

MEMORANDUM

TO: Transfer # 71316 File

FROM: Corey Skinner

DATE: March 8, 2007

SUBJECT: Additional Points of Diversion Analysis

Transfer # 71316 was originally filed in June of 2004 and advertised without protest in March of 2005. Prior to sending the transfer to the State Office for final action, it was noted that the three proposed new wells were located just east of the ESPA boundary (as defined in Section 01 of Rule 50 of the Department's Conjunctive Management Rules) and the existing wells are located just west of the same boundary. Basically, the transfer proposes adding new wells within the ESPA for rights with currently authorized diversions (wells) just outside the ESPA. At the time this was discovered, there was cause for concern relating to whether or not the proposed change would negatively impact any reaches in the Snake River. The old groundwater model cells did not cover the area involved with this transfer, but the new groundwater model cells did cover the area. It was decided to wait until the new transfer spreadsheet that relies on the new groundwater model became available so that the impacts of the additional points of diversion could be analyzed before taking final action on the transfer.

Recently, I had an opportunity to analyze the addition of points of diversion as proposed by Transfer # 71316 using the new transfer spreadsheet that relies on the new groundwater model. Examination of the location of the three proposed wells indicates that one of the proposed wells is located in cell (R81, C35), which happens to be an adjacent cell to the current wells (located in cell R80, C35). The other two wells are proposed to be located in the next adjacent cell (R82, C35) to the original wells. An analysis was run using the assumption that all the historical pumping is moved to the farthest cell (R82, C35), which would be the very worst-case scenario. This analysis revealed that the Neeley to Minidoka reach would experience some depletion greater than 5%, but the depletion would not begin occurring for at least 50 years. The analysis also revealed that the rest of the river reaches would either experience continual gains or depletions less than 5%.

After this analysis was performed I had an opportunity to discuss this transfer and analysis with State Office staff. It was agreed that the analysis would represent very worst-case scenario, which would be very unlikely to actually occur. In addition, it was noted that the centroid of the three proposed wells would actually be located within model cell R81, C35, which is an adjacent cell to the cell where the current points of diversion are located. Note that for transfers proposing changing diversions to adjacent cells a model analysis is not even required according to current Department guidance for

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transfers. After the discussion, a second model analysis was run using the assumption that all the historical pumping is moved to the centroid location in the adjacent cell (R81, C35). This particular analysis revealed that the resulting depletions would not exceed 5%. This particular analysis is a more realistic scenario than the first, worst-case, scenario. Another item of note, not discussed with State Office staff, is that transfer processing memo # 24 indicates that points of diversion can be changed/added within the recorded place of use of the rights involved with the transfer without a model analysis being required. Note that the new wells proposed by transfer # 71316 are all located within the recorded place of use of the rights involved with the transfer.

Due to the items discussed in this memo, I recommend that transfer # 71316 be approved as proposed.