineer's guidelines regarding the public interest in the following ways.
- A. When the proposed appropriation is for municipal supply, as is the case with this application, the state engineer's guidelines defining the public interest require the applicant to demonstrate the approximate number of persons to be served and the approximate future requirements. This application fails to approximate the number of persons served and future requirements. Without an approximation of the number of persons served and future requirements, this application is speculative, and pursuant to the state engineer's guidelines, detrimental to the public interest.
 - B. When the appropriation is "large," the state engineer's guidelines defining the public interest state that the state engineer must consider whether the applicant has the financial ability to develop the water and put it to beneficial use. The applicant has filed ten applications (66072-66081), of which this application is one. Each application indicates that water will be used "In the Amargosa Desert hydrographic basin as described in Order 724 designating and describing the Amargosa Desert Ground Water Basin, Nye County, Nevada...", and that "Water will be conveyed from the point of diversion to locations in Nye County."
- Because each application contains these statements of use and conveyance, NPS concludes that the applications are part of a single project. The total amount of water sought pursuant to these applications is 47.29 cfs. Given the size and scope of this project, the state engineer must consider the applicant's financial ability to develop the water and put it to beneficial use. The applicant has not provided any information which demonstrates the financial ability to develop this water and put it to beneficial use.
- VIII. Application 66080 proposes to withdraw water from the NE $\frac{1}{4}$ NE $\frac{1}{4}$, Sec 33, T14S, R48E MDB&M and to use the water "In the Amargosa Desert hydrographic basin...". The application also states that the "Water will be conveyed from the point of diversion to locations in Nye County." The proposed point of diversion and places of use

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include public lands administered by the BLM and are not owned by the applicant. In Ruling 4548, the State Engineer stated that "...it is not in the public interest to approve applications for use on lands where the applicant does not control both the proposed well locations and the proposed places of use."

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CONCLUSIONS

- I. Nevada Revised Statute, § 533.370(3), states that the Nevada State Engineer shall reject an application for a water permit "where there is no unappropriated water in the proposed source of supply, or where its proposed use or change conflicts with existing rights, or threatens to prove detrimental to the public interest...." Based on the mandate set forth in § 533.370(3), N.R.S., the state engineer should reject this application for the following reasons.

There is no unappropriated water available because:

- A. The permitted and certificated water rights in the Crater Flat Hydrographic Basin exceed the perennial yield.
- B. The permitted and certificated water rights in the Pahute Mesa Groundwater Subsystem exceed the perennial yield.

The approval and development of this application will impair the senior water rights of the United States because:

- A. The appropriation proposed by this application will reduce or eliminate the flows of springs in Death Valley NP, which are discharge areas for regional groundwater flow systems, thereby impairing the senior NPS water rights.
- B. The appropriation proposed by this application, in combination with existing appropriations, will cause the water level at Devil's Hole to fall, thereby impairing the senior Federal reserved water right for Devil's Hole.
- C. The proposed appropriation, in combination with existing appropriations, would capture water that comprises outflow to Death Valley NP. Thus, the NPS's senior water rights, water resources, and water related resources will be impaired.

The public interest would not be served by granting a permit to this application because:

- A. The water and water-related resources of the nationally important Death Valley

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National Park would be diminished or impaired as a result of this application, in combination with existing rights and senior applications.

- B. The water and water-related resources of the park would be diminished, reducing the aesthetic value of the park and thereby reducing contributions to the local economy.
 - C. The appropriation proposed by this application is speculative and the applicant has not provided information that demonstrates the financial ability to develop this water and put it to beneficial use.
 - D. The land where the applicant proposes to divert and use the water is not owned by the applicant.
- II. The NPS reserves the right to amend this exhibit as more information becomes available.

REFERENCES CITED

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