

MEMORANDUM

Date: September 16, 2011

To: Water Right File 22-13425

From: Craig L. Saxton

Storage Volume calculation:

The field examiner reported the developed surface area of the pond as 2.3 acres but was measured in ArcMap to be 1.7 acres. The design surface area was actually 2.36 acres. Because of the change in the actual surface developed in contrast to what was designed, the calculated evaporative losses are different than what was originally estimated. The volume to be appropriated for evaporative loss reflected on the license was calculated by taking the ratio of the estimated pond surface area and associated evaporative losses and applying that to the developed surface area of 1.7 acres.

Actual surface area of the pond measured using ArcMap is 1.7 acres. Pond capacity is $(1.7 \text{ ac} * 12 \text{ feet deep} * 0.4) = 8.4 \text{ af}$. The actual evaporative loss is calculated to be 3.0 AF. Total volume for the pond is $8.4 \text{ af} + 3 \text{ af} = 11.4 \text{ AF}$.

Mitigation Condition Language:

Permit condition number 5 pertaining to mitigation states that the ground to be dried up is under 22-153 is located in the NENE, S27, T5N, R46E when the actual ground under 22-152 that was dried up is in the NESE, S27, T5N, R45E. This is not a significant change as outlined in Water Appropriation rules (IDAPA 37.03.08.035.04.a) therefore an amendment is not needed to correct the language in permit condition #5 when it is carried over to licensing.

Mitigation requirement has been met.

Amendment needed:

Amendment needed. The pond falls in the SENW and the SWNE of section 27 which will also require a second POD.

POD Location:

Examiner could not locate exact POD as the source is springs in the footprint of the pond. In the situation where the source is suspected to be from seepage/or multiple springs in the footprint of the pond, but we cannot lock down exactly where the POD is located, the practice is to identify one, main point of diversion. However, in this situation the pond falls within two 40 acre tracts so two points of diversion will be identified. I placed a point in the center of the portion of the pond falling in each QQ.

Source:

Since multiple PODs are described, the source is more appropriately described as springs. This is a clarification in source and not a change in source.

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Purpose of Use:

Because there is no direct diversion for stockwater from the pond, stockwater will be changed to Stockwater Storage.

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