

MEMORANDUM

To: Water Right File Nos. 23-11333
From: Aaron Marshall
Date: November 28, 2007
Re: License Processing

Chronology:

Water right permit no. 23-11333 was issued to Tom Summers on December 26, 2005, for irrigation of 20.2 acres and a maximum diversion rate of 0.20 cfs.

Proof of beneficial use was received on December 30, 2005 for irrigation of 20.2 acres and a diversion rate of 0.20 cfs.

A beneficial use field examination was completed by Nate Arave May 24, 2007. Nate found a total of 20.2 acres irrigated within the permitted 40-acre tracts but the number of acres in each tract was not exactly as permitted. A licensing amendment is not necessary since the total acres and tract locations are still the same as permitted.

Nate measured the diversion works capacity operating under normal conditions at 0.22 cfs.

Analysis:

The license will reflect the point of diversion and place of use that was developed and confirmed during the field examination. The maximum diversion rate will be limited to the permitted rate of 0.20 cfs. The maximum annual diversion volume will be 70.7 acre-feet based on the calculations shown below.

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 20.2 \text{ acres} \times 3.5 \text{ afa} = 70.7 \text{ af}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = \\ 0.20 \text{ cfs} \times 200 \text{ days} \times 1.9835 = 79.3 \text{ af}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 70.7 \text{ af}$$