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

FILED
DEC 17 2004
STATE ENGINEER'S OFFICE

IN THE MATTER OF APPLICATION NUMBER 71203
FILED BY THOMAS BUQO
OF BLUE DIAMOND, NEVADA
ON MAY 11, 2004
TO APPROPRIATE THE
PUBLIC WATERS OF THE STATE OF NEVADA

**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 No. 71203 to appropriate the public waters of the State of Nevada.

Signed _____
Agent or Protestant

Charles W. Pettee
Printed or Typed Name

Address 1201 Oakridge Drive, Suite 250
Fort Collins, CO 80525

Subscribed and sworn to before me this 16th day of December, 2004.

FLORA B. ROMERO NOTARY PUBLIC STATE OF COLORADO

Notary Public _____

State of Colorado

County of Larimer

My Commission expires _____

Flora B. Romero, Notary Public
State of Colorado
My Commission Expires 7/31/2006

**IN THE MATTER OF APPLICATION 71203**

**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. 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In 1952, a forty-acre tract of public land surrounding Devil's Hole was withdrawn, creating a detached component of Death Valley National Monument through Proclamation No. 2961, 3 CFR 147 [1949-1953 Comp.].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 National Park in Nevada. In the 1970's, groundwater withdrawals near Devil's Hole 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). A unanimous decision by the U.S. Supreme 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 spawn (Cappaert v. United States, 1976). The Supreme Court granted continuing jurisdiction to the district court to quantify the minimum water level. The district court held a hearing in 1978 and set the minimum water level at 2.7 feet below the reference copper washer. Current water levels at Devil's Hole are about 2.2 feet below the reference washer and have been steadily declining since about 1989.

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

VI. Many of the "unusual features of scenic, scientific, and educational interest" within Death Valley National Park 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 the Park and its natural features 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 the past ten years is as follows:

| | |
|---|---|
| 1994 | 971,487 |
| 1995 | 1,109,421 |
| 1996 | 1,189,215 |
| 1997 | 1,188,212 |
| 1998 | 1,177,746 |
| 1999 | 1,227,583 |
| 2000 | 1,179,094 |
| 2001 | 1,014,636 |
| 2002 | 897,596 |
| 2003 | 890,375 |

(Source: NPS Public Use Statistics Office )

C. Visitors to the park support local businesses by spending money on food, beverages, gas and lodging. In 2000, an economic model was developed by researchers at Michigan State University to estimate the impacts that park visitors have on the local economy in terms of their contribution to sales, income and jobs in the area (NPS Public Use Statistics Office). The model estimated that at Death Valley National Park in 2001, total visitor spending in the local area was approximately $44 million dollars. Of this total amount, $16.2 million contributed directly to personal income, and supported 1,212 jobs. Among all direct sales, $13.5 million was spent on lodging, and $9.5 million on food and beverages.

D. At least three biologically significant springs or spring complexes are located in Death Valley National Park 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, un-named riffle beetle, Devils Hole riffle beetle, Furnace Creek naucorid bug, badwater snail, robust tryonia, Amargosa tryonia, Texas Spring amphipod, and the Travertine Springs amphipod. The Devil's Hole pupfish and white-faced ibis have also been designated as state endangered species by the Nevada Board of Game and Fish Commissioners.

E. 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. Application 71203 was submitted by Thomas Buqo for 11.5 cfs for quasi-municipal purposes. The annual duty is assumed to be 8,673 acre-ft/yr.

II. The proposed point of diversion is located in the Mercury Valley hydrographic basin (225) within the boundaries of the Nevada Test Site.

III. The Mercury Valley hydrographic basin is part of the regional ground-water flow system known as the Death Valley Regional Flow System (DVRFS) (Harrill, et al., 1988). The direction of ground water flow in the vicinity of the proposed point of diversion is generally to the south toward the Amargosa Desert and Devils Hole (Rush, 1970, Winograd and Thordarson, 1975; Laczniak et al., 1996; and Laczniak et al., 1999).

IV. According to the Nevada Department of Conservation and Natural Resources (1992), the perennial yield for the Amargosa Desert (230) is combined with Mercury Valley (225), Rock Valley (226), Fortymile Canyon - Jackass Flats (227A), Fortymile Canyon - Buckboard Mesa (227B), and Crater Flat (229). The combined perennial yield for these basins is 24,000 acre-ft/yr. In Ruling 4525, the Nevada State Engineer found that existing certificated and permitted water rights in the Amargosa Desert exceed the perennial yield of 24,000 acre-ft/yr, therefore there was no water available for appropriation.

V. Winograd and Thordarson (1975) suggest that the major springs in the Furnace Creek area of Death Valley National Park are likely fed by interbasin movement of water from the central Amargosa Desert. Approximately 5,000 acre-ft of ground water discharges through springs in the Furnace Creek area (Winograd and Thordarson, 1975). Total annual ground water discharge by evapotranspiration from the floor of Death Valley was estimated to be 35,000 acre-ft (DeMeo et al., 2003).

VI. The withdrawals proposed by this application, in combination with existing permits, will capture ground water that would otherwise flow toward Devil's Hole and springs in the Amargosa Desert and underflow to Death Valley National Park.

## 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:

**IN THE MATTER OF APPLICATION 71203**

**EXHIBIT A (Continued)**

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

There is no unappropriated water available because:

A. Mercury Valley receives only minor amounts of recharge. Any underflow from the basin is toward the Amargosa Desert.

B. The combined perennial yield of Amargosa Valley, Mercury Valley, Rock Valley, Fortymile Canyon - Jackass Flats, Fortymile Canyon - Buckboard Mesa, and Crater Flat is 24,000 acre-ft, and Amargosa Valley by itself exceeds the perennial yield of 24,000 acre-ft.

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

A. The proposed appropriation, in combination with existing appropriations, will reduce or eliminate the flows of springs in Death Valley National Park, which discharge from the regional groundwater flow system.

B. The proposed appropriation, in combination with existing appropriations, will cause the water level at Devil's Hole to fall and impact the senior water right at Devil's Hole.

C. The proposed appropriation, in combination with existing appropriations, would capture water that comprises underflow to Death Valley National Park.

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 National Park, including Devil's Hole, would be diminished or impaired as a result of this application, resulting in impacts to wildlife and habitat.

B. The water and water-related resources of the park would be diminished, reducing the aesthetic value of the park, affecting visitation and impacting the local economy.

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

**IN THE MATTER OF APPLICATION 71203**

**EXHIBIT A (Continued)**

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

**REFERENCES CITED**

DeMeo, G.A., Laczniak, R.J., Boyd, R.A., Smith, J.L. and Nylund, W.E. Estimated Ground-Water Discharge by Evapotranspiration from Death Valley, California, 1997-2001. 2003.

Dudley Jr., W.W., and Larson J.D. *Effect of Irrigation Pumping on Desert Pupfish Habitats in Ash Meadows, Nye County, Nevada.* U.S. Geological Survey Professional Paper 927, 1976.

Harrill, J.R., Gates, J.S., and Thomas, J.M. *Major Ground-Water Flow Systems in the Great Basin Region of Nevada, Utah, and Adjacent States*. Hydrologic Investigations Atlas HA-694-C, 1988.

Hunt, C.B., Robinson, T.W., Bowles, W.A., and Washburn, A.L. *Hydrologic Basin, Death Valley, California.* U.S. Geologic Survey Professional Paper 494-B, 1966.

Laczniak, R.J., DeMeo, G.A., Reiner, S.R., Smith, J.L. and Nylund, W.E. 1999. *Estimates of Ground-Water Discharge as Determined from Measurements of Evapotranspiration, Ash Meadows Area, Nye County, Nevada.* U.S. Geological Survey Water Resources Investigations Report 99-4079.

Laczniak, R.J., Cole, JC., Sawyer, D.A., and Trudeau, D.A. 1996. Summary of hydrogeologic controls on ground-water flow at the Nevada Test Site, Nye County, Nevada. U.S. Geological Survey Water Resources Investigations Report 96-4109.

Nevada Department of Conservation and Natural Resources, Division of Water Resources and Water Planning. *Hydrographic Basin Statistical Summary, Ground Water Basins 001-232.* 1992.

Rush, F.E. 1970. Regional ground-water systems in the Nevada Test Site Area, Nye, Lincoln and Clark Counties, Nevada. USGS Water Resources Reconnaissance Series 54.

Winograd, I.J., and Thordarson, W. *Hydrogeologic and Hydrochemical Framework, South-Central Great Basin, Nevada-California, with Special Reference to the Nevada Test Site.* U.S. Geological Survey Professional Paper 712-C, 1975.