

# Peer Review Plan

**Date:** 9/18/2020 (updated 4/7/2021)

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

**Title:** Occurrence of water and thermogenic gas from oil-bearing formations in groundwater near the Orcutt Oil Field, California USA.

**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 based on a variety of factors including a long history of oil field development, geographic location in an area not previously studied as part of the RMP, and relatively high oil and gas well density and large injection volumes of water and steam for enhanced oil recovery or water disposal compared to many oil fields in California and its proximity to used groundwater resources. The objectives of the study were to determine the occurrence of water and thermogenic gas from oil-bearing formations in groundwater and to use multiple lines of evidence to explore possible pathways for those occurrences. This work has been the subject of past management briefing correspondence and a coordinated media plan by the USGS and the California State Water Resources Control Board. This product will be released in the outside scientific *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):** September 2020 – 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. Internal USGS peer review will be completed first, followed by the journal review.

**Expected Number of Reviewers:** Anticipates a minimum of four total peer reviewers.

**Requisite Expertise:** Groundwater 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](mailto:peer_review_agenda@usgs.gov).