



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



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November 22, 2019  
Submitted via email to:  
[waterrights@utah.gov](mailto:waterrights@utah.gov)

Utah State Engineer  
Utah Division of Water Rights  
Attn: Snake Valley Public Meeting  
P.O. Box 146300  
Salt Lake City, UT 84114-6300

Dear State Engineer,

The U.S. Fish and Wildlife Service (Service) appreciates the recent meeting that the Division of Water Rights held in Eskdale, Utah on September 26<sup>th</sup>, 2019 to discuss groundwater management in the Snake Valley (Valley). The Service manages the Fish Springs National Wildlife Refuge (Refuge) that is located at the far northern end of Snake Valley and depends on groundwater springs that feed the wetlands at the Refuge. The current hydrogeologic understanding indicates that the springs at the Refuge are supplied by water from Snake Valley.

The Service believes that the currently considered "safe-yield" does not provide sufficient protection for senior water rights holders (including the Refuge) and natural springs that provide important habitat for species with conservation agreements (Least Chub and Columbia Spotted Frog). Groundwater modeling conducted by the U.S. Geological Survey (USGS) in 2017 and 2019 has shown that the currently approved and proposed withdrawals within Snake Valley will have significant detrimental effects on spring flows and groundwater resources throughout the region. The Service is concerned that any reduction in spring flow would result in permanent injury to the Service senior water right and would reduce the amount of the unique habitat offered throughout Snake Valley.

The Service has been involved in basins where over-appropriation of groundwater has caused significant declines in senior Service water rights and changes in surface water availability. The original policy decisions that led to over-appropriation has caused decades of technical investigations, reduced water available for habitat creation, and great concern among the affected communities. The impacts from over-appropriation of groundwater has led to thousands of streams, springs, and other water features fed by groundwater to change from perennial to intermittent or ephemeral and does not provide the habitat necessary for the life-cycle needs of several species.

The Service supports the adoption of a groundwater management policy that limits new injurious appropriations and utilizes the USGS groundwater modeling to quantify impacts to senior rights and spring flows from junior appropriations. The unique ecology and environments located throughout Snake Valley can only be maintained by preventing reductions in spring discharge and protecting groundwater resources in Snake Valley.

Sincerely,



Brian S. Caruso, Ph.D., P.E.  
Chief, Division of Water Resources

#### USGS Groundwater Modeling Studies:

Masbruch, M.D., and Brooks, L.E., 2017, Potential effects of existing and proposed groundwater withdrawals on water levels and natural groundwater discharge in Snake Valley and surrounding areas, Utah and Nevada: U.S. Geological Survey Open-File Report 2017–1026, 135 p., <https://doi.org/10.3133/ofr20171026>.

Masbruch, M.D., 2019, Numerical model simulations of potential changes in water levels and capture of natural discharge from groundwater withdrawals in Snake Valley and adjacent areas, Utah and Nevada: U.S. Geological Survey Open-File Report 2019–1083, 49 p., <https://doi.org/10.3133/ofr20191083>