

Attachment A

Information In Support of the Protests of the U.S. Bureau of Indian Affairs
In the Matter of Nevada Water Right Application for Permit Nos. 64674 and 64675

On December 11, 1998, Vidler Water Company, Inc. (Vidler) filed two *Applications for Permits to Appropriate the Public Waters of the State of Nevada* (Application for Permit). Application for Permit Nos. 64674 and 64675 request to withdraw a combined diversion rate of 20 cubic feet per second and a combined annual duty of 14,480 acre-feet for irrigation purposes. The proposed points of diversion (groundwater wells) are to be located in Lincoln County in the Tikapoo Valley North (No. 169A) Hydrographic Area which is considered a part of the Death Valley Groundwater Flow System (Death Valley System) (Laczniak and others, 1996). The Death Valley System discharges primarily to the south near Death Valley National Park, where the traditional homeland of the Timbisha Shoshone Tribe (Tribe) is located.

The Tribe is federally recognized tribe which at present has no land base but currently live within their traditional ancestral homeland which encompasses a vast territory of up to 11 million acres in the region of Death Valley, California, and extends into Western Nevada. Although, the Tribe has lived in the Death Valley area for thousands of years, the federal government did not set aside lands for a reservation at the time of the creation of Death Valley National Monument in 1933. Currently, the Tribe resides near Furnace Creek, California located within Death Valley National Park. However, the Tribe is currently negotiating with the federal government for lands located within their traditional homeland to be taken into trust for the Tribe by the U.S. Government. Pursuant to Section 705(b) of the California Desert Protection Act of 1994, the Secretary of the Interior, in consultation with the Tribe, has recently submitted a report which identified lands suitable for a reservation both inside and outside of Death Valley National Park in California and Nevada. Depending upon where the future trust lands are located, federal Indian trust resources may be adversely impacted by the proposed groundwater withdrawal applications. In addition, to the proposed trust lands, the Tribe will have access to traditionally religious and cultural areas for certain types of usage. Several of these sites include area springs, including Ash Meadows, the primary discharge point of the Ash Meadows subbasin of the Death Valley System.

The Tribe's traditional homeland and future trust lands are located near the southern terminus of the Death Valley System, a regional groundwater flow system in southern Nevada. The flow system covers an area of about 15,800 square miles and is estimated to transmit more than 70,000 acre-feet of groundwater annually (Harrill and others, 1988). In general, the groundwater flow direction is to the south through a thick sequence of Paleozoic carbonate rocks and to a lesser extent through volcanic and basin-fill material. The Death Valley System is primarily recharged in the high mountains of central Nevada and discharges at four primary locations to the south: Ash Meadows, Oasis Valley, Alkali Flat, and Death Valley (Laczniak and others, 1996). The proposed Vidler groundwater withdrawal applications are located near a principal recharge area of the Ash Meadows Subbasin of the Death Valley System.

Groundwater in the Ash Meadows subbasin discharges approximately 17,000 acre-feet/year at Ash Meadows Springs (Winograd and Thordarson, 1995). The mixed ionic and isotopic composition of the springflow at Ash Meadows is supportive of water originating or passing through differing rock types indicative of the large distance between the subbasin's recharge and discharge areas (Laczniak and others, 1996). In addition, subsurface outflow southward into the Alkali Flat-Furnace Creek Ranch subbasin from rocks beneath the Ash Meadows springs is probable based on groundwater flow models and geochemical data

(Laczniak and others, 1996).

Since many of the basins in southern Nevada are hydraulically connected, the development of groundwater in one valley can ultimately impact the environment of another valley. There is concern that the proposed Vidler diversions, if approved, will cause declines in spring flow and groundwater levels and alter the groundwater flow direction and/or gradient on local and regional scales. These effects are considered likely due to the regional hydraulic interconnection and the high conductivity of the local and regional aquifers. The proposed points of diversion are located upgradient in the Death Valley System and any withdrawal within the system will likely result in less water being available further downgradient in the system.

Therefore, the BIA requests that Application for Permit Nos. 64674 and 64675 be denied for the following reasons:

- (1) The withdrawals of groundwater proposed in the applications may result in reductions in flows in the carbonate aquifer located beneath the Death Valley area. If permitted, the proposed withdrawals would interfere with potential federal reserved rights to be held by the United States in trust for the Tribe, as well as other senior water rights. This potential decrease in groundwater availability may adversely impact the Tribe's effort to provide a sustainable homeland for its members.
- (2) Recently, several groundwater withdrawal applications have targeted the regional Carbonate aquifer system. Vidler, in addition to the subject applications, has applied for over 188,000 acre-feet/year of groundwater in 13 different hydrographic basins in southern Nevada focusing primarily on the regional White River system. While the areal extent and characteristics of the Death Valley System (and adjacent flow systems including the White River) is not fully understood and additional analyses are needed and recommended, it is generally agreed that this system extends beneath the area of the subject applications and discharges in the Death Valley area. The degree of this interconnection is unknown, but considering the quantity of the subject applications and others, caution needs to be applied with the granting of further water permits in this (and adjacent) groundwater flow system. Granting of additional groundwater permits may interfere with potential federal reserved water rights to be held by the United States in trust for the Tribe, as well as other senior water rights.

The BIA reserves the right to amend and supplement its exhibit and protests of Application for Permit Nos. 64674 and 64675 to the extent that more information relevant to the protest becomes available.

Literature Cited

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 Atlas 694-C.

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Prudic, D.E., Harrill, J.R., and Burby, T.J., 1993. Conceptual evaluation of regional groundwater flow in the carbonate-rock province of the Great Basin, Nevada, Utah, and adjacent states. U.S. Geological Survey Open-File Report 93-170.

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