

PROTEST FEE PAID  
TR 1203650



United States Department of the Interior  
FISH AND WILDLIFE SERVICE  
Mountain-Prairie Region



IN REPLY REFER TO:  
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SEP 18 2012

Kent Jones, P.E.  
State Engineer  
1594 West North Temple, Suite 220  
Salt Lake City, Utah 84114-6300

RE: Protest against Fixed-Time Application to Appropriate Water No. 69-115 (A79462)

Dear Mr. Jones:

By way of this letter, the U.S. Fish and Wildlife Service (Service) protests Application to Appropriate Water, No. 69-115 (A79462) out of concern of injury to water rights at Fish Springs National Wildlife Refuge (Refuge) and out of concern there is not water to appropriate. Enclosed is a check for \$15 for the protest fee.

The applicants, Utah Alunite Corp and Utah School and Institutional Trust Lands Administration, seek to appropriate 6,500 acre-feet of ground water from Wah Wah Valley, diverted by nine wells near Grover Wash for milling and processing of potash and alunite. The Service is concerned removal and the likely complete depletion of 6,500 acre-feet of ground water may affect carbonate aquifer contributions from Wah Wah Valley to the Refuge. The Refuge is around 90 miles north of, and down-gradient from, the proposed withdrawal areas. The proposed well field is in an area known to contribute to Fish Springs via the Great Basin Carbonate Rock Aquifer. The area is part of the aquifer's Great Salt Lake Desert Ground-Water Flow System, which is comprised of the following hydrographic basins: Spring Valley, Tippet Valley, Deep Creek Valley, Snake Valley, Pine Valley, *Wah Wah Valley*, Tule Valley, *Fish Springs Flat*, and Beryl-Enterprise Area.

The application cites several sources and states recharge to the Wah Wah ground-water system is about 10,000 acre-feet per year and about 1,500 acre-feet are lost to evaporation. The difference between those two values, 8,500, is described as the sustained yield and available for appropriation. The application states about 1,500 acre-feet has been permitted in Wah Wah Valley, leaving 6,500 acre-feet available for new appropriation.

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WATER RIGHTS  
SALT LAKE

However, Stephens, 1974 stated the 8,500 acre-feet is discharge out of the basin, and “probably moves northward out of the basin as subsurface outflow.” Discharge out of a basin into another basin is not “sustained yield” in the Great Salt Lake Desert Ground-Water Flow System but is contributory to another basin’s water sources, some or all which may have water rights on them. The 1,500 acre-feet value discharged in the valley itself is a better value to use for sustained yield. The U.S. Geological Survey (Prudic, Harrill, and Burby, 1993) simulated 9,000 acre-feet per year underflow from Wah Wah Valley to Fish Springs Flat. Thus, the 8,500 acre-feet may be destined to Fish Springs and if removed, will injure the Refuge’s senior water rights:

18-51, 5 cfs, North Fish Spring, priority 4/16/1926;  
 18-59, 10 cfs, Lower Fish Spring, priority 4/30/1929;  
 18-66, 10 cfs, Spring Area, priority 12/27/1930;  
 18-215, 18.88 cfs, Springs (11), priority 5/22/1961;  
 18-331, 0.1 cfs, Underground Water Well, priority 10/08/1970;  
 United States of America Federal Public Water Reserve No. 1, Spring Area, priority 1912.

In addition, water may not be available to appropriate. Our cursory review of State of Utah water right records indicates there are around 1,850 acre-feet of certificated and vested rights to springs and wells in Wah Wah Valley (Utah Division of Water Rights website). This value is about the same as sustained yield (ET and valley discharge) value of 1,500 acre-feet. In addition to developed appropriations, there are about 43,250 acre-feet per year being sought by other entities. (Central Iron County Water Conservancy District’s Application No. 69-101, 12,000 acre-feet per year; Melville Irrigation Company’s Application No. 69-102, 24,600 acre-feet per year, our estimate, based on assuming 20 percent of the application’s 123,000 acre-feet per year is to come from Wah Wah Valley; and Beaver County’s 69-109, 6,650 acre-feet.) Thus, there are about 43,250 acre-feet per year of potentially-permitted diversions for Wah Wah Valley ground water, exclusive of this application, and this amount far exceeds a ground-water sustained yield value of 1,500 acre-feet.

Area 69 allows small appropriations for families generally around 1.73 acre-feet and applicants seeking more must show an immediate need to the water and an ability to develop it. Application No. 69-115 may not fit these requirements.

If you have questions or require further information, please contact my staff hydrologist, Patricia Fiedler, at (303) 236-4492.

Sincerely,



Megan A. Estep  
 Chief, Division of Water Resources

Enclosure