

MEMORANDUM

Date: November 22, 2010
To: Water Right File 72-7360
From: medl
Re: license review

Applicant

According to IDWR records of Custer County taxlots, Glen Hunt owns the property at the place-of-use and the point-of-diversion

Source and POD

Warm Spring Creek is the source but the examiner found only one point-of-diversion not three. The Warm Spring Creek water is comingled with Challis Irrigation Company water in a common collection box before being pumped and piped to the right holder's irrigation system. I created the POD shape by comparing available aerial photography to the field examiner's report and maps.

Water Use

The applicant has canal shares in Challis Irrigation Company. This water right (72-7360) is supplemental to those shares.

An upstream water right holder has senior priority use of most of the water from Warm Spring Creek. Water to fill this right is not regularly available.

Place of Use

The POU shape was created by comparing several years of aerial photography to the field examiner's report and maps. The POU confirmed by the examiner is considerably smaller than what had been applied for. The final shape is a compromise based on a blend of contemporary and vintage aerial photography and the taxlot records of Custer County provided to IDWR's database.

The application stated that 72-0139 was also used on the place-of-use. That is not correct. I found that 72-0139 had been combined with another right and decreed to an upstream water user. However, decreed water Right 72-4134, authorizes stockwatering from the reach of Warm Spring Creek within the Hunt property and overlaps a portion of the irrigation place-of-use.

The place-of-use is within the service territory of the Challis Irrigation Company.

Status and Combined Use

Water District 170 has been established since the field examiner confirmed this water use. The permit was approved in 1985 and did not require watermaster controls or measuring devices. I have consulted with current watermaster. He is aware that this right may not have control works and measuring devices required by order in 2007 unless they were applied to control and measure the primary surface water; the Challis Irrigation canal water.

Calculations

The current season-of-use is different than the examiner recommended. I applied the current season to the license. I agree with the rate recommended by the examiner. However, because the POU shape is less than the examiner recommended the volume has been adjusted down.

I believe that the system capacity is limited by the capacity of the pump in the main collection box. I requested and received archive pump curves to match the pump that was in place at the time of the exam. Most efficient operation occurs when pumping at approximately 0.69 cfs, however, the system could supply flows of 1.0 cfs.