

Supplemental Memorandum

Date: April 25, 2011

To: File 36-8735

From: Craig L. Saxton *CLS*

RE: Supplemental information to accompany Sandy Hemenway's 4/21/11 review memo.

Diversion Rate: I just wanted to add that the recommended diversion rate of 0.11 cfs is well below the typical diversion rate for 600 dairy cattle, and in this case, it is more appropriate to use the physical measurement over the dairy spreadsheet calculation.

Despite that the dairy spreadsheet recommended a diversion rate of 0.08 – 0.09 cfs, the physical measurement was 0.11 cfs which is well below the typical rate for 600 dairy cattle of 23.5 AF $[(35 \text{ gpd} * 600 \text{ head} * 365 \text{ days}) / (325850 \text{ gal}) = 23.5 \text{ af}]$. Because the dairy spreadsheet is a guide, and because the measured diversion rate of 0.11 cfs is a tangible measurement that is well within the parameters of what is considered typical beneficial use for the size of the dairy, it is reasonable to use the physical measurement over the dairy spreadsheet calculation when licensing the diversion rate.

**Note that the dairy also has 100 head of dry cattle that I didn't include in this example because it is unnecessary.*

Diversion Volume: The point I want to emphasize here to supplement Sandy's review memo is that condition #5 on the approved application to amend permit 36-8735 only limits the permit to 26.5 AFA, not the total use of water on the dairy. The volume use limit of 24.9 AF for the dairy was taken from the dairy spreadsheet. Use of 36-8735 and overlapping right 36-8215 should not exceed 29.4 AF.