

MEMORANDUM

Date: November 06, 2013
To: Water Right File 37-7842/1-7054
From: Michele Edl
Re: recharge capacity

Initial review

This permit authorizes 800 cfs comingled from both the Big - Little Wood Rivers and the Snake River to be put to beneficial use for groundwater recharge. In spite of a series of processing actions after the amended Beneficial Use Field Report was accepted in 1993, the right is limited by the Proof of Beneficial Use statement to 300 cfs.

The recharge event confirmed by the examiner occurred in April 1986. Discharge data from USGS station #13142500, Big Wood River below Magic Dam near Richfield ID, confirms that Magic reservoir filled early that year and a significant quantity of water was released from the impoundment before the irrigation season began. See the attached graph.

ESPA Modeling

On October 22, 2013, I attended a seminar presentation by Mike McVay (Technical Hydrogeologist, State Office, IDWR). A copy of the seminar announcement is attached. As a result, I recognized similarities between the place of use authorized by this permit and the Shoshone site described in Mr. McVay's presentation. And I anticipated that elements of this water right had been analyzed by Mr. McVay as part of his recharge investigation.

I emailed Mr. McVay a request to confirm if 300 cfs could be beneficially used for recharge at the POU location of this permit. In short, his answer was yes. However, he also stated that the site does have limits on its ability to accept recharge. This site cannot utilize the 800 cfs originally authorized by the permit. It is limited by the infiltration rate to 695 AF or ~ 350 cfs at most.



USGS 13142500 BIG WOOD RIVER BL MAGIC DAM NR RICHFIELD ID

