

MEMORANDUM

To: Astaris Files
Fr: Bryce Contor
Date: 9/12/01

Re: Annual Diversion Volume

Astaris is supposed to be providing some data to aid in calculating diversion volume limitation. This is an alternate calculation to compare with the Astaris data, or to use it if Astaris doesn't provide data.

1) Simplot volumes at neighboring plant were calculated based on average of two years' data plus three std. deviations. This worked out to 8,500 acre feet for Combined Capacity 13.8 gfs, max reported rate 10.5 gfs, combined licensed rates of 19.01 gfs.

$$\frac{8,500}{(10.5 \times 1.9835)} = 408 \text{ days}$$

Volume p 2

$$\frac{8500}{(13.8 \times 1.9835)} = 310.5 \text{ days}$$

$$\frac{8500}{(19.01 \times 1.9835)} = 225.4 \text{ days}$$

2) WMO data in file 29-2284 indicate about 4.1 cfs diversion rate on 5/11/1998.
(1200 gpm observed, estimated to be 65% of flow)

3) Plant capacity $\approx$ 11.5 cfs

4) License Σ = 8.5 cfs

5) Using Simplot ratios, two possible volumes are:

$$4.1 \text{ cfs} \times 1.9835 \times 408 \text{ days} = 3,318 \text{ acre ft}$$

$$8.5 \text{ cfs} \times 1.9835 \times 311 \text{ days} = 5,244 \text{ acre ft}$$

$$8.5 \text{ cfs} \times 1.9835 \times 365 \text{ days} = 6,154 \text{ acre ft}$$

$$11.5 \text{ cfs} \times 1.9835 \times 225 \text{ days} = 5,132 \text{ acre ft}$$

Unless other data are produced I propose 5,250 acre feet as a combined limit, rounded up from the second calculation.

BAC 7/12/01