

MEMORANDUM

TO: Water Right File 63-34319

FROM: Daniel Nelson – Analyst 3

DATE: February 19, 2019

SUBJECT: Licensing Review of Water Right 63-34319

The field exam for this right was performed by Certified Field Examiner Terry Scanlan of SPF Water Engineering.

Pond Volume:

The certified water right examiner determined that the total volume of the pond was 36 af with an evaporation rate of 7.6 af for a total of 43.6 af. The field examiner actually went out and performed depth measurements on the pond. The field examiner stated that the pond was 17 feet deep at its deepest point and ranged between 14 and 17 feet throughout most of the middle of the pond. I was able to confirm the 3 acres of surface area and the 7.6 af of evaporation losses. However, I was not able to confirm the pond depth.

Using the standard for the Department, 17 feet maximum depth would equal an average depth of approximately 6.8 feet ($17 \text{ max depth} \times 2/5 = 6.8 \text{ feet average depth}$). Using the Department standard of 6.8 average depth and 3 acre of pond surface area, the volume of the pond would be 20.4 af. The permit stated that the pond would be 3.5 acres in surface area with an average depth of 8 feet for a total of 28 af. I back calculated the maximum depth that would be allowable with the limit of 28 af of capacity, and the average depth would be approximately 9.4 feet of depth. However, Mr. Scanlan did actually go out and sound the depth of the pond, so I am convinced that his calculations are accurate.

The permit allowed for a pond of 28 af and 9.2 af of evaporation for a total of 37.2 af. We cannot authorize more than the 37.2 af for licensing, so I am in agreement with the recommendation in the field report that the permit be licensed for a surface area not to exceed 3 acres, 29.6 af of capacity, and 7.6 af of evaporation losses. This should be acceptable because we have only adjusted the condition of the permit and not exceed the total volume authorized by the permit. The permit holder will need to file another permit to cover the additional capacity developed by digging the pond deeper than originally intended when filing the permit.

Overlapping Review:

There are a number of overlapping water rights for the City of Middleton that encompass this property, but all of those rights are for municipal purposes. This right is for aesthetic storage, and is not connected to the municipal system. There are also irrigation rights that overlap this place of use, but once again, this is a standalone system and is not connected into any other system.

Conditions:

Conditions 123, 219, and 220 will be carried forward to licensing, but conditions 220 and 219 will be altered to provide the actual pond dimensions of 3 acres surface area, 29.6 af of capacity, and 7.6 af of evaporation for a total storage of 37.2 af as was permitted. The remainder of the conditions will be removed. Condition 121 will be replaced with condition 103 as is standard.