



State of Idaho

DEPARTMENT OF WATER RESOURCES

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DIRK KEMPTHORNE
GOVERNOR

KARL J. DREHER
DIRECTOR

April 10, 2000

Frank Erwin
2628 S 975 E
Hagerman, ID 83332

Re: Tupper Springs

Dear Frank,

Thank you for meeting with me on Friday, April 7, and reviewing the diversions at Tupper Springs with me.

I arrived at the Aqua Life site at about 10:05 a.m. and met with Jerry Egelston, hatchery manager. After visiting with Jerry for a few minutes, he went and shut off the water from Fischer/Big Springs that commingles with the water from Tupper Springs. After waiting a few minutes for the water to settle, we then measured the weirs in the two raceways. We measured a total of 2.44 cfs over the weirs plus 0.75 cfs in the hatch house. The hatch house water was measured by discharging one of the incubator outlets into a five-gallon bucket. We then converted the discharge to cfs for 23 incubator outlets. You arrived at the site just as we finished measuring the hatch house diversion.

After calculating the hatch house water, we then went to the Tupper hatchery. We measured a head of about 0.53 ft over the upper raceway boards, which converts to a flow of 2.06 cfs using a standard suppressed weir formula. We then inspected the different springs and pipe diversions at the Tupper place, including the irrigation diversion and the domestic and commercial (bottling plant) diversions.

After you left, I current metered the inflow to the upper Tupper Hatchery raceway. I measured the flow in the rectangular concrete flume box about 2 to 4 feet above the submerged weir and raceway pipe invert. I measured a total of 1.60 cfs using my current meter. This measurement confirms our accuracy concerns regarding the use of the stoplog weir at the outlet of the upper raceway.

During our visit, you stated that you had advised the Tupper's and their hatchery lessee, Lynn Babbington, that the flow of the hatchery would be reduced on April 10. This reduction was to be made in order to satisfy the 4.0 cfs Aqua Life right (36-02414). The April 10th date was provided to allow the Tupper's and the lessee some time to move fish, if necessary. The directive to the Tupper's to reduce their diversion is consistent with the memo sent to you by Cindy Hodges of IDWR on March 30, 1999.

Based on my measurements with you on April 7th and the past directive from IDWR, you should proceed to reduce the Tupper hatchery diversion to about 0.8 to 1.0 cfs. The approximate corresponding head on the Tupper weir discharge chart would be 0.37 to 0.41 ft. Since the diversion and overflow structure lack screw gates, I think it will be difficult to make fine adjustments. I would prefer setting the Tupper hatchery diversion at this time to no more than 1.0 cfs unless flows decrease further. My preference for the setting closer to 1.0 cfs is because I am also a little concerned about the accuracy of the raceway weirs at Aqua Life. At this low flow, the head over the weirs is a little less than what is required for normal weirs. Until both parties improve their measuring devices, I think it is difficult to regulate these low flows with much precision. If measuring problems and calls for water persist, then IDWR may issue an order to the parties that requires adequate measuring devices and controlling works.

Please contact Cindy Hodges or me if you have further questions concerning this matter.

Sincerely,



Tim Luke

Cc: David Tupper
Ken Ellis, Aqua Life
Allen Merritt, Southern Region

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