

MEMORANDUM

Date: December 27, 2012
To: Water Right File 98-7909
From: kfranklin
Re: Licensing

In 2005 Ducks Unlimited filed for a water right 98-7848, to divert 5.0 cfs and store 230.4 acre-feet for wildlife purposes in the same impoundment as this right 98-7909. The Idaho Department of Fish & Game has since acquired right 98-7848 from Ducks Unlimited. In addition to wildlife storage, 98-7848 has a wildlife flow through diversion rate of 5.0 cfs for up to a 45 day maximum between March 15 and November 15 of each year that generates a diversion volume for the flow through of 446 acre-feet.

The storage impoundment for right 98-7848 was larger than the 230.4 acre-feet originally applied for, so Idaho Fish & Game applied for another water right, 98-7909 to cover the remainder of the impoundment.

When the application was filed for right 98-7909, the total impoundment size was determined to be 575.8 acre-feet. The annual evaporation loss was estimated to be 365.06 acre-feet, minus the average precipitation volume of 288.52 acre-feet, which yields a net loss of 76.54 acre-feet. The annual seepage loss was estimated to be 554 acre-feet. Adding the size of the impoundment, the yearly evaporation loss and the annual seepage loss was equivalent to 1,206.34 acre-feet. In addition, Fish and Game drains the impoundment to simulate a drought, but not more than once per year and refills which adds another 575.8 acre-feet to the total, making a gross annual storage volume of 1,782.14 acre-feet.

Since rights 98-7848 and 98-7909 would be combined, the permit issued for 98-7909 was developed as follows;

Gross annual impoundment storage 1,782.14 acre-feet, minimum the storage volume for 98-7848 of 230.4 acre-feet equals 1,552 acre-feet (rounded). The permitted wildlife storage volume for 98-7909. Permit 98-7909 also had a wildlife flow through diversion rate of 5.0 cfs for up to a 45 day maximum to be used within a years period, that generates a total diversion volume of 446 acre-feet. The licensed diversion volume for 98-7909 was calculated to be 1,552 acre-feet plus the wildlife diversion volume of 446 acre-feet, which yields a total of 1,998 acre-feet.

To avoid overlap, 98-7909 was conditioned, that when combined with 98-7848 the total annual diversion volume cannot exceed 2,228.4 acre-feet. The 2,228.4 acre-feet was determined by adding the total diversion volume of 1,998 acre-feet for right 98-7909 to 230.4 acre-feet, which is the storage volume for right 98-7848.