

Memorandum

To: Allen Merritt
From: Dave Shaw
Re: Heart Rock Ranch LLC

April 7, 2011

Thanks for talking with me yesterday about the applications and draft approvals for Heart Rock Ranch LLC. With the bullets below I will try to explain the changes/additions to the drafts.

1. I took condition 8 from the draft approval of transfer 75851 and added it at the end of condition 7 of permit 37-22459. It is fine to keep the condition in transfer 75851 but water right 37-2538, the water right being transferred by 75851, does not provide for the diversion of ground water during the non-irrigation season. Application for permit 37-22459 does authorize the diversion of ground water, up to 6.58 cfs, during the non-irrigation season and the condition to limit the pumping of ground water to the irrigation season only is appropriate to be included in the permit approved.

2. The 3 AWR rights 37-22051, 37-22052 and 37-22533 permit the year around diversion of 6.58 cfs from ground water. Even though condition 6 of permit 37-22459 refers to irrigation season diversion rate, since these AWR rights permit diversion year around they should be included in the list of rights limited to the combined diversion rate of 76.74 cfs. This same change should be made to the comparable condition in each of the transfer approvals.

3. Irrigation ponds DU-17 through DU-20 are on the east side of the highway and have a storage capacity of 34.0 ac-ft. This area is served only by ground water from water right 37-2538. This right has a total diversion rate of 1.65 cfs but after the transfer is approved the irrigation portion of the water right will be limited to 1.35 cfs. My understanding of the 24 hour storage policy is water for irrigation purposes can be stored up to the volume of water that can be produced by the irrigation right in 24 hours. In this case the 24 hour volume of the only irrigation water available on the east side of the highway is 2.7 ac-ft, far less than the 34.0 ac-ft capacity of the ponds. The use of ground water is a concern for many water users in the basin and a clear plan of how these ponds will be utilized such that the irrigation storage will be limited to 2.7 ac-ft is an important issue.

A similar situation exists with irrigation ponds DU-15 and DU-16, however, these ponds are fed by Big Wood River water from the Flood 64 diversion and the concern from other water users is much less for these ponds since this is the last diversion on the river.

I added a proposed condition 10 to permit 37-22459 and condition 11 to transfer 75851 but the language can probably be improved with input from others. I also added a reference to a more general description of pond usage in condition 13 of permit 37-22459.

4. We had a disagreement with the applicant over the treatment of winter precipitation on ponds that emptied or partially emptied during the non-irrigation season. The applicant's analysis indicated the need to dry up an additional 7.8 acres of pasture beyond the area occupied by ponds to balance the annual ET with the historical ET from irrigation. The additional 7.8 acres were included in transfer 75840 of water rights 37-180, 37-181, 37-231A and 37-233. This transfer identifies 9.1 acres to be dried up under the overlapping rights 37-180 and 37-181, and an additional 7.9 acres to be dried up under overlapping water rights 37-231A and 37-233 for a total of 17 acres. Of these 17 acres, 9.2 acres will be occupied by ponds leaving the 7.8 acres of additional area.

Our analysis showed the need to dry up 19.7 acres in addition to the area of the ponds instead of the 7.8 acres identified by the applicant. As part of the settlement to resolve the protests, the parties

agreed to dry up 15 acres of irrigated pasture in addition to the area covered by ponds. Item 6 in the Settlement Agreement specifies these acres should be dried up under the rights covered by transfer 75840. To satisfy this portion of the Settlement Agreement the applicant should identify an additional 7.2 acres to be dried up in this transfer. It should be the applicant's choice to decide which rights are modified to provide the additional acreage but those changes need to be made to comply with the settlement agreement.

5. The permit references a non-existent POD on the Big Wood River – NENENW Section 11, T1S R18E on page 8 of the draft permit. This is probably a point of injection or redirection but those designations were not included in the description.

6. The Crystal Creek transfers T75854 for 37-139 and T75855 for 37-1187 do not have a condition requiring use of surface before groundwater. We thought this was a standard condition when senior surface water rights are supplemented by junior ground water rights but don't have a particular issue with these transfers.

7. There are a few other little housekeeping/typos to clean up that will probably be cleaned up when the final documents are prepared. There are some errors/discrepancies between the draft approvals and the accompanying maps. In particular the maps accompanying permit 37-22459 miss label Township 1 North as 2 North.

Provision 8 of the January 20, 2011 Stipulation recognizes the issuance of IDWR's approvals do not supersede any of the Counties approvals or conditions. Does any recognition of the county permits and approvals need be included in the IDWR approvals to confirm that part of the Stipulation?

Thank you for your help Allen. If you have questions about any of this please let me know and I will try to explain.