



NEWS RELEASE - FOR IMMEDIATE RELEASE

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Inquiry into the potential for recharging the Wood River Aquifer shows poor aquifer-retention rates

BOISE - (March 26, 2018) – The Idaho Water Resource Board asked one of its in-house experts, Mike McVay, to see if there might be any benefits associated with recharging water into the aquifer underlying the Wood River Valley.

McVay, a water resource engineer for the Idaho Department of Water Resources, said he explored the potential of recharge flows using the ground water model developed for the Wood River Valley. The results were not very promising, he said. Looking at four different hypothetical recharge locations, McVay found that the water-retention rates were very low for all four.

For example, the model showed that water recharged into the aquifer returned to the Big Wood River in a matter of months after it was sent into the ground. He looked at recharging water flows at a site near Ketchum, a site south of Bellevue, a site between the Big Wood River and the bypass canal near Walker Drive, and a site near Silver Creek.

The recharge water from three sites flowed back to the Big Wood River in less than a year. Eighty-five percent of the recharge water at the Bellevue site – the best site of the four – flowed back to the river within a year, and an additional 10 percent returned to the river in the second year.

Because of the low-retention rates, “recharge in wet years won’t help in the dry years,” McVay said. “Basically, you’re going to see the benefits of recharge in the same year that recharge occurs.”

The concept behind aquifer recharge in Idaho has been developed to restore ground water in the Eastern Snake Plain Aquifer (ESPA) to sustainable levels. IDWR hydrologists have evaluated recharge locations across the ESPA region. The ESPA is a much larger aquifer and, in general, the sites in the ESPA retain more water after ten years than any site in the Wood River Valley after two years, McVay said.

The Wood River Valley aquifer is much smaller and exhibits confined conditions in the southern end, he said, and it has a close relationship with the Wood River Valley surface water system.

There are several pending water calls between senior surface water users and the more junior ground water users in the Wood River Valley. The Water Resource Board asked McVay to look into the potential for recharge in the Wood River Valley to better understand whether recharging the aquifer could help address the impacts to senior water rights and ease conflicts between water users.

McVay also noted that a new or surplus water supply would be needed to perform recharge in the Wood River Valley. Surplus water is typically available only in wet years; however, the aquifer recovers during these years thereby reducing

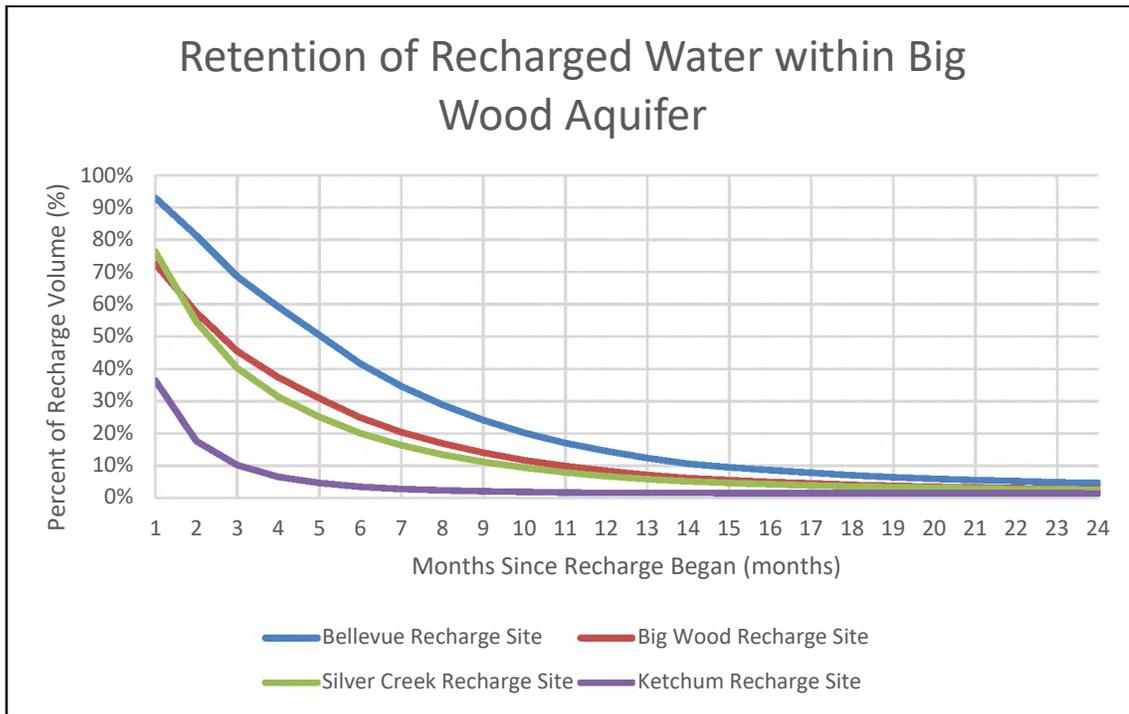
the benefit of recharge. New water would be available only if existing water users reduced their consumption, McVay said.

“The problem is there isn’t any surplus water when you need it,” said Peter Van Der Meulen, a Water Resource Board member from Hailey.

If some existing irrigation water rights were transferred to recharge rights, the additional water gained from the reduction in consumptive use could be used for recharge, McVay said. The short retention time then would allow the new, recharged water to return to Silver Creek and the Big Wood River later in the irrigation season when the need is greatest.

Recharge might improve water quality and temperature in Silver Creek, which would benefit fisheries during drought years, but again, excess flows are only available in wet years.

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(Source IDWR)

Retention of Recharged Water within the ESPA

