United States Department of the Interior
FISH AND WILDLIFE SERVICE
UTAH FIELD OFFICE
2369 WEST ORTON CIRCLE, SUITE 50
WEST VALLEY CITY, UTAH 84119

September 15, 2010

In Reply Refer To
FWS/R6
ES/UT
10-TA-0338

Mr. Brad Hill, Permitting Manager
Utah Division of Oil, Gas, and Mining
Box 145801
Salt Lake City, Utah 84114-5801

RE: Cause No. UIC-358.1; Westwater Farms LLC; Harley Dome #1SWD Well

Dear Mr. Hill:

We have reviewed the referenced Underground Injection Control (UIC) Permit Application. The proposed project involves the operation of the Harley Dome #1 well as a salt water injection well (Class II) in Section 10, Township 19 South, Range 25 East, Grand County, Utah. The well will inject fluids into the Wingate formation at approximately 1,750 feet below the surface. We are providing the following comments for your consideration.

The Colorado pikeminnow (*Ptychocheilus lucius*), razorback sucker (*Xyrauchen texanus*), humpback chub (*Gila cypha*), and bonytail (*Gila elegans*) are federally listed endangered fishes endemic to the Colorado Basin. The location of the injection well is approximately five miles from the Colorado River, which is designated critical habitat for all four of the endangered fish species. We are concerned with possible seepage of injected liquids from the referenced project into the nearby Colorado River.

Last week Christopher Kierst of your staff explained in detail to Jana Mohrman from the Upper Colorado River Recovery Program that the receiving aquifer (in the Wingate formation) dipped northeast, away from the Colorado River. We understand that because of this orientation, there is only a remote chance that injected liquids could back up and seep into the Colorado River. Despite this low probability of seepage, we wish to make you aware of the importance of the nearby Westwater Canyon of the Colorado River for recovery of endangered fish species.

Westwater canyon is designated critical habitat for all four species of endangered fish (59 FR 13374). In particular, a large population of humpback chub inhabits this reach. This population is essential to species recovery. The Wingate/Chinle formations are exposed in the cliffs above this reach, creating a possible connection between the injection well receiving site and critical

habitat. We wish to prevent any negative impacts to the water quality in Westwater Canyon from the referenced project.

The Service requests that a water quality analysis and monitoring program be initiated if after the injection period begins, the Upper Colorado River Recovery Program observes contaminated water seeping down the canyon walls.

This response has been prepared under the authority of and in accordance with the provisions of the Fish and Wildlife Coordination Act (16 U.S.C. 661 et seq.) and the Endangered Species Act (16 U.S.C. 1531 et seq.). Thank you for description of the geology and operation of this injection well. We appreciate the opportunity to comment on this application. If you have any questions or need further information, please contact Jana Mohrman, hydrologist, at (303) 236-4486 or Kevin McAbee, ecologist, at (801) 975-3330 ext. 143.

Sincerely,

Larry Crist

cc: Paul Badame, Native Aquatics Project Leader
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