

Mr. Kent L. Jones, State Engineer
Utah Division of Water Rights
Attn: Malad River Policy
P.O. Box 146300
Salt Lake City, Utah 84114-6300

February 9, 2018

Re: Proposed Groundwater Management Policy for Malad and Bear River Drainages in Water Right Area 29

Dear Mr. Jones:

Hansen, Allen & Luce, Inc. (HAL) has prepared numerous hydrologic and hydrogeologic studies for various public water systems within the Malad and Bear River drainages in Water Right Area 29. These evaluations have focused on assisting public water suppliers with meeting the growing demand for drinking water in the area through management of existing groundwater sources and development of additional groundwater sources. Currently, public drinking water systems in the area rely 100% on groundwater supplies to meet their demands.

Based on multiple evaluations, including detailed review of potential recharge and projected discharges in specific areas, we have found that there are still some areas within the Malad and Bear River drainages that have additional high-quality groundwater resources available for new appropriation for public drinking water suppliers. Public drinking water suppliers are ideal candidates for placing these additional resources to beneficial use because almost all of the water used indoors is returned to the overall hydrologic system after wastewater treatment (either through septic systems or treatment plants or lagoons). Also, a portion of the outdoor water use from drinking water systems is returned to the hydrologic system through infiltration from lawn irrigation. These return flows to the system mitigate the potential impact on the overall system from additional drinking water system withdrawals.

The Proposed Groundwater Management Policy for Malad and Bear River Drainages in Water Right Area 29 affirms that there are limited additional groundwater supplies available for new groundwater appropriations subject to local evaluation of potential impacts to existing water rights. This affirmation is based on recent hydrogeologic evaluations (Scientific Investigations Report 2017-5011 and Special Study 157) that were funded in part by the Division of Water Rights (DWRi). Based on our review of these studies, we feel that DWRi has developed an appropriate proposed policy for management of groundwater in the area. In our opinion, this policy is consistent with hydrogeologic conditions that we have observed in the area.



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Thank you for the responsible leadership of the DWRi in investigating the available resources of the Malad and Bear River drainages and then developing a sound management plan.

Sincerely,
Hansen, Allen & Luce, Inc.

A handwritten signature in blue ink, reading "J. Lance Nielsen", written over a horizontal line.

J. Lance Nielsen, M.S., P.E.
Principal