

MEMORANDUM

Date: November 23, 2011
To: Application for Permit 72-16874 File
From: Corey Skinner
Re: Evaluation of Sufficiency of Information Submitted

Application proposes to appropriate a combined 11.1 ac-ft of water from an unnamed stream (tributary to the East Fork of the Salmon River) and groundwater to obtain an aesthetic and stockwater right for an existing pond located approximately 6.4 miles south and 5.3 miles east of Clayton. The pond consists of an embankment constructed across a low area that collects runoff flows from surrounding areas. Note that surface water entering the pond does not necessarily flow in a defined channel, but enters the pond from surrounding areas. For this reason, it is recommended that the permit be issued with a source of "runoff", rather than an "unnamed stream". The pond is excavated and intercepts the high ground water in the area (location is adjacent to the East Fork of the Salmon River). The proposed point of diversion in Section 25 represents the embankment (capturing and impounding runoff from surrounding areas) and the proposed point of diversion in Section 26 represents the lowest excavated point in the bottom of the pond (intercepting groundwater). Note that irrigation water diverted from the East Fork of the Salmon River pursuant to rights 72-193A and 72-2142, and claim 72-16789 can also enter the pond and travel through the pond for the irrigation of lands below. A field check of the pond indicated that there is no low level outlet at the pond and that this diverted irrigation water is rediverted via overflow channels from the pond and that storage of this water does not occur (see 9/16/20011 memo and photos in file).

The 11.1 ac-ft of water is based off an estimate of the pond volume (average width of 210 feet x average length of 575 feet X average depth of 4 feet / 43560). Arcmap indicates that the surface area of the pond is approximately 2.5 acres. Using an average depth of 4 feet, and a 2.5 acre surface area, the volume would be about 10 acre-feet. Precipitation deficit values for shallow systems &/or stock ponds in the Stanley and Challis area indicate anticipated evaporative losses anywhere from 1.31 – 2.29 acre-feet per acre per year. It is recommended that the permit be issued for the proposed 11.1 acre-feet with the difference between the 10 acre-feet and 11.1 acre-feet partially covering anticipated evaporative losses from the pond. The irrigation rights that run through the pond could also partially cover anticipated evaporative losses from the pond.

IDWR guidance for on-stream ponds in water districts indicates that upstream and downstream measuring devices should be required. In addition, IDWR guidance indicates that some sort of lockable works should be required to allow the water master a method to regulate water flowing into the pond. However, based on the field observations and the fact that the pond is filled via infiltrating groundwater and surface runoff from surrounding lands (which includes irrigation water diverted via existing rights and already regulated by the water master) it appears that there is no need for these typical requirements. In addition, there would be no practical way of installing measuring or regulating devices for infiltrating groundwater and surface runoff from surrounding lands and water is not actually released from the pond.

- **Effect on Other Water Rights:**

None anticipated. If application is approved and a permit is granted, it will be one of the more junior rights in the area.

- **Sufficiency of Water Supply:**
The pond has existed for many years and was observed to have been nearly full during the 9/12/2011 site visit.
- **Application Made in Good Faith:**
The pond has existed for many years.
- **Financial Resources:**
The application is for an existing, developed system, and there should be no additional investment required.
- **Local Public Interest:**
No issues anticipated. Application was subject to public notice and protest and no protests or negative comments were received. Comments were solicited from the watermaster(s), IDF&G, and IDWR planning section with no negative comments received.
- **Beneficial Use/Conservation of Water Resources:**
Proposed uses are a beneficial use of water.

Review of the application finds there is no clear inconsistency with criteria set forth in Section 42-203A Idaho Code or the Water Appropriation Rules (IDAPA 37.03.08) preventing processing of this application.