

MEMORANDUM

To: Water Right File No 61-12090
From: Ashley Ritter
Date: April 6, 2020
Re: Reporting Requirements Review

Intro

On April 03, 2020, SPF Water Engineering (SPF) submitted 2019 Annual Water Level Monitoring Report for Permit 61-12090 (via email). Permit 61-12090 condition six (6) requires compliance with an IDWR approved monitoring plan that was approved by the Department on March 26, 2012. The approved monitoring plan requires submission of an annual report that includes:

- a) Analysis of water level trends in the production well and shallow observation well;
- b) Reporting of discharge rates over time and analysis in relation to water levels;
- c) Electronic records of water level and discharge data;
- d) Evaluation of downward return flow from irrigation discharge water in relation to water levels; and
- e) Reporting of any temporary agricultural use, including crops grown and acres irrigated during the year.

Review of report

The SPF submitted report summarizes water level data collected from the Elk Creek Village monitoring well (MW-1) and the Elk Creek Village production well (PW-1). It is reported that PW-1 is not yet being used for production, but groundwater levels are still being measured.

Monitoring events took place on March 19, June 24, September 16, and December 12, 2019 as well as March 27, 2020. During the December 2019 monitoring event the transducer was lost within MW-1 (due to a corroded installation cable) and a new transducer was installed during the March 2020 monitoring event (resulting in a data gap from September 2019 to March 2020). Manual water level measurements remained consistent with just 0.5 feet of fluctuation over that time period.

MW-1 experienced a spontaneous water level drop of roughly 1.2 feet from September 12-13, 2019, but has since recovered to historical water levels. This is assumed to be associated with a 1500 gpm pumping test of a new irrigation well located approximately 0.8 miles to the south.

Analysis of water level trends in MW-1 and PW-1 from October 2011 to March 2020 suggest ground water levels at the monitoring site are relatively stable with seasonal fluctuation of less than a foot each year. It appears a very slight upward hydraulic gradient has been present during the monitoring period.

Electronic records of water level and discharge data accompanied the 2019 Monitoring Report. The electronic records are scanned and profiled as an Excel document. Please see PC Docs to view the spreadsheet.

Conclusions

The reporting requirement included in the approved monitoring plan for permit 61-12090 have been satisfied.