

## MEMORANDUM

May 12, 2008

TO: Parties to Snake River Farms Mitigation Plan Status Conference

FROM: Cindy Yenter, Water District 130 Watermaster

RE: Summary of IDFG and Clear Lakes Country Club Water Rights near Clear Lakes

### IDFG Right No. 36-4076

On April 17 Michelle Richman and I measured a portion of the spring discharges available under the IDFG right 36-4076, which the North Snake and Magic Valley Ground Water Districts have proposed to use for 2008 mitigation of the Snake River Farm (SRF) call. We measured the upper end of the spring system, just north of the SRF facility, where flows are most likely to be captured for re-diversion to SRF. We found that the small spring (spring 1, see attached map) which emerges south of the road at the east end of the SRF facility is flowing at **0.48 cfs**. This stream meanders through the golf course for approximately 300 yards before crossing under Clear Lake Road and spilling into a ditch flowing along the north side of Clear Lake Road carrying flow from a second spring (spring 2). The two springs together measured **1.14 cfs**, at a point just downstream from their confluence.

The ditch north of Clear Lake Road continues to the north and east, flowing through thick brush and becoming wide, slow, and full of silt. The ditch appears to pick up small additional flows from 2 other springs located to the west of Clear Lake Grade. A portion of one of these springs is diverted away from the main ditch to a small wetlands area west of Clear Lake Grade, where it sinks. The diverted flow is measured through a small trapezoidal flume. The balance of the water in the ditch flows under the grade to the larger wetlands and ponds on the east side. There is not another good measurement location in the main ditch east of spring 2, until just before the ditch is piped under the Clear Lake Grade. We did not measure near the grade crossing, although when I was there a week earlier the flow at that point did not appear to be much more than 1.0 cfs.

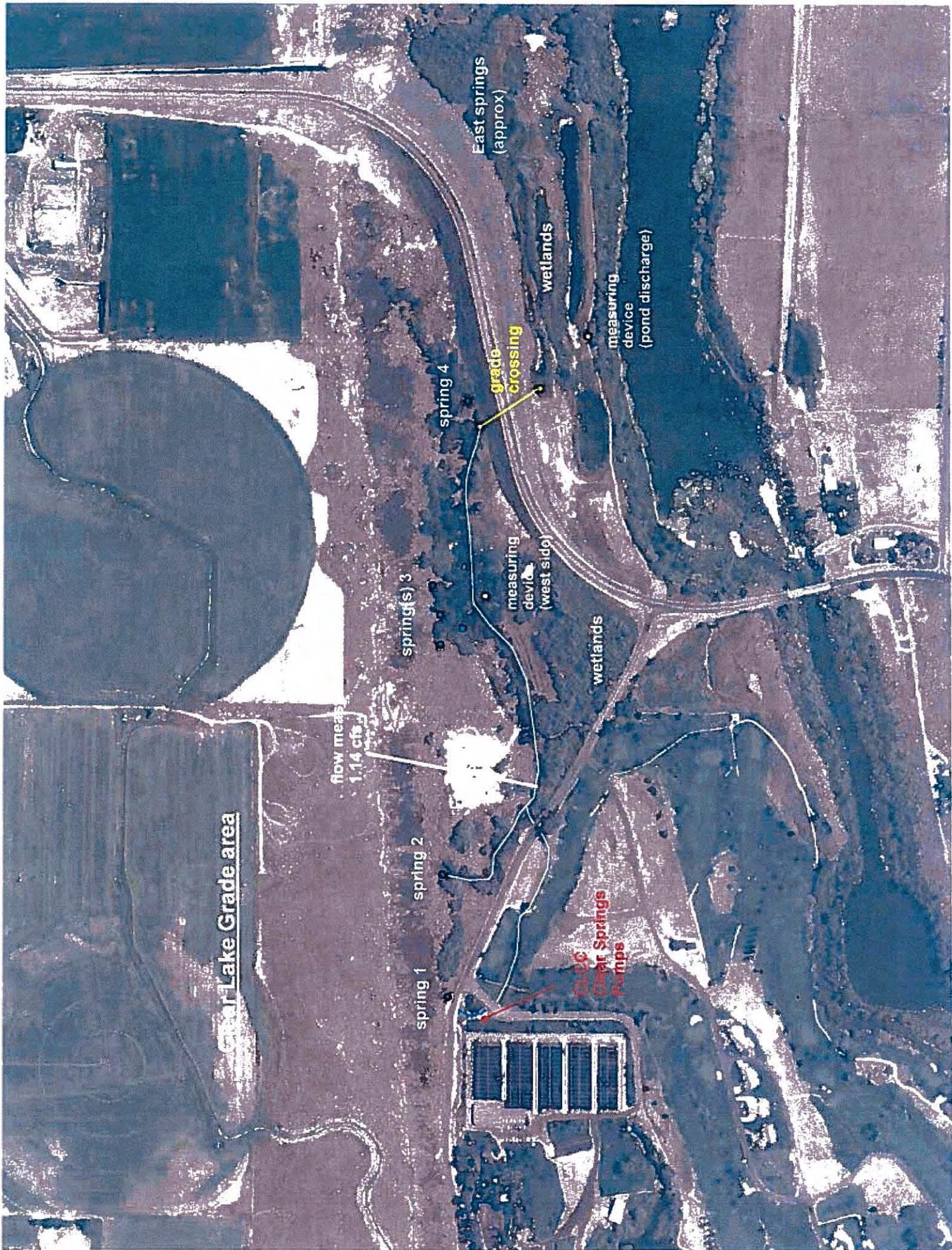
East of Clear Lake Grade, a series of ponds collects the spring flow from west of the grade, along with flow from a separate spring arising to the east of the ponds (East spring). All flows collected in the ponds discharge to the Snake River at a single point, and are measured through a second trapezoidal flume. IDFG makes annual reports of the additive flows as measured through the two flumes. Total diversions under this right generally range from 1.5 to 4.0 cfs, although the amount reasonably available near SRF appears to be just over 1.0 cfs.

### Clear Lakes Country Club Right Nos. 36-4148B and 36-16237

These rights divert from Clear Springs and share a common point of diversion with the SRF rights. The Clear Lakes Country Club (CLCC) rights have historically been diverted directly from the fresh water pipeline serving the lower SRF raceways, and pumped to the golf course grounds for irrigation. In combination with right nos. 36-4074 and 36-10154 which are diverted from Clear Lakes Creek (lower part of Clear Lake), the rights may irrigate 90 acres at a total combined diversion rate of 3.5 cfs. The Clear Springs pumps, 60 HP and 20 HP, were measured in 2006 at 2.2 cfs when operated together and 0.31 cfs with the smaller pump operating alone. Both pumps are used to irrigate large areas and the small pump is used to irrigate the driving range; these operating conditions are exclusive of one another so the capacity of the pumping plant is limited to approximately 2.2 cfs.

Two flow meters measure the cumulative volume diverted by CLCC from Clear Springs. For years 2005 and 2006, the total average adjusted volume diverted is 269 acre-feet.

The attached map shows the approximate locations of all the IDFG springs and measuring devices, and the CLCC Clear Springs pumps.



Clear Lake Grade area

spring 1

spring 2

springs 3

spring 4

East springs  
(approx)

grade  
crossing

measuring  
device  
(west side)

measuring  
device  
(pond discharge)

wetlands

wetlands

Clear Springs  
Pumps

flow mead  
1.14 cfs