



Central Valley Regional Water Quality Control Board

TO: Eileen Sobeck

Executive Director

STATE WATER RESOURCES CONTROL BOARD

FROM: Patrick Pulupa

Executive Officer

CENTRAL VALLEY REGIONAL WATER QUALITY CONTROL BOARD

DATE: 27 October 2023

SUBJECT: INFORMATION REGARDING AREAS UNDER CONSIDERATION FOR

OILFIELD BENEFICIAL USE DE-DESIGNATIONS AS WELL AS

NEARBY REGIONAL AQUIFER EXEMPTIONS

This memorandum is to provide more information on the locations of project areas for the Lost Hills proposed oilfield de-designation Basin Plan Amendment (BPA) and two areas that have recently been requested for an evaluation of potential oilfield beneficial use de-designations. All three of these areas are in the jurisdiction of the Tulare Lake Basin of the Central Valley Regional Water Quality Control Board (Central Valley Water Board). Information provided in this memorandum also includes locations of Aquifer Exemptions that occur regionally in the vicinity of those three areas.

There may be future proposed beneficial use de-designations through the Central Valley Salinity Alternatives for Long-Term Sustainability (CV-SALTS) program and the associated Prioritization and Optimization Study, but those potential de-designations are still under development and are not being proposed at this time.

Proposed Oilfield De-Designation BPA

Lost Hills Oilfield BPA

The Lost Hills Oilfield BPA proposes to de-designate Municipal and Domestic Supply (MUN) and Agricultural Supply (AGR) beneficial uses in groundwater from a designated horizontal and vertical portion of the southern region of the Lost Hills Oilfield. This BPA was adopted by the Central Valley Water Board on 10 June 2022 and will be considered for approval at the November 7, 2023 State Water Board meeting. The attached maps show the approximate location of the proposed de-designation area for this BPA.

Potential Oilfield De-Designation BPAs Requested for Evaluations

These are evaluations that have been requested by external interested parties for evaluation by the Central Valley Water Boards staff. Staff have not yet made any determinations on the de-designation areas of these projects.

McKittrick Area Oilfields Groundwater MUN and AGR Evaluation Request

A potential BPA is currently being evaluated for a potential de-designation project area in oilfields near the community of McKittrick. This potential BPA was requested for evaluation by Valley Water Management Company, which operates oilfield produced wastewater disposal facilities in the project area. This project is an evaluation to potentially remove MUN and AGR beneficial uses in groundwater within a horizontal and vertical area adjacent to and within the administrative boundaries of the South Belridge, Monument Junction, and Cymric Oilfields in Kern County. The delineations of the proposed de-designation area are still being evaluated and have not been finalized at this time. However, the attached maps show an approximate and conservative potential project area for this project that is currently being evaluated for de-designation for MUN and AGR. CEQA scoping for this project occurred in May 2023.

California Independent Petroleum Association (CIPA) Oilfields Groundwater MUN and AGR Evaluation Request

An additional area that is currently being evaluated for the potential for de-designation of MUN and AGR has been requested for evaluation by the California Independent Petroleum Association (CIPA). The proposed area encompasses a larger area relative to the proposed Lost Hills BPA and the potential McKittrick BPA (approximately 55 miles long, extending from Lost Hills Oilfield in the north to Midway-Sunset Oilfield in the south, and approximately 18 miles wide from east to west). CIPA submitted a Technical Report providing information for this evaluation on 10 August 2023. The attached maps show an approximate and conservative potential project area that is currently being evaluated for de-designation for MUN and AGR. Staff have done an initial review of the Technical Report and are performing further data gathering and evaluations of the proposed project area for the requested evaluation.

Aquifer Exemptions

Aquifer Exemptions are a federal process to exempt a potential underground source of drinking water from coverage under the Safe Drinking Water Act. A Basin Plan Amendment is a California state process under the Porter-Cologne Act to remove or dedesignate an assigned beneficial use from a Regional Water Quality Control Board's Basin Plan. A Basin Plan Amendment is approved by the State Water Board and the Office of Administrative Law. Aquifer Exemptions and beneficial use de-designations are applied separately to an area, with separate criteria and processes. Therefore an area can have one without the other, and one does not necessitate the other.

Map Extent Disclaimers

The proposed and potential BPA project areas discussed in this memorandum are all located in the Tulare Lake Basin. The maps included in this memorandum show only

the horizontal extent of the approximate project areas. Vertical extent is an important component of areas of de-designation and Aquifer Exemption that is not depicted in this memorandum.

Additionally, most of the project areas shown in the maps are approximations that have been drawn <u>very approximately</u> for the purposes of this memorandum to illustrate the relationship between project areas and evaluation areas and aquifer exemption areas.

Furthermore, one BPA is proposed (Lost Hills Oilfield BPA) but the remaining two are potential BPAs in the exploratory phase of evaluating the project areas for potential dedesignation. Therefore, it is extremely likely that the boundaries of these potential areas of de-designation will change during the course of the respective evaluations.

Maps

There are four Figures attached to this memorandum.

Figure 1 shows a location map of all three areas that either have a proposed beneficial use de-designation (Lost Hills Oilfield BPA) or that have been requested for beneficial use de-designation evaluation.

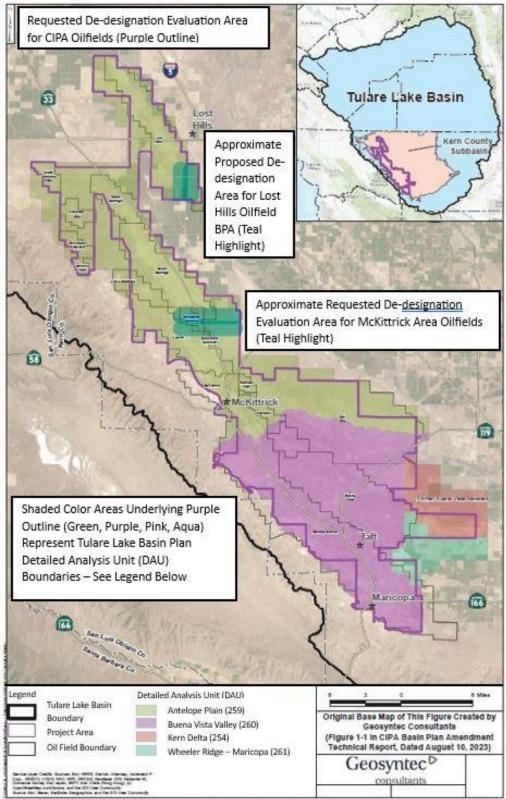
Figure 2 shows a location map of the same projects shown in Figure 1 along with general areas of nearby aguifer exemptions.

Figures 3 and 4 show close up location maps of the aquifer exemptions shown in Figure 2 (the northern portion and the southern portion of Figure 2, respectively).

Contact

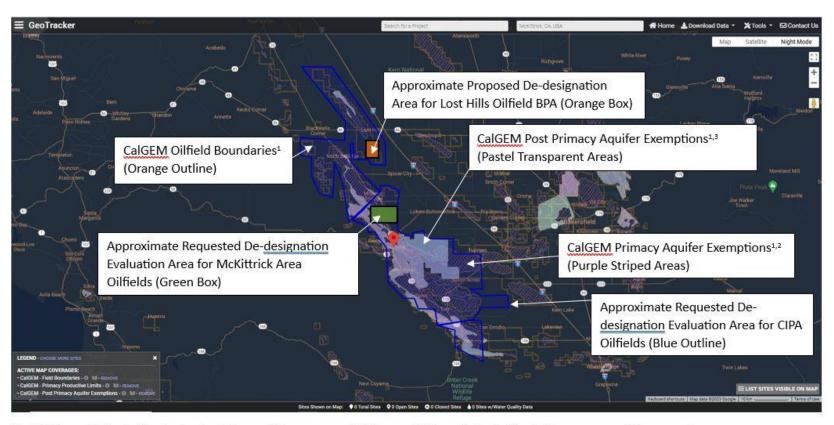
If any further information is needed regarding this information, please contact Jennifer Fuller at Jennifer.Fuller@Waterboards.ca.gov or at (916) 464-4646.

Figure 1: Location Map of Approximate Oilfield Areas Proposed for Dedesignation (Lost Hills BPA) or Requested for De-designation Evaluation



This map depicts the approximate locations of the three oilfield areas currently proposed for de-designation. DAUs are shown in colors underlying the map.

Figure 2: Location Map of Approximate Proposed Oilfield De-designation, Requested Evaluation Areas & Nearby Aquifer Exemptions



¹CalGEM stands for California Geologic Energy Management <u>Division</u>; a division of the California Department of Conservation.

²CalGEM Primacy Aquifer Exemptions are Aquifer Exemptions that are included in the September 29, <u>1982</u> Memorandum of Agreement between United States Environmental Protection Agency (US EPA) and <u>CalGEM</u>. These aquifers are exempted <u>for</u> Class II injection by the US EPA.

³CalGEM Post Primacy Aquifer Exemptions are Aquifer Exemptions exempted after the September 29, <u>1982</u> Memorandum of Agreement between US EPA and <u>CalGEM</u>. These aquifers are also exempted <u>for</u> Class II injection by the US EPA.

≡ GeoTracker Northern Portion of Approximate Requested Lost Hills Post Primacy Aquifer Exemption (Tulare Exempt Area) De-designation Evaluation Area for CIPA Oilfields (Blue Outline) Lost Hills Primacy Aquifer Exemption North Belridge Primacy and Post Primacy (Tulare Exempt Area) Aquifer Exemptions Semitropic Primacy Antelope Plains Gas (ABD) Primacy Aquifer Exemption Aquifer Exemption Antelope Hills Primacy Aquifer Exemption **Buttonwillow Gas Primacy** McDonald Anticline Primacy Aquifer Exemption **Aguifer Exemption** South Belridge Primacy and Post Primacy **Bowerbank Primacy** (Tulare Exempt Area) Aquifer Exemptions **Aquifer Exemption** Chico-Martinez Primacy Aquifer Exemption Cymric Primacy and Post Primacy (Tulare Exemption Area) Aquifer Exemptions

Figure 3: Close-up Location Map of Aquifer Exemptions Shown in Northern Portion of Figure 2

Figure 4: Close-up Location Map of Aquifer Exemptions Shown in Southern Portion of Figure 2

