



THE STATE OF ARIZONA
GAME AND FISH DEPARTMENT

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February 10, 2007

Hon. Thomas Shedden
 Hearing Officer
 Arizona Offices of Administrative Hearings

Re: OAH No. 07-TR001_DWR – Transport of Ground Water from Arizona to Nevada

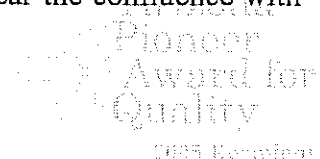
Dear Officer Shedden:

The Arizona Game and Fish Department (Department) appreciates the opportunity to comment on Wind River Resources L.L.C.'s application to transport ground water pumped from the Mormon Wells area of Beaver Dam Wash in Arizona, to the Virgin Valley Water District in Mesquite, Nevada. The Department is strongly opposed to the pumping of groundwater from the aquifer near Beaver Dam Wash for transport to Nevada. The pumping of large volumes of groundwater as proposed could lead to a lowering of the local water table and the permanent loss of one of the few remaining habitats that supports large numbers of native fish and amphibians in the Arizona section of the Virgin River Basin.

Beaver Dam Wash is an important stream for native fish conservation in Arizona. Fish species found in the Arizona section of the stream include Virgin spinedace (*Lepidomeda mollispinis mollispinis*), speckled dace (*Rhinichthys osculus*), desert sucker (*Catostomus clarki*), and the federally listed Endangered Virgin River chub (*Gila seminuda*).

Virgin spinedace are currently managed under a conservation agreement signed by U.S. Fish and Wildlife Service, Bureau of Reclamation, Bureau of Land Management (Utah and Arizona offices), National Park Service, Washington County Water Conservancy District, and the States of Arizona, Nevada and Utah. The conservation agreement was developed to recover the populations of the spinedace without listing them under the Endangered Species Act. Conservation and enhancement of surface flows in streams, including restoration of flow to currently dewatered stream sections, is one of the most important conservation activities outlined in the conservation agreement, and certainly applies to conservation efforts of all native fish species.

While much of the stream in Arizona is ephemeral, Virgin chub are found in the roughly 1 mile long permanent reach of the stream near its confluence with the Virgin River (AGFD unpublished data, 2003 Virgin Spinedace Distribution Monitoring Report). The other species of native fish are found both in the permanent reach of the stream near the confluence with



the Virgin River and in the ephemeral reaches located upstream, when surface water is present.

In particular, the stream reach near the proposed well site at Mormon Wells has shown the ability to support large numbers of native fish. While this stretch of Beaver Dam Wash has historically gone dry during low precipitation years, during times of higher precipitation the area has maintained surface flow for several years and has supported large populations of native fish including Virgin spinedace. The Mormon Wells reach of Beaver Dam Wash has had continuous surface flow in a roughly 1 mile long reach since the floods that occurred during the early spring of 2005. By October of 2006 Virgin spinedace were so numerous in that reach that over 400 individuals were collected in less than a ¼ mile stretch of the stream near where the proposed well site is located. During another wet period in the mid 1990's when surface water persisted in the Mormon Wells reach for several years, electrofishing surveys showed similar numbers. A survey conducted in October 1995 captured 368 Virgin spinedace, 489 speckled dace and 373 desert suckers in a 100 meter section of the stream.

Beaver Dam Wash is also within historical range for the Relict leopard frog (*Rana onca*), federally listed as a Candidate species. Relict leopard frogs have been documented at Reber Spring, approximately 5 miles from Mormon Wells. While no recent observations have been recorded at Mormon Wells, the area is within the Management Zone for the species as defined in the species' Conservation Agreement and Rangewide Conservation Assessment and Strategy (Relict Leopard Frog Conservation Team 2005), and could be considered a reintroduction site. The loss of aquatic habitat has contributed to the decline of the Relict leopard frog rangewide.

According to the Wind River Resources L.L.C.'s application and follow-up documents filed with the Arizona Department of Water Resources, information on the hydrogeology at the actual well site is lacking. Without this information it is impossible to determine the effect that the proposed groundwater removal would have on the local water table over time. The Department does not support lowering water tables in Arizona and impacting rare and imperiled aquatic species, as well as riparian vegetation and habitats utilized by migratory birds, game and nongame species. Until such time as hydrologic impacts can be assessed, and as a result of any losses of aquatic habitat in Arizona, the Department strongly opposes Wind River Resources L.L.C.'s application to remove groundwater from the Mormon Wells area on Beaver Dam wash for transport to the Virgin Valley Water District in Nevada.

Hon. Thomas Shedden

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The Department appreciates your consideration of these concerns in review of the Wind River Resources L.L.C's application. We would appreciate further opportunities for involvement in this decision and process. Please contact Ron Sieg, Flagstaff Regional Supervisor at 928-214-1240.

Sincerely,

A handwritten signature in black ink, appearing to read 'J. Avey', written over a large, light-colored circular scribble.

Josh Avey
Habitat Branch Chief

cc: Ron Sieg, Region II Supervisor
Bob Broscheid, Wildlife Management Assistant Director
Steve Spangle, Supervisor, Ecological Services