

3/13/07

Things to keep in mind when licensing CSI rights 47-7478 and 47-7606

1) The total of the two rights are limited to 6 cfs. According to the maximum capacity of the two pumps on the wells the system is capable of pumping 6.3 cfs however the college pumps at a lower rate. The following are the highest instantaneous flow measurements recorded over the last few years.

March 1999 – 5.1 cfs

November 2000 – 2.4 cfs

February 2001 – 4.9 cfs

February 2002 – 4.6 cfs

February 2003 – 2.3 cfs

January 2004 – 4.0 cfs

January 2005 – 4.1 cfs

2) Right 47-7478: At the time of the field exam the total capacity of the system was 1.38 cfs, however the recommended rate was 1.21 cfs. The lower rate was determined by combining the designed flow rate with the measured flow rate and use the lower of the two values. I believe that the total system capacity should be used (1.38 cfs)

3) If right 47-7478 is licensed for 1.38 cfs, right 47-7606 could be licensed for 4.62 cfs. In 1992 when the pumps were installed the system had the capacity to pump over 6 cfs.

4) The volume of water that was recommended for licensing in right 47-7478 was 624.2 af. This volume was based on the period of use of 259 days. The basis and reasoning for the number of days needs to be determined. The result will change the original recommended volume.

5) The total volume for the two rights should be based on what has been historically used. Between 1990 and 1993 the recorded yearly volume was between 570 af and 734 af. Because the proof of beneficial use was submitted in 1993 it would be reasonable to use the high of 734 af as the total volume for the two rights. However in 1994 the volume increased to 827 af with no recorded changes or additions to the system. It may be reasonable to use the 1994 volume.

6) In addition to the recorded volume of water that was used by CSI, there is the fish propagation use that was recorded in right 47-7478. The fish propagation was in use during the field exam in 1985 but ended a few years later. The recommended volume for right 47-7478 did not include the volume of geothermal water used in fish propagation. It is possible that the year round use of 0.08 cfs for fish propagation would have used 58 af. Should this volume be included in addition to what is recommended for the annual volume ($827\text{af} + 58\text{af} = 885\text{af}$)? After licensing of the right CSI would be able to transfer the use of the fish propagation to heating.