

Peer Review Plan

Date: 2/19/2021

Source Center: U.S. Geological Survey (USGS)
California Water Science Center
6000 J Street, Placer Hall
Sacramento, CA 95819

Title: Mapping aquifer salinity gradients and effects of oil-field produced water disposal using geophysical logs: Elk Hills, Buena Vista and Coles Levee Oil Fields, San Joaquin Basin, California.

Subject and Purpose: This product is a study by the USGS in cooperation with the California State Water Resources Control Board's Oil and Gas Regional Monitoring Program (RMP). The study area was selected because groundwater resources adjacent to these oil fields are used for irrigation and domestic supply and are in physical proximity to oil production activities and oil-bearing formations. The objective of the study is to determine the base of potentially useable groundwater (less than 10,000 milligrams per liter dissolved solids) and map changes in subsurface salinity over time caused by disposal of oil-field produced water in injection wells. This product will be released in the outside scientific publication, *Journal of Hydrology-Regional Studies*.

Impact of Dissemination: This information product is considered by the USGS to be Influential Scientific Information.

Timing of Review (Including Deferrals): February - September 2021. Deferrals are not anticipated at this time.

Manner of Review, Selection of Reviewers, and Nomination Process: Peer review will be by individual letters. USGS will select the peer reviewers in accordance with the requirements [Survey Manual chapter 502.3—Fundamental Science Practices: Peer Review](#). Anonymous peer reviewers will also be selected by the journal editor.

Expected Number of Reviewers: Anticipates at least four peer reviewers.

Requisite Expertise: Borehole geophysical log interpretation, ground-water quality interpretation, groundwater flow, and processes that potentially affect groundwater quality near oil fields.

Opportunity for Public Comment: No opportunity for public comment is formally incorporated by the USGS for this product.

Agency Contact: peer_review_agenda@usgs.gov