

DEPARTMENT OF WATER RESOURCES

P.O. BOX 942836
SACRAMENTO, CA 94236-0001
(916) 653-5791



10/1/2024

Mr. Dean Dusette (Dean.Dusette.@conservation.gov)
CalGEM CEQA Program Coordinator (CEQA@conservation.ca.gov)
11000 River Run Boulevard
Bakersfield, California 93311

Subject: **SWP Response** to Request by CalGEM for **Chevron Lost Hills CEQA § 15063(g)** Informal Consultation with Responsible and Trustee Agencies Regarding an Environmental Document for a New Oil, Natural Gas, or Geothermal Project

Dear Mr. Dusette,

The Department of Water Resources' (DWR) State Water Project (SWP) is providing this letter with its recommendation on the California Environmental Quality Act (CEQA) process for the Proposed Project.

Pursuant to CEQA Guidelines, §15063(g), the California Geologic Energy Management Division (CalGEM) of the California Department of Conservation, provided notice that CalGEM is conducting an informal consultation with responsible and trustee agencies (Agencies), to solicit input on the CEQA process for the "**Proposed Project**." The CalGEM notice requests recommendations pertaining to CalGEM's preparation of an environmental document.

Specifically, CalGEM seeks: "recommendations, rationale, and supporting information" as to whether an **Environmental Impact Report (EIR)**, **Mitigated Negative Declaration (MND)**, or a **Negative Declaration (ND)** should be prepared for the Proposed Project. This Proposed Project involves an application by the Operator, Chevron USA Inc. (Chevron) Chevron Lost Hills, for permits to drill and install **75 new wells at the Lost Hills Oil Field (LHOF)**, with the stated, underlying purpose to offset declining well count and oil production levels.

CalGEM CEQA Program
10/1/2024

Page 2

Based on the map of the Proposed Project (attached to the CalGEM notice and hereto as Attachment A), that was provided to SWP¹, the Proposed Project area is immediately adjacent to the California Aqueduct (Aqueduct) and entirely located within 2.5 miles of the Aqueduct between Mileposts (MP) 199 and MP 207. As the owner/operator of the Aqueduct, the SWP, in its capacity as an interested Agency, is providing this letter, with its recommendation on the CEQA process.

1. Recommendation from SWP as an Interested Agency

The SWP, as an Interested Agency, recommends that an EIR be prepared for the Proposed Project.

2. Rationale for SWP Recommendation

The SWP's recommendation for an EIR is based upon the historical corollary relationship between the subsidence occurring at and adjacent to the LHOF, and the subsurface extraction occurring in the vicinity. The SWP's recommendation that an EIR be prepared for the Proposed Project, whose stated objective is to "...offset declining... oil production levels", is due to the potential for significant and unavoidable impacts.

Per CEQA guidelines, a significant impact related to geology and soils occurs if the proposed project is located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Proposed Project, and potentially result in subsidence.

Also, per CEQA guidelines, a significant impact related to utilities and service systems occurs if the Proposed Project requires or would result in the relocation or construction of new or expanded water facilities, where the construction or relocation of which could cause significant environmental effects.

Additionally, per CEQA guidelines, significant environmental impacts occur if the Proposed Project could result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities (e.g., that portion of the Aqueduct which would need to be altered/rebuilt) in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services (e.g., in order to keep water flowing). Such construction could cause significant

¹ On September 11, 2024, CalGEM sent this Notice to the Kern County Water Agency (KCWA), affording KCWA an opportunity to participate in informal consultation. Recipients of the CalGEM notice were encouraged in the body of the notice to inform other Agency representatives who are "interested" in this Proposed Project. KCWA shared the notice with Westside Water Authority who, in turn, shared the notice with SWP on September 19, 2024.

CalGEM CEQA Program

10/1/2024

Page 3

environmental impacts, thereby requiring its own EIR. Because **significant and unavoidable geologic and soil (subsidence)** and water facility (the Aqueduct) impacts are likely to occur as a result of the Proposed Project, SWP recommends an EIR be prepared. The SWP has a direct and primary interest in fully understanding, arresting and ameliorating the subsidence and compaction of land in those areas overlying or immediately adjacent to the LHOFF given the location and effects on its infrastructure, namely the Aqueduct.

3. Supporting Information

a. Subsidence

The annual DWR benchmark surveys in this area of the Kern Bowl (Pools 23 thru 26, in proximity to the LHOFF) show **subsidence of the Aqueduct of up to 4 feet since 1967**. Figure 1 below represents cumulative subsidence in the SWP's San Joaquin Field Division (SJFD) reaches of the Aqueduct since its original construction in 1967. Of specific note is the area within the red box, (the area of the LHOFF) which has experienced over 4 feet of cumulative subsidence at MP 200 and MP 207. **Approximately 25% of this subsidence has occurred since 2013**.

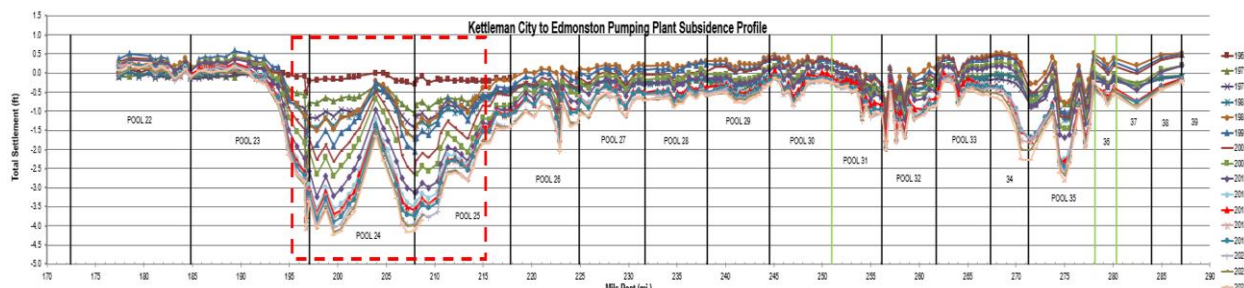


Figure 1: Profile indicating subsidence in the SJFD.

Source: DWR Precise Survey Section, SLFD

Currently, due to its subsided condition, there are areas of the Aqueduct adjacent to the LHOFF with **little to no available freeboard** (the vertical distance between the top of the Aqueduct's concrete liner and the originally intended operating water surface of the Aqueduct). This condition decreases capacity, operational flexibility, and pumping efficiency. It also **increases costs and potential risks to operate**.

b. Extraction

Per CalGEM's data, there are **3,618 active oil and gas wells** (including water source wells used in oil & gas extraction process) in the **LHOFF area**. As noted above, the area

CalGEM CEQA Program

10/1/2024

Page 4

of primary oil and gas development within the LHOF is located approximately between Aqueduct MP 195 and MP 215.

The total net production for the LHOF between 2015 and 2023 is shown in WellSTAR records to be approximately 29,781 AF of water, or 3,722 AF/yr. This volume is primarily from active water source wells, generally located between the oilfield and the Aqueduct, which are not being offset by nearby injection wells.

SWP provides the following additional supporting information:

- *Publicly available dataset:* California Department of Water Resources – State Water Project, Operations and Maintenance; Historical Surveyed Subsidence along the California Aqueduct (annual since 2016):

<https://data.cnra.ca.gov/dataset/california-aqueduct-subsidence-study>

- *Publicly available dataset:* California Department of Water Resources – Sustainable Groundwater Management Office; TRE Altamira InSAR Dataset - Historical Vertical Raster of Subsidence June 2015 to July 2024:

<https://sgma.water.ca.gov/webgis/?appid=SGMADataViewer#landsub>

Please also see chart at Attachment B

- *Publicly available dataset:* California Department of Water Resources – Sustainable Groundwater Management Office; GPS Stations - Vertical Displacement:

<https://sgma.water.ca.gov/webgis/?appid=SGMADataViewer#landsub>

Please also see chart at Attachment C

- *Publicly available dataset:* California Department of Conservation – California Geologic Energy Management Division's (CalGEM) – WellSTAR Bulk Data Downloads: Production/Injection Databases

<https://wellstar-public.conservaion.ca.gov/General/PublicDownloads/Index>

CalGEM CEQA Program

10/1/2024

Page 5

If you have any questions, please contact Jesse Dillon (Manager of the California Aqueduct Subsidence Program) by telephone at (916) 699-8403 or by e-mail at jesse.dillon@water.ca.gov.

Sincerely,



John Yarbrough
Deputy Director
State Water Project

cc: Tom McCarthy, Kern County Water Agency - (tmccarthy@kcwa.com)

Mark Gilkey, Westside Water Authority - (mgilkey@westsidewa.org)

Morgan Campbell, Westside Water Authority - (mcampbell@westsidewa.org)

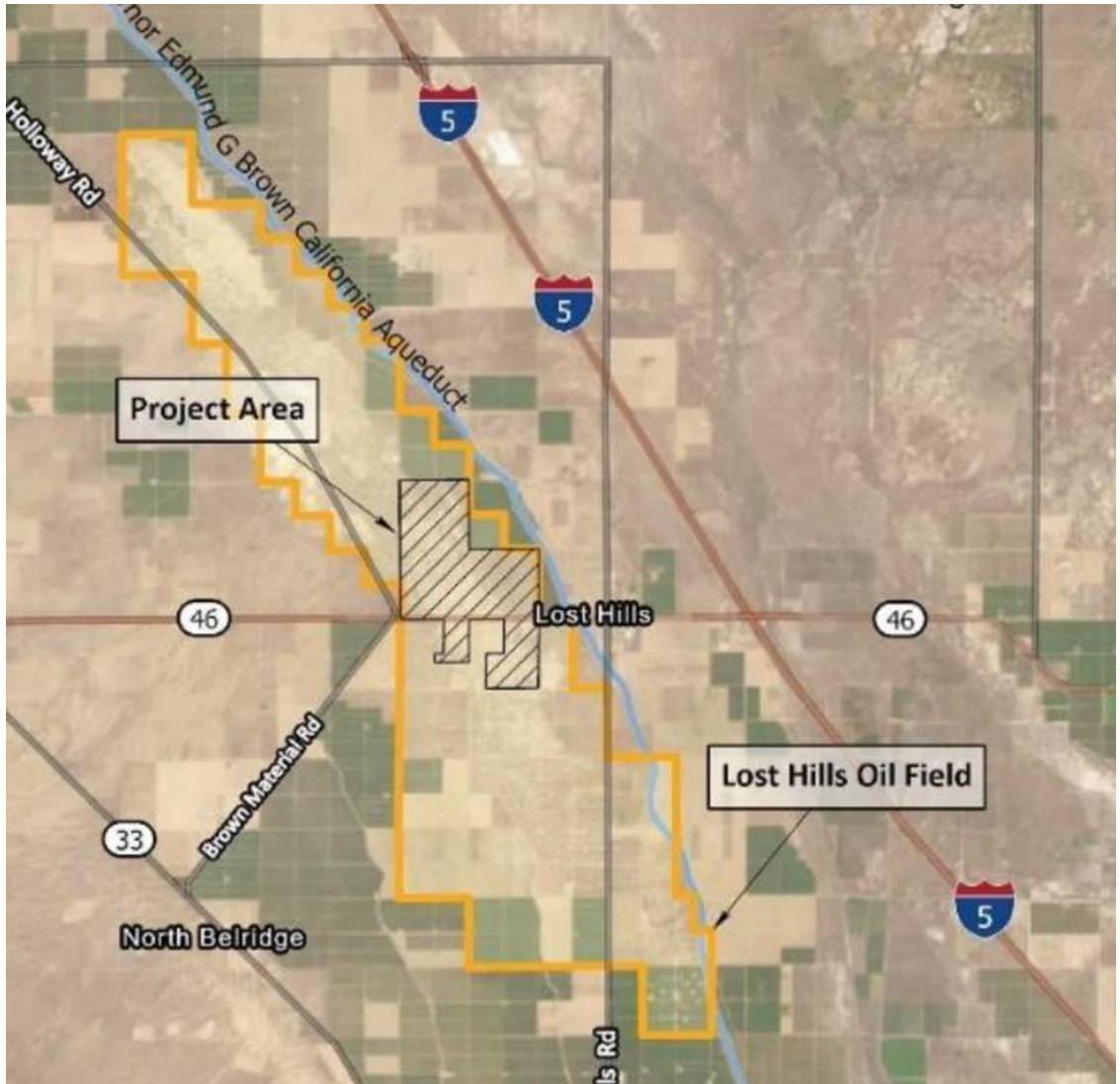
Mr. You Chen Chao – DWR SWP Risk and Resiliency Officer -
(YouChen.Chao@water.ca.gov)

Mr. Anthony Meyers – DWR SWP Principal Operating Officer -
(Anthony.Meyers@water.ca.gov)

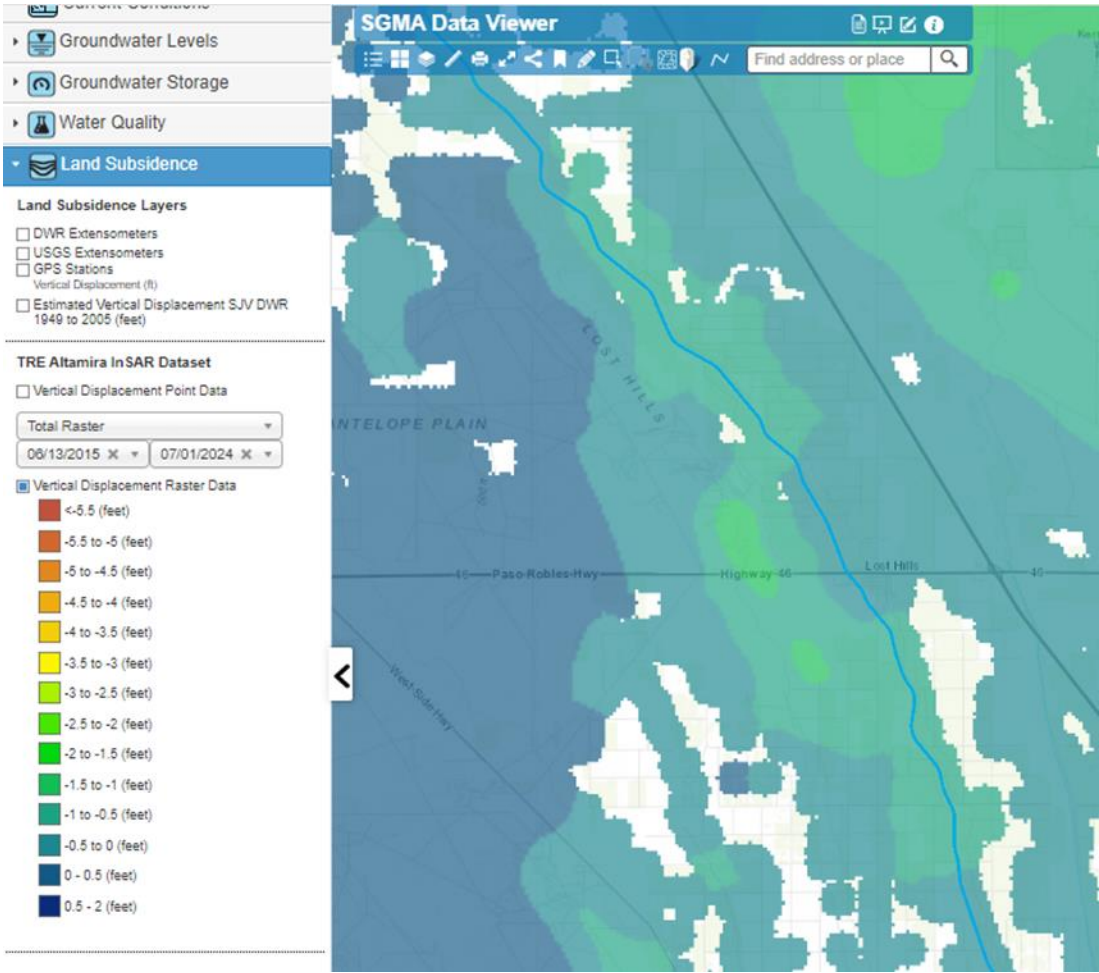
Mr. Jesse Dillon – DWR SWP CASP Program Manager -
(Jesse.Dillon@water.ca.gov)

CalGEM CEQA Program
10/1/2024
Page 6

ATTACHMENT A



ATTACHMENT B



CalGEM CEQA Program

10/1/2024

Page 8

ATTACHMENT C

