

# PROJECT REPORT

**TO: ENVIRONMENTAL EVALUATION COMMITTEE** AGENDA DATE: November 19, 2020

**FROM: PLANNING & DEVELOPMENT SERVICES**

AGENDA TIME 1:30 PM/No. 4

PROJECT TYPE: CUP #20-0009, 20-0010, 20-0011 & 20-0012 SUPERVISOR. DIST: #5

Gordons Well II, LLC

LOCATION: 6626 Evan Hewes Highway (etal) APN: 056-210-044 (etal)

Winterhaven, CA

PARCEL SIZE: ± 418 acres

GENERAL PLAN (existing) Recreational/Open Space GENERAL PLAN (proposed) N/A

ZONE (existing) S-2 (Open Space Preservation) ZONE N/A

GENERAL PLAN FINDINGS  CONSISTENT  INCONSISTENT  MAY BE/FINDINGS

PLANNING COMMISSION DECISION:

HEARING DATE: \_\_\_\_\_

APPROVED  DENIED  OTHER

PLANNING DIRECTORS DECISION:

HEARING DATE: \_\_\_\_\_

APPROVED  DENIED  OTHER

ENVIROMENTAL EVALUATION COMMITTEE DECISION: HEARING DATE: 10/29/2020

INITIAL STUDY: #20-0026

NEGATIVE DECLARATION  MITIGATED NEG. DECLARATION  Addendum to FEIR

DEPARTMENTAL REPORTS / APPROVALS:

PUBLIC WORKS

NONE

ATTACHED

AG

NONE

ATTACHED

APCD

NONE

ATTACHED

E.H.S.

NONE

ATTACHED

FIRE / OES

NONE

ATTACHED

SHERIFF.

NONE

ATTACHED

OTHER

(See Attached)

REQUESTED ACTION:

SEE ATTACHED

Planning & Development Services

801 MAIN ST., EL CENTRO, CA 92243 442-265-1736

(Jim Minnick, Director)

S:\AllUsers\APN\056\210\044\CUP 20-0009\EEC PKG\CUP20-0009 (etal) ProjRpt.docx

EEC ORIGINAL PKG

- NEGATIVE DECLARATION**  
 **MITIGATED NEGATIVE DECLARATION**

*Initial Study & Environmental Analysis  
For:*

**Conditional Use Permit #20-0009, 0010, 0011 & 0012  
Ron Pratte (Gordons Well II, LLC)**



*Prepared By:*

**COUNTY OF IMPERIAL**  
**Planning & Development Services Department**  
801 Main Street  
El Centro, CA 92243  
(442) 265-1736  
[www.icpds.com](http://www.icpds.com)

**October, 2020**

**EEC ORIGINAL PKG**

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## SECTION 1 INTRODUCTION

### A. PURPOSE

This document is a  policy-level,  project level Initial Study for evaluation of potential environmental impacts resulting with the proposed Conditional Use Permits #20-0009, 0010, 0011 & 0012 (Refer to Exhibit "A" & "B"). For purposes of this document, the Conditional Use Permit will be called the "proposed project".

### B. CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) REQUIREMENTS AND THE IMPERIAL COUNTY'S GUIDELINES FOR IMPLEMENTING CEQA

As defined by Section 15063 of the State California Environmental Quality Act (CEQA) Guidelines and Section 7 of the County's "CEQA Regulations Guidelines for the Implementation of CEQA, as amended", an **Initial Study** is prepared primarily to provide the Lead Agency with information to use as the basis for determining whether an Environmental Impact Report (EIR), Negative Declaration, or Mitigated Negative Declaration would be appropriate for providing the necessary environmental documentation and clearance for any proposed project.

According to Section 15065, an **EIR** is deemed appropriate for a particular proposal if the following conditions occur:

- The proposal has the potential to substantially degrade quality of the environment.
- The proposal has the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals.
- The proposal has possible environmental effects that are individually limited but cumulatively considerable.
- The proposal could cause direct or indirect adverse effects on human beings.

According to Section 15070(a), a **Negative Declaration** is deemed appropriate if the proposal would not result in any significant effect on the environment.

According to Section 15070(b), a **Mitigated Negative Declaration** is deemed appropriate if it is determined that though a proposal could result in a significant effect, mitigation measures are available to reduce these significant effects to insignificant levels.

This Initial Study has determined that the proposed applications will not result in any potentially significant environmental impacts and therefore, a Negative Declaration is deemed as the appropriate document to provide necessary environmental evaluations and clearance as identified hereinafter.

This Initial Study and Negative Declaration are prepared in conformance with the California Environmental Quality Act of 1970, as amended (Public Resources Code, Section 21000 et. seq.); Section 15070 of the State & County of Imperial's Guidelines for Implementation of the California Environmental Quality Act of 1970, as amended (California Code of Regulations, Title 14, Chapter 3, Section 15000, et. seq.); applicable requirements of the County of Imperial; and the regulations, requirements, and procedures of any other responsible public agency or an agency with jurisdiction by law.

Pursuant to the County of Imperial Guidelines for Implementing CEQA, depending on the project scope, the County

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of Imperial Board of Supervisors, Planning Commission and/or Planning Director is designated the Lead Agency, in accordance with Section 15050 of the CEQA Guidelines. The Lead Agency is the public agency which has the principal responsibility for approving the necessary environmental clearances and analyses for any project in the County.

### **C. INTENDED USES OF INITIAL STUDY AND NEGATIVE DECLARATION**

This Initial Study and Negative Declaration are informational documents which are intended to inform County of Imperial decision makers, other responsible or interested agencies, and the general public of potential environmental effects of the proposed applications. The environmental review process has been established to enable public agencies to evaluate environmental consequences and to examine and implement methods of eliminating or reducing any potentially adverse impacts. While CEQA requires that consideration be given to avoiding environmental damage, the Lead Agency and other responsible public agencies must balance adverse environmental effects against other public objectives, including economic and social goals.

The Initial Study and Negative Declaration, prepared for the project will be circulated for a period of 20 days (30-days if submitted to the State Clearinghouse for a project of area-wide significance) for public and agency review and comments. At the conclusion, if comments are received, the County Planning & Development Services Department will prepare a document entitled "Responses to Comments" which will be forwarded to any commenting entity and be made part of the record within 10-days of any project consideration.

### **D. CONTENTS OF INITIAL STUDY & NEGATIVE DECLARATION**

This Initial Study is organized to facilitate a basic understanding of the existing setting and environmental implications of the proposed applications.

#### **SECTION 1**

**I. INTRODUCTION** presents an introduction to the entire report. This section discusses the environmental process, scope of environmental review, and incorporation by reference documents.

#### **SECTION 2**

**II. ENVIRONMENTAL CHECKLIST FORM** contains the County's Environmental Checklist Form. The checklist form presents results of the environmental evaluation for the proposed applications and those issue areas that would have either a significant impact, potentially significant impact, or no impact.

**PROJECT SUMMARY, LOCATION AND ENVIRONMENTAL SETTINGS** describes the proposed project entitlements and required applications. A description of discretionary approvals and permits required for project implementation is also included. It also identifies the location of the project and a general description of the surrounding environmental settings.

**ENVIRONMENTAL ANALYSIS** evaluates each response provided in the environmental checklist form. Each response checked in the checklist form is discussed and supported with sufficient data and analysis as necessary. As appropriate, each response discussion describes and identifies specific impacts anticipated with project implementation.

#### **SECTION 3**

**III. MANDATORY FINDINGS** presents Mandatory Findings of Significance in accordance with Section 15065 of the CEQA Guidelines.

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**IV. PERSONS AND ORGANIZATIONS CONSULTED** identifies those persons consulted and involved in preparation of this Initial Study and Negative Declaration.

**V. REFERENCES** lists bibliographical materials used in preparation of this document.

**VI. NEGATIVE DECLARATION – COUNTY OF IMPERIAL**

**VII. FINDINGS**

**SECTION 4**

**VIII. RESPONSE TO COMMENTS (IF ANY)**

**IX. MITIGATION MONITORING & REPORTING PROGRAM (MMRP) (IF ANY)**

**E. SCOPE OF ENVIRONMENTAL ANALYSIS**

For evaluation of environmental impacts, each question from the Environmental Checklist Form is summarized and responses are provided according to the analysis undertaken as part of the Initial Study. Impacts and effects will be evaluated and quantified, when appropriate. To each question, there are four possible responses, including:

1. **No Impact:** A "No Impact" response is adequately supported if the impact simply does not apply to the proposed applications.
2. **Less Than Significant Impact:** The proposed applications will have the potential to impact the environment. These impacts, however, will be less than significant; no additional analysis is required.
3. **Less Than Significant With Mitigation Incorporated:** This applies where incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact".
4. **Potentially Significant Impact:** The proposed applications could have impacts that are considered significant. Additional analyses and possibly an EIR could be required to identify mitigation measures that could reduce these impacts to less than significant levels.

**F. POLICY-LEVEL or PROJECT LEVEL ENVIRONMENTAL ANALYSIS**

This Initial Study and Negative Declaration will be conducted under a  policy-level,  project level analysis. Regarding mitigation measures, it is not the intent of this document to "overlap" or restate conditions of approval that are commonly established for future known projects or the proposed applications. Additionally, those other standard requirements and regulations that any development must comply with, that are outside the County's jurisdiction, are also not considered mitigation measures and therefore, will not be identified in this document.

**G. TIERED DOCUMENTS AND INCORPORATION BY REFERENCE**

Information, findings, and conclusions contained in this document are based on incorporation by reference of tiered documentation, which are discussed in the following section.

**1. Tiered Documents**

As permitted in Section 15152(a) of the CEQA Guidelines, information and discussions from other documents can be included into this document. Tiering is defined as follows:

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"Tiering refers to using the analysis of general matters contained in a broader EIR (such as the one prepared for a general plan or policy statement) with later EIRs and negative declarations on narrower projects; incorporating by reference the general discussions from the broader EIR; and concentrating the later EIR or negative declaration solely on the issues specific to the later project."

Tiering also allows this document to comply with Section 15152(b) of the CEQA Guidelines, which discourages redundant analyses, as follows:

"Agencies are encouraged to tier the environmental analyses which they prepare for separate but related projects including the general plans, zoning changes, and development projects. This approach can eliminate repetitive discussion of the same issues and focus the later EIR or negative declaration on the actual issues ripe for decision at each level of environmental review. Tiering is appropriate when the sequence of analysis is from an EIR prepared for a general plan, policy or program to an EIR or negative declaration for another plan, policy, or program of lesser scope, or to a site-specific EIR or negative declaration."

Further, Section 15152(d) of the CEQA Guidelines states:

"Where an EIR has been prepared and certified for a program, plan, policy, or ordinance consistent with the requirements of this section, any lead agency for a later project pursuant to or consistent with the program, plan, policy, or ordinance should limit the EIR or negative declaration on the later project to effects which:

- (1) Were not examined as significant effects on the environment in the prior EIR; or
- (2) Are susceptible to substantial reduction or avoidance by the choice of specific revisions in the project, by the imposition of conditions, or other means."

## 2. Incorporation By Reference

Incorporation by reference is a procedure for reducing the size of EIRs/MND and is most appropriate for including long, descriptive, or technical materials that provide general background information, but do not contribute directly to the specific analysis of the project itself. This procedure is particularly useful when an EIR or Negative Declaration relies on a broadly-drafted EIR for its evaluation of cumulative impacts of related projects (*Las Virgenes Homeowners Federation v. County of Los Angeles* [1986, 177 Ca.3d 300]). If an EIR or Negative Declaration relies on information from a supporting study that is available to the public, the EIR or Negative Declaration cannot be deemed unsupported by evidence or analysis (*San Francisco Ecology Center v. City and County of San Francisco* [1975, 48 Ca.3d 584, 595]). This document incorporates by reference appropriate information from the "Final Environmental Impact Report and Environmental Assessment for the "County of Imperial General Plan EIR" prepared by Brian F. Mooney Associates in 1993 and updates.

When an EIR or Negative Declaration incorporates a document by reference, the incorporation must comply with Section 15150 of the CEQA Guidelines as follows:

- The incorporated document must be available to the public or be a matter of public record (CEQA Guidelines Section 15150[a]). The General Plan EIR and updates are available, along with this document, at the County of Imperial Planning & Development Services Department, 801 Main Street, El Centro, CA 92243 Ph. (442) 265-1736.
- This document must be available for inspection by the public at an office of the lead agency (CEQA Guidelines Section 15150[b]). These documents are available at the County of Imperial Planning & Development Services Department, 801 Main Street, El Centro, CA 92243 Ph. (442) 265-1736.

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- These documents must summarize the portion of the document being incorporated by reference or briefly describe information that cannot be summarized. Furthermore, these documents must describe the relationship between the incorporated information and the analysis in the tiered documents (CEQA Guidelines Section 15150[c]). As discussed above, the tiered EIRs address the entire project site and provide background and inventory information and data which apply to the project site. Incorporated information and/or data will be cited in the appropriate sections.
  - These documents must include the State identification number of the incorporated documents (CEQA Guidelines Section 15150[d]). The State Clearinghouse Number for the County of Imperial General Plan EIR is SCH #93011023.
  - The material to be incorporated in this document will include general background information (CEQA Guidelines Section 15150[f]). This has been previously discussed in this document.

## II. Environmental Checklist

1. **Project Title:** Conditional Use Permits #20-0009, 0010, 0011 & 0012, Ron Pratte
2. **Lead Agency:** Imperial County Planning & Development Services Department
3. **Contact person and phone number:** Joe Hernandez, Planner IV, (442)265-1736, ext. 1748
4. **Address:** 801 Main Street, El Centro CA, 92243
5. **E-mail:** joehernandez@co.imperial.ca.us
6. **Project location:** 6626 Evan Hewes Highway, Winterhaven, CA 92283
7. **Project sponsor's name and address:** Ron Pratte  
4450 W. Earhart Way,  
Chandler, ZA 85226
8. **General Plan designation:** Recreation/Open Space
9. **Zoning:** S-2 (Open Space/Preservation)

**10. Description of project:** Applicant is requesting an increase (see table 2 below) in the current permitted water allocation per CUP's #10-0018, #10-0021, and #1205-96(B) and the approval for a new well, for a total allocation of 1,000 acre-feet of water yearly. The project is located at 6626 E Evan Hewes Hwy, Winterhaven CA 92283. The current use of the water includes domestic for residential structures, dust suppression, irrigation, and for restaurant. Dust suppression has been the most significant use given the arid sandy open desert location and the fact that there are extensive travel areas within this project area.

The project site has secured a number of Conditional Use Permits over time. The following represent those currently in effect:

Table 1:

CUP	Recording Date	APN	Area	Acre feet/year	Zoning
CUP #10-0018	09/28/2010	056-210-063-000	186.5 ac. parcel	15	S-2
CUP #10-0021	09/28/2010	056-210-067-000	24.5 ac. parcel	25	S-2
CUP #1205-96 (B)	07/18/1996	056-210-066-000	6.65 ac. parcel	5	S-2

The project was initially submitted under CUP 19-0022 under the same proposed location and use, however, given the fact that a parcel may be segregated or sold, applicant resubmitted under Conditional Use Permit #20-0009, 0010, 0011 & 0012 the following methodology to allocate quantities to each well while not exceeding the aggregate total of 1,000 acre feet per year for all four wells. These allocations are only for limiting the wells should they become under separate ownership. While owned by the same owner, the 1,000 acre feet per year shall be the governing control:

Table 2:

Existing CUP	Proposed CUP	APN & Area	Site description	Proposed use	Existing Ac. ft./yr.	Proposed Ac. ft./yr.
#10-0018	#20-0010	056-210-063-000 186.5 ac.	Primary Residence	Domestic, dust control, landscape, agricultural	15	200
#10-0021	#20-0012	056-210-067-000 24.5 ac.	Caretakers Residence	Domestic, dust control, landscape, agricultural	25	140
#1205-96 (B)	#20-0011	056-210-066-000 6.65 ac.	Restaurant parcel	Restaurant and dust control	5	20
N/A New well	#20-0009	056-210-044-000 40 ac.	Currently Vacant	Dust control, Agricultural.	N/A	640

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The owner is proposing to have flexibility to use more or less than estimated above, as long as all parcels are owed by the same owner and not exceeding the aggregate total of 1,000 ac. ft./yr.; however, in the event any of the parcels shown above are transferred to different owners, then the maximum allowed for that (sold) APN shown above shall be the amount shown. Additionally, if one of the above parcels is sold, then the aggregate total of 1000 acre feet/year. shall be reduced by the amount for the parcel sold.

Well water from the three existing and new well are proposed to be used on any parcel owned by the Applicant, which includes Assessor's Parcel Numbers 056-210-001, -008, -042, -044, -052, -053, -054, -061, -063, -066, and -067 (the project area), if ownership of any one of the parcels ceased to be under the same ownership, then it shall no longer be entitled to use of water from these wells.

**11. Surrounding land uses and setting:** The proposed project site is located on the north side of Evan Hewes Highway, at a location commonly referred to as Gordons Well on the above-mentioned Assessor's Parcel Numbers. Project's total acreage is 418.36 acres and it is zoned S-2 (Open Space/Preservation). The project site is surrounded by BLM land to the North, East and West; and S-1 (Open Space/Recreation), S-2 (Open Space/Preservation), and BLM to the South. The project site has a restaurant, a communication tower, a primary residence and a caretakers residence.

The Evan Hewes Highway is located South of the proposed project site, and further South the All American Canal. Overall, the project site is surrounded by desert landscape.

**12. Other public agencies whose approval is required** (e.g., permits, financing approval, or participation agreement.): Planning Commission, Imperial County Public Works Department, Imperial County Fire Department, Imperial County Air Pollution Control District (ICAPCD), Imperial Irrigation District (IID).

**13. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1?**

The AB 52 Notice of Opportunity to consult on the proposed project letter was initially sent mailed via certified mail on October 10, 2019 for CUP #19-0022; to President Jordan D. Joaquin, from the Quechan Indian Tribe, on email received on October 17, 2019, the Quechan Historic Preservation Officer stated that the Tribe did not wish to make any comments on this project. CUP #19-0022 is for the same land as CUPs #20-0009, 20-0010, 20-0011 & 20-0012 and subsequently on August 8, 2020, an email from Quechan Indian Tribe was received stating that they have no comment on this project.

**ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:**

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Aesthetics                | <input type="checkbox"/> Agriculture and Forestry Resources | <input type="checkbox"/> Air Quality                        |
| <input type="checkbox"/> Biological Resources      | <input type="checkbox"/> Cultural Resources                 | <input type="checkbox"/> Energy                             |
| <input type="checkbox"/> Geology /Soils            | <input type="checkbox"/> Greenhouse Gas Emissions           | <input type="checkbox"/> Hazards & Hazardous Materials      |
| <input type="checkbox"/> Hydrology / Water Quality | <input type="checkbox"/> Land Use / Planning                | <input type="checkbox"/> Mineral Resources                  |
| <input type="checkbox"/> Noise                     | <input type="checkbox"/> Population / Housing               | <input type="checkbox"/> Public Services                    |
| <input type="checkbox"/> Recreation                | <input type="checkbox"/> Transportation                     | <input type="checkbox"/> Tribal Cultural Resources          |
| <input type="checkbox"/> Utilities/Service Systems | <input type="checkbox"/> Wildfire                           | <input type="checkbox"/> Mandatory Findings of Significance |

**ENVIRONMENTAL EVALUATION COMMITTEE (EEC) DETERMINATION**

After Review of the Initial Study, the Environmental Evaluation Committee has:

- Found that the proposed project **COULD NOT** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.
- Found that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A **MITIGATED NEGATIVE DECLARATION** will be prepared.
- Found that the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.
- Found that the proposed project **MAY** have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed.
- Found that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or **NEGATIVE DECLARATION** pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or **NEGATIVE DECLARATION**, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE DE MINIMIS IMPACT FINDING:  Yes  No

<u>EEC VOTES</u>	<u>YES</u>	<u>NO</u>	<u>ABSENT</u>
PUBLIC WORKS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ENVIRONMENTAL HEALTH SVCS	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
OFFICE EMERGENCY SERVICES	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
APCD	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
AG	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
SHERIFF DEPARTMENT	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ICPDS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*for [Signature]*  
 Jim Minnick, Director of Planning/EEC Chairman

*11-20-2020*  
 Date:

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## PROJECT SUMMARY

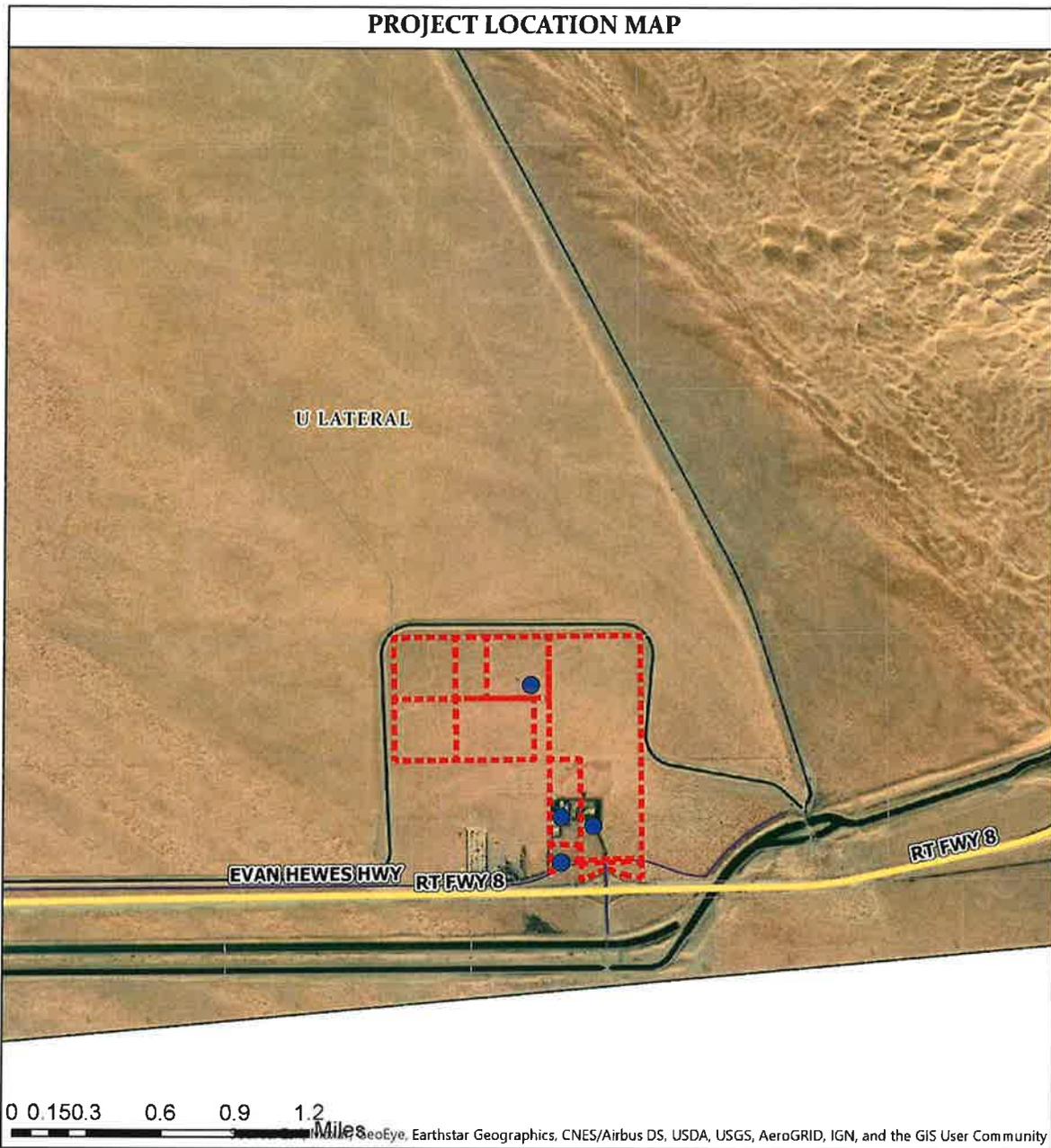
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- A. Project Location:** The proposed project site is located on the north side of Evan Hewes Highway, at a location commonly referred to as Gordons Well on Assessor's Parcel Numbers 056-210-001, -008, -042, -044, -052, -053, -054, -061, -063, -066, and -067. Project's total acreage is 418.36 acres and it is zoned S-2 (Open Space/Preservation).
- B. Project Summary:** Applicant is requesting an increase in the current permitted water allocation per CUP's #10-0018, #10-0021, and #1205-96(B) and the approval for a new well, for a total allocation of 1000 acre-feet of water yearly.
- C. Environmental Setting:** The project site has a restaurant, a communication tower, a primary residence, a caretakers residence and accessory structures. The site is surrounded by BLM land to the North, East and West; and S-1 (Open Space/Recreation), S-2 (Open Space/Preservation), and BLM to the South. The Evan Hewes Highway is located South of the proposed project site, and further South the All American Canal. Overall, the project site is surrounded by desert landscape.
- D. Analysis:** A Final Draft Groundwater Extraction Feasibility Analysis and Hydrogeologic Report<sup>1</sup> was prepared by a registered geologist, according to the report, while the proposed extraction of 1,000 AFY is not expected to drawdown the water table significantly over the next 20 years, groundwater pumped from wells at the Project site is extracted from the aquifer that is naturally replenished by the Colorado River, and that consumption shall be considered subject to the Law of the River (Colorado River Compact of 1922 and amendments).
- E. General Plan Consistency:** Under the Land Use Element of the Imperial County General Plan, the project site is designated as "Recreation/Open Space", and it is zoned S-2 (Open Space/Preservation). The proposed project could be considered consistent with the General Plan since the drilling and operation water well is a permitted use with an approved Conditional Use Permit in the S-2 (Open Space/Preservation) zone, provided it complies with all other applicable local, State, or Federal regulations and/or requirements (i.e. Law of the River)

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<sup>1</sup> Final Draft Groundwater Extraction Feasibility Analysis and Hydrogeologic Report, Dudek 2020

# Exhibit "A" Vicinity Map



**GORDON'S WELL II**  
**CUP #20-0009 , 20-0010, 20-0011 & 20-0012**  
**INITIAL STUDY #20-0026**  
**APN 056-210-001, 008, 042, 044, 052, 053, 061, 063, 066 AND 067-000**

	HIGHWAYS
	PROJECT LOCATION
	WATER WELL



# Exhibit "B" Site Plan



SEC. 36, T. 16S., R. 10E.

Tax Area Code  
94-0072

56-21

Assessor's Map BK. 55-Pg. 21  
County of Imperial, Calif.

**RECLAIMER**  
THIS IS NOT AN OFFICIAL MAP  
THIS MAP WAS CREATED FOR THE PURPOSE OF PROVIDING  
INFORMATION FOR THE PUBLIC AND IS NOT TO BE USED FOR  
ANY OTHER PURPOSE. THE OFFICE OF THE ASSessor  
MAKES NO WARRANTY AS TO THE ACCURACY OF THE INFORMATION  
HEREON.

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## EVALUATION OF ENVIRONMENTAL IMPACTS:

- 1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
  - a) Earlier Analysis Used. Identify and state where they are available for review.
  - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
  - c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- 9) The explanation of each issue should identify:
  - a) the significance criteria or threshold, if any, used to evaluate each question; and
  - b) the mitigation measure identified, if any, to reduce the impact to less than significance

Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated (PSUMI)	Less Than Significant Impact (LTSI)	No Impact (NI)
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**I. AESTHETICS**

Except as provided in Public Resources Code Section 21099, would the project:

- a) Have a substantial adverse effect on a scenic vista or scenic highway?    

**a) The project site is not located near any designated or eligible scenic vista or scenic highway according to the Imperial County Circulation & Scenic Highway Element<sup>2</sup>; therefore, no substantial adverse effect is expected.**
- b) Substantially damage scenic resources, including, but not limited to trees, rock outcroppings, and historic buildings within a state scenic highway?    

**b) As previously stated, the proposed project is not located near a Scenic vista or Scenic Highway and would not substantially damage scenic resources. Therefore, no impact is expected.**
- c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surrounding? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?    

**c) The proposed project would not substantially physically degrade the environment since there is an existing facility and the proposed project is for new water well and an increment in the water extraction of the existing water wells. Less than significant impacts are expected.**
- d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?    

**d) The proposed water well would not appear to create a new source of substantial light or glare which would affect day or nighttime view in the area. However, less than significant impacts are expected.**

**II. AGRICULTURE AND FOREST RESOURCES**

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. --Would the project:

- a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?    

**a) The proposed project is located in the "Recreational /Open Space" area as designated by the General Plan's Land Use Element. The project site pursuant to the 2016 Imperial County Important Farmland Map consist of, Unique Farmland, Urban and Buildup land, and Other lands. The proposed new well proposes dust control and agriculture for the proposed uses and lie within the Unique Farmland and Other land designation. Agriculture uses are permitted in the Open Space/Recreation category. Therefore, the proposed project is not expected to convert existing designated farmland to non-agriculture use; however, less than significant impact would be expected.**
- b) Conflict with existing zoning for agricultural use, or a Williamson Act Contract?

<sup>2</sup> Imperial County General Plan Circulation & Scenic Highway Element

	Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated (PSUMI)	Less Than Significant Impact (LTSI)	No Impact (NI)
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**b)** The proposed project site is designated Recreation/Open Space on the Imperial County Land Use Plan Map<sup>3</sup> and Zoned S-2 (Open Space/Preservation) which allows for crop and tree farming; and as mentioned above under item a), most of the scope of work involves agricultural use. Additionally, the proposed project's parcel is designated as "Non-Enrolled Land" per the California Department of Conservation Imperial County Williamson Act FY 2016/2017 Map<sup>4</sup>, therefore, no impacts are expected.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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**c)** The Imperial County General Plan Land Use Map designates this parcel as "Recreation/Open Space", and no forest land is near the vicinity of the project. The proposed project will not conflict with the existing zoning and will not cause rezoning of forest land, timber land, or Timberland Production; therefore, no impact is expected to occur.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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**d)** As previously stated in item c) above, the proposed project will not result in the loss of forest land or conversion of forest land to non-forest use. Therefore, no impacts are expected.

e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**e)** This parcel is designated as "Unique Farmland, Urban and Built-Up land, and Other Land" and a major scope of work involves agricultural use and dust suppression as stated previously above under item a), therefore no change of Farmland to non-agricultural use, or forest land to non-forest use is expected. Any impacts are expected to be less than significant.

**iii. AIR QUALITY**

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to the following determinations. Would the Project:

a) Conflict with or obstruct implementation of the applicable air quality plan?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**a)** Per Imperial County Air Pollution Control District comment letter dated August 19, 2020, all earthmoving and construction activities must adhere to regulation VIII which is designed to mitigate fugitive dust during construction activities. Also, if any generators above 50 horsepower are used on site either during construction or operation, the applicant needs to secure the proper permit from the Air District's Engineering and Permitting Division. Compliance with ICAPDC regulations is expected to bring any impacts to less than significant.

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**b)** The proposed project is to increase the water extraction to 1,000 acre-feet a year and to drill and operate a new well for a total of four wells on site. As commented above under item a), adherence to ICAPDC rules and regulations would reduce impact to less than significant.

<sup>3</sup> Imperial County Land Use Plan Map

<sup>4</sup> Imperial County Williamson Act FY 2016/2017 [ftp://ftp.consrv.ca.gov/pub/dlrp/wa/Imperial\\_16\\_17\\_WA.pdf](http://ftp.consrv.ca.gov/pub/dlrp/wa/Imperial_16_17_WA.pdf)

	Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated (PSUMI)	Less Than Significant Impact (LTSI)	No Impact (NI)
c) Expose sensitive receptors to substantial pollutants concentrations? <b>c) The proposed Project is in a remote location and due to the nature of the project (water extraction thru four wells) and is not expected to expose sensitive receptors to substantial pollutants concentrations. Compliance with APCD rules and regulations would bring any impact to less than significant levels.</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? <b>d) The proposed project does not anticipate in creating objectionable odors affecting a substantial number of people as it is located in a remote location. As stated above under item a), compliance with APCD regulations would bring any impact to less than significant levels.</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

IV. **BIOLOGICAL RESOURCES** *Would the project:*

- a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?  
**a) The proposed project site is located within disturbed land and does not appear to have any substantial adverse effect on any sensitive species, riparian habitat, wetlands, or migratory species. However, less than significant impacts would be expected.**
- b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?  
**b) As mentioned above, under item a), the proposed project is located within disturbed land and would not appear to create a substantial adverse effect on any riparian habitat or other sensitive natural community. Less than significant impacts would be expected.**
- c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?  
**c) The proposed project is not located in protected wetlands and per Dudek (2020), there are no potential groundwater dependent ecosystems (GDEs) mapped in the immediate vicinity of the Project site. Any impacts would be would appear to be less than significant.**
- d) Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?  
**d) The proposed project site is located on disturbed land and does not appear to not substantially interfere with movement of any resident or migratory fish or wildlife species or impede the use of native wildlife nursery sites. The impact would appear to be less than significant.**
- e) Conflict with any local policies or ordinance protecting biological resource, such as a tree preservation policy or ordinance?  
**e) The proposed project is in a disturbed parcel and it is not located within an Agency-Designated Habitat area per Imperial County Conservation & Open Space Element, Figure 3 "Agency-Designated Habitats", therefore, it is not likely it would conflict with any local policy or ordinances protecting biological resources, such as a tree preservation policy or ordinance. Therefore, less than significant impacts are expected.**

	Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated (PSUMI)	Less Than Significant Impact (LTSI)	No Impact (NI)
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? f) The proposed project site is not located within a habitat conservation plan natural community conservation plan; therefore, no impacts would be expected.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

V. **CULTURAL RESOURCES** *Would the project:*

- |  |                          |                          |                                     |                          |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| a) Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?<br>a) According to the Imperial County General Plan's Conservation and Open Space Element, Figure 5, the area is classified under "1000m buffer around Named Streams and Waterbodies" and under the Fray Francisco Garces Exploration Trail Route (1770-1890), however, per Figure 6 "Known Areas of Native American Cultural Sensitivity" the map does not locate the project within a designated area. Additionally, consultation was requested with the California Native American tribes traditionally and culturally affiliated with the project area. The Quechan Indian Tribe have requested to be consulted under Assembly Bill 52. Consultation expired on October 10, 2019, no comments were received. Thus, the site has development in some of the proposed parcels and no archeological artifacts were reported during construction, if there would be any impact, it would be expected to be less than significant. | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?<br>b) As previously mentioned under item a) above, the proposed project is not likely to cause a substantial change to an archeological resource. Less than significant impacts are expected.  | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) Disturb any human remains, including those interred outside of dedicated cemeteries?<br>c) The proposed project site is not located in a known cemetery, and based on the findings from Figures 5 and 6 from the Conservation and Open Space Element mentioned above under item a), The proposed project is not expected to result in the disturbance of any human remains, including those interred outside of dedicated cemeteries. Less than significant impacts are expected.   | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

VI. **ENERGY** *Would the project:*

- |   |                          |                          |                                     |                          |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|
| a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?<br>a) The consumption of energy associated with the construction of the new well, and subsequent increment in the extraction of water for the proposed project is not considered a wasteful, inefficient or unnecessary use of energy resources. Therefore, any impact is considered to be less than significant. | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?<br>b) The proposed project would increment the water extraction of the existing wells and includes the construction and operation of a new well, however the project is not expected to conflict or obstruct a state or local plan for renewable energy nor is located within a Renewable Energy Overlay Zone <sup>5</sup> . Less than significant impacts are expected.                              | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

<sup>5</sup> Renewable Energy and Transmission Element, County of Imperial General Plan – <http://www.icpds.com/CMS/Media/Renewable-Energy-and-Transmission-Element-2015.pdf>

Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated (PSUMI)	Less Than Significant Impact (LTSI)	No Impact (NI)
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VII. **GEOLOGY AND SOILS** *Would the project:*

- a) Directly or indirectly cause potential substantial adverse effects, including risk of loss, injury, or death involving:
- a) The proposed project does not appear to conflict with the geology and soils of adjacent properties; and subsequently or indirectly cause potential substantial adverse effects, including risk of loss, injury, or death. Less than significant impacts are expected.**
- 1) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42?
- 1) According to Dudek (2020), the project is located within the San Andreas fault system and is located approximately 8 miles east of the Algodones fault and 23 miles west of the Imperial Fault. While there has been no vertical displacement within the Algodones fault, the Imperial fault is considered active; therefore, the site could be affected by the occurrence of seismic activity, in similitude to the surrounding parcels. Any proposed construction shall be in compliance with the California Building Code in order to reduce the risk to a level less than significant.**
- 2) Strong Seismic ground shaking?
- 2) The proposed project and any proposed construction may be affected by strong seismic ground shake in the event of an earthquake, therefore, the applicant will be require to comply with the California Building Code, said measures would assure that the impacts of the projects would be less than significant.**
- 3) Seismic-related ground failure, including liquefaction and seiche/tsunami?
- 3) As stated above under item 2), any proposed construction will require to comply with the California Building Code, which would assure that the impacts of the projects would be less than significant. Additionally, the project is not located in a Tsunami inundation area according to the California Official Tsunami Inundation Maps<sup>6</sup>, no impacts are expected related to a seiche or tsunami.**
- 4) Landslides?
- 4) The proposed project is not located within a Landslide Activity area according to the Imperial County Seismic and Public Safety Element<sup>7</sup>, Figure 2 (Landslide Activity). The topography within the project site is generally flat, and therefore will not be directly or indirectly affected by a landslide. No impacts are expected.**
- b) Result in substantial soil erosion or the loss of topsoil?
- b) The proposed project is not located within an area of substantial soil erosion according to Imperial County Seismic and Public Safety Element, Figure 3 (Erosion Activity). Less than significant impacts are expected.**
- c) Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in on- or off-site landslides, lateral spreading, subsidence, liquefaction or collapse?
- c) According to Dudek (2020), the proposed project location and relation to the infrastructure of the All American Canal is a matter of concern. Inelastic land subsidence is a permanent**

7. Department of Conservation Tsunami Inundation Maps - <http://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=tsunami>

8. Imperial County Public Safety Element - <http://www.icpds.com/CMS/Media/Seismic-and-Public-Safety-Element.pdf>

Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated (PSUMI)	Less Than Significant Impact (LTSI)	No Impact (NI)
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lowering of the ground surface due to compaction of the geologic materials caused by groundwater extraction. The geologic material of well 16S/19E-36P01S (RV Park Well 1 or Gordon's Well #1, the nearest well to the Project area) consists of sand and gravel up to ¼-inch in size to a depth of 125 feet bgs. Clay and sand occurs from a depth of 125 feet to 140 feet, and sand and small boulders occur from 140 feet below ground surface (bgs) to the total depth of the well at 228 feet bgs. Based on this geologic material, subsidence is only likely in clay material below 125 feet bgs. Because groundwater levels in the Project area due to Project pumping will be above 125 feet bgs where compaction could potentially occur, subsidence is unlikely. Therefore, impacts are expected to be less than significant.

- d) Be located on expansive soil, as defined in the latest Uniform Building Code, creating substantial direct or indirect risk to life or property?

**d)** As mentioned above, under item c), according to Dudek (2020), the geologic material on well #1 consists of sand and gravel up to ¼-inch in size to a depth of 125 feet bgs, however, clay and sand occurs from a depth of 125 feet to 140 feet. Clay can be highly expansive; however, compliance with the California Building Code (CBC) seismic coefficients for design and construction of the new well would assure that any impacts would be reduce to less than significant.

- e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

**e)** The proposed project does not include septic tanks or alternative waste water disposal systems from those that already exist. Less than significant impacts are expected.

- f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

**f)** The proposed project is not known to be located within a unique paleontological resource or site or unique geologic feature. Less than significant impacts are expected.

VIII. **GREENHOUSE GAS EMISSION** *Would the project:*

- a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

**a)** Greenhouse gas emissions are expected to be generated during the construction of the new well, however it is not expected that the emissions generated may have a significant impact on the environment. As commented above under Section III "Air Quality", the proposed project will adhere to ICAPCD rules and regulations, such adherence is expected to bring any impacts to less than significant levels.

- b) Conflict with an applicable plan or policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

**b)** The proposed project is not expected to conflict with an applicable plan or policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. Compliance with ICAPCD rules and regulations is expected to bring any impacts to less than significant levels.

Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated (PSUMI)	Less Than Significant Impact (LTSI)	No Impact (NI)
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IX. **HAZARDS AND HAZARDOUS MATERIALS** *Would the project:*

- |   |                          |                          |                                     |                                     |
|---|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?<br><b>a) The project does not propose to routinely transport, use, or dispose of any hazardous materials. No impacts are expected.</b>  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| b) Create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment?<br><b>b) The proposed project is not expected to create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment as no hazardous materials are involved in the construction and operation of the wells. No impacts are expected.</b>  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?<br><b>c) The proposed project is not located within ¼ mile of a school, thus, the project is not expected to emit hazardous emissions, materials, substances or waste; therefore, no are expected.</b>  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| d) Be located on a site, which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?<br><b>d) The proposed project site is not located on a site included on a list of hazardous material sites<sup>8</sup>; therefore, less than significant impacts are expected.</b>  | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?<br><b>e) The proposed project is not located within an airport land use plan, or within two miles of a public airport or public use airport. Holtville Municipal Airport is approximately 20 miles northwest of the proposed project. Therefore, it would not result in a safety hazard for people residing or working in the project area; therefore, no impact is expected.</b>         | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?<br><b>f) The proposed project is not expected to interfere with an adopted emergency response plan or emergency evacuation plan. No impact is expected.</b>   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?<br><b>g) The proposed project site is located within the "LRA Moderate Fire Hazard Severity Zone" according to the California Department of Forestry and Fire Protection "Draft Fire Hazard Severity Zones in the LRA" Map of Imperial County<sup>9</sup>. The site has a 10,000 gallon tank for Fire protection. Therefore, any impact related to expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires is considered to be less than significant.</b> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |

<sup>8</sup> EnviroStor Database <http://www.envirostor.dpsc.ca.gov/public/>

<sup>9</sup> California Department of Forestry and Fire Protection "Draft Fire Hazard Severity Zones in the LRA" Map of Imperial County

Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated (PSUMI)	Less Than Significant Impact (LTSI)	No Impact (NI)
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X. **HYDROLOGY AND WATER QUALITY** *Would the project:*

- a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

**a)** According to Dudek (2020), groundwater quality in the East Mesa GMA is generally regarded as moderate to poor and has been locally influenced by seepage from the old unlined reaches of the Coachella and All-American canals. Data indicate that in general, specific conductance, TDS, and sulfate are commonly measured at levels that exceed California recommended secondary drinking water standards in wells nearby the Project site. As local aquifer properties likely vary from those used in the Groundwater Extraction Feasibility Analysis and Hydrogeologic Report, the following items are recommended:

1. Pumping tests to be conducted for existing and or new Project production wells to determine site-specific values for transmissivity and storativity. These site specific values should be used to update the impact analysis presented in Dudek (2020) report. In addition, baseline water quality samples should be collected from Project wells for general minerals, and nitrate, fluoride, sulfate, boron, and selenium, which have been identified as potential contaminants of concern in the Imperial Valley Groundwater Basin.
2. A Project annually report production, and groundwater level and groundwater quality data will be a condition of the CUP.
3. The production and groundwater level data shall be recorded on a monthly frequency and a water quality shall be analyzed semi-annually in the spring and fall. Groundwater quality results should be evaluated for trend and compared to available Colorado River water quality above Imperial Dam.

It is anticipated that compliance with Dudek (2020) recommendations would bring impacts to less than significant levels.

- b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

**b)** Per Dudek (2020), while the proposed extraction of 1,000 AFY is not expected to drawdown the water table significantly over the next 20 years, groundwater pumped from wells at the Project site is extracted from the aquifer that is naturally replenished by the Colorado River according to the Colorado River Accounting Surface Method, and therefore, the proposed project water consumption shall be considered subject to the Law of the River (Colorado River Compact of 1922 and amendments). Project compliance with the Law of the River would bring impacts to less than significant levels.

- c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

**c)** The proposed project is for the extraction of 1000 acre feet a year from three existing water wells and a proposed new well which is not expected to substantially alter the existing drainage patterns of the site or area; however, any grading will require that a grading/drainage plan to be submitted to the Imperial County Department of Public Works. Any impacts would appear to be less than significant.

	Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated (PSUMI)	Less Than Significant Impact (LTSI)	No Impact (NI)
(i) result in substantial erosion or siltation on- or off-site;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>(i) As mentioned above under item c), the proposed project would require a grading/drainage permit for any grading. Any impacts would however, appear to be less than significant.</b>				
(ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>(ii) As mentioned above under item c), the proposed project will require a drainage/grading permit for any proposed grading. Any impact would appear to be less than significant.</b>				
(iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or;	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>(iii) The proposed project is not expected to exceed the capacity of existing or planned stormwater drainage system. As mention under item c) above, a drainage/grading plan will be required. Any impact would appear to be less than significant.</b>				
(iv) impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>(iv) The proposed project is located within Zone "X" per Federal Emergency Agency's Flood Insurance Rate Map Panel 06025C2200C. Therefore, less than significant impacts are expected.</b>				
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>d) The project site is not located within a Tsunami Inundation Area according to the Department of Conservation and as previously stated, it is located in an area of minimal flooding; therefore, it is not likely it would expose people or structures to a significant risk release of pollutants due to project inundation. Less than significant impacts are expected.</b>				
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>e) According to Dudek (2020), the Imperial Valley Groundwater Basin is not adjudicated and is designated by California Department of Water Resources (DWR) as having a very low priority in regards to enacting the Sustainable Groundwater Management Act (SGMA). Therefore, the Basin was not required to prepare a Groundwater Sustainability Plan (GSP) at this time. Additionally, according to Dudek (2020), the proposed extraction of 1,000 Acre feet of water is not expected to drawdown the water table significantly over the next 20 years, and as mentioned above under item b) it will be subject to the Law of the River. Therefore, less than significant impacts are expected.</b>				

XI. **LAND USE AND PLANNING** *Would the project:*

- |  |                          |                          |                                     |                                     |
|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Physically divide an established community?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| <b>a) The proposed project will not physically divide an established community; therefore, no impact is expected.</b>  |                          |                          |                                     |                                     |
| b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?   | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| <b>b) The proposed Project is consistent with the existing land use designation which allows for crop and tree farming within the S-2 zone, and per Dudek (2020) it will also be subject to the Law of the River; therefore, conflicts with an applicable land use plan are considered less than significant provided such compliance is obtained.</b> |                          |                          |                                     |                                     |

Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated (PSUMI)	Less Than Significant Impact (LTSI)	No Impact (NI)
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XII. **MINERAL RESOURCES** *Would the project:*

- a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

**a)** The proposed project does not include the removal of mineral resources and it is not located within the boundaries of an active mine per Imperial County General Plan's Conservation and Open Space Element, Figure 8 "Existing Mineral Resources". Less than significant impacts are expected.

- b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

**b)** The proposed project will not result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. Less than significant impacts are expected.

XIII. **NOISE** *Would the project result in:*

- a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

**a)** The proposed project is not expected to generate a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. Additionally, the proposed project would continue to be subject to the Noise Standards, as set out in the Noise Element of the Imperial County General Plan, Noise Standards compliance would make any impacts to be less than significant.

- b) Generation of excessive groundborne vibration or groundborne noise levels?

**b)** Ground borne vibration is typically associated with activities such as drilling and construction of the proposed well, however, these activities are temporary and once the new well is completed, they are expected to cease. Additionally, the proposed project would continue to be subject to the Noise Standards during construction and operation of the wells, as set out in the County's General Plan. Less than significant impacts are expected.

- c) For a project located within the vicinity of a private airstrip or an airport land use plan or where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

**c)** The proposed project site is not within the vicinity of a private airstrip Therefore; no impacts are expected.

XIV. **POPULATION AND HOUSING** *Would the project:*

- a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and business) or indirectly (for example, through extension of roads or other infrastructure)?

**a)** The proposed project anticipate a new agricultural use, however it is not expected to induce substantial unplanned population growth in the area either directly or indirectly, no new residences, or road extensions are proposed. Therefore, impacts are expected to be less than significant.

	Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated (PSUMI)	Less Than Significant Impact (LTSI)	No Impact (NI)
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- b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

**b) The proposed project will not displace substantial numbers of people necessitating the construction or replacement housing elsewhere. Therefore, no impact is expected.**

**XV. PUBLIC SERVICES**

- a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

**a) The proposed project is not expected to result in substantial adverse physical impacts associated with potential impacts foreseen on public services. However, any impact would be less than significant.**

- 1) Fire Protection?

**1) The proposed project is not expected to result in substantial impacts on fire protection; any new impacts would be less than significant.**

- 2) Police Protection?

**2) The proposed project is not expected to result in substantial impacts on police protection; any new impacts would be less than significant.**

- 3) Schools?

**3) The proposed project is not expected to have a substantial impact on schools. No impacts are expected.**

- 4) Parks?

**4) The proposed project is not expected to create a substantial impact on parks. No impacts are expected.**

- 5) Other Public Facilities?

**5) The proposed project is not expected to impact other public facilities. Therefore, no impacts are expected.**

**XVI. RECREATION**

- a) Would the project increase the use of the existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

**a) The proposed project is not expected to increase the use of the existing neighborhood and regional parks or other recreational facilities. No impact is expected.**

- b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse effect on the environment?

**b) The proposed project does not include or require the construction of recreational facilities. No impacts are expected.**

	Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated (PSUMI)	Less Than Significant Impact (LTSI)	No Impact (NI)
<b>XVII. TRANSPORTATION</b> <i>Would the project:</i>				
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities? <b>a) The proposed project is not expected to conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities. Less than significant impacts are expected.</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Would the project conflict or be inconsistent with the CEQA Guidelines section 15064.3, subdivision (b)? <b>b) The proposed project is not expected to conflict or be inconsistent with the CEQA Guidelines section 15064.3, subdivision (b) as is not expected to have a significant transportation impact within transit priority. Less than significant impacts are expected.</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Substantially increases hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? <b>c) The proposed project does not appear to substantially increase hazards due to design features or incompatible uses. Therefore, no impacts are expected.</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in inadequate emergency access? <b>d) The proposed project is not expected to result in an adequate emergency access. Therefore, no impacts are expected.</b>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**XVIII. TRIBAL CULTURAL RESOURCES**

a) Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place or object with cultural value to a California Native American tribe, and that is:	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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a) As previously stated under item V "Cultural Resources", according to the Imperial County General Plan's Conservation and Open Space Element, Figure 5, the area is classified under "1000m buffer around Named Streams and Waterbodies", however, per Figure 6 "Known Areas of Native American Cultural Sensitivity" the map does not locate the project within a designated area. Additionally, consultation was requested with the California Native American tribes traditionally and culturally affiliated with the project area. The Quechan Indian Tribe sent an email dated October 17, 2019 (under Conditional Use Permit #19-0022) stating that they have no comment. Thus, the site has development in some of the proposed parcels and no archeological artifacts were reported during construction. Therefore any impact would be expected to be less than significant.

(i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as define in Public Resources Code Section 5020.1(k), or	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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**(i) As stated above, under item a), no comments were received from the Quechan Indian Tribe and no archeological artifacts were reported during construction of the existing structures on site; therefore, it is not likely the site would be eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as define in Public Resources Code Section 5020.1(k). Less than significant impacts are expected.**

	Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated (PSUMI)	Less Than Significant Impact (LTSI)	No Impact (NI)
(ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American Tribe.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>ii) It is not likely that the proposed project area would be a significant resource pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. Therefore, less than significant impacts are expected.</b>				

**XIX. UTILITIES AND SERVICE SYSTEMS** *Would the project:*

- |  |                          |                          |                                     |                                     |
|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction of which could cause significant environmental effects?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| <b>a) The proposed project would not result in the relocation or construction of or expand water, wastewater treatment or stormwater drainage, electrical power, natural gas, or telecommunication facilities. No impact are expected.</b>   |                          |                          |                                     |                                     |
| b) Have sufficient water supplies available to serve the project from existing and reasonably foreseeable future development during normal, dry and multiple dry years?  | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| <b>b) According to the Final Draft Groundwater Extraction Feasibility Analysis and Hydrogeologic Report (Dudek dated June 2020), the proposed extraction of 1,000 AFY is not expected to drawdown the water table significantly over the next 20 years, groundwater pumped from well at the project site is extracted from the aquifer that is naturally replenished by the Colorado River, and that consumption shall be considered subject to the law of the River (Colorado River Compact of 1922 and amendments). Therefore, less than significant impacts are expected.</b> |                          |                          |                                     |                                     |
| c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| <b>c) The proposed project does not require a wastewater treatment. The existing structures currently have their appropriate septic system. No impacts are anticipated.</b>  |                          |                          |                                     |                                     |
| d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| <b>d) The proposed project would not appear to generate any solid waste that would impact a local landfill. Therefore, no impact are expected.</b>   |                          |                          |                                     |                                     |
| e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| <b>e) The proposed project does not require a solid waste plan. The project site appears to comply with all federal, state, and local statutes and regulations related to solid waste. No impact are anticipated.</b>  |                          |                          |                                     |                                     |

Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated (PSUMI)	Less Than Significant Impact (LTSI)	No Impact (NI)
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XX. **WILDFIRE**

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project:

- a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

**a) The proposed project is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones according to California Fire Prevention SRA Fee viewer, therefore, no impacts are expected related to substantially impair an adopted emergency response plan or emergency evacuation plan.**

- b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

**b) As previously stated under item a) above, the proposed project is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones, therefore, no impacts are expected related due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire.**

- c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

**c) As previously stated under item a) above, the proposed project is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones, therefore, it would not require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment. Any impact would be less than significant.**

- d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

**d) As previously stated under item a) above, the proposed project is not located in or near state responsibility areas or lands classified as very high fire hazard severity zones, therefore it is not expected to expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. Any impact would be less than significant.**

*Note: Authority cited: Sections 21083 and 21083.05, Public Resources Code. Reference: Section 65088.4, Gov. Code; Sections 21080(c), 21080.1, 21080.3, 21083, 21083.05, 21083.3, 21093, 21094, 21095, and 21151, Public Resources Code; Sundstrom v. County of Mendocino, (1988) 202 Cal.App.3d 296; Leonoff v. Monterey Board of Supervisors, (1990) 222 Cal.App.3d 1337; Eureka Citizens for Responsible Govt. v. City of Eureka (2007) 147 Cal.App.4th 357; Protect the Historic Amador Waterways v. Amador Water Agency (2004) 116 Cal.App.4th at 1109; San Franciscans Upholding the Downtown Plan v. City and County of San Francisco (2002) 102 Cal.App.4th 656.*

Revised 2009- CEQA, Revised 2011- ICPDS, Revised 2016 – ICPDS, Revised 2017 – ICPDS, Revised 2019 – ICPDS

Potentially Significant Impact (PSI)	Potentially Significant Unless Mitigation Incorporated (PSUMI)	Less Than Significant Impact (LTSI)	No Impact (NI)
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### SECTION 3

#### III. MANDATORY FINDINGS OF SIGNIFICANCE

The following are Mandatory Findings of Significance in accordance with Section 15065 of the CEQA Guidelines.

- |  |                          |                          |                                     |                          |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| <p>a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, eliminate tribal cultural resources or eliminate important examples of the major periods of California history or prehistory?</p> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| <p>b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)</p>  | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| <p>c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?</p>  | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

#### **IV. PERSONS AND ORGANIZATIONS CONSULTED**

This section identifies those persons who prepared or contributed to preparation of this document. This section is prepared in accordance with Section 15129 of the CEQA Guidelines.

##### **A. COUNTY OF IMPERIAL**

- Jim Minnick, Director of Planning & Development Services
- Michael Abraham, AICP, Assistant Director of Planning & Development Services
- Joe Hernandez, Planner IV
- Imperial County Air Pollution Control District
- Department of Public Works
- Fire Department
- Ag Commissioner
- Environmental Health Services
- Sheriff's Office

##### **B. OTHER AGENCIES/ORGANIZATIONS**

- Imperial Irrigation District
- Quechan Indian Tribe

##### **C. ENGINEER AND TECHNICAL STUDIES**

- Dudek

*(Written or oral comments received on the checklist prior to circulation)*

## V. REFERENCES

1. Groundwater Extraction Feasibility Analysis and Hydrogeologic Report Final Draft, Dudek 2020, referenced as Dudek (2020).
2. Imperial County General Plan Conservation and Open Space Element  
<http://www.icpds.com/CMS/Media/Conservation-&-Open-Space-Element-2016.pdf>
3. Imperial County Important Farmland 2016 Map
4. Imperial County Land Use Plan Map  
<http://www.icpds.com/CMS/Media/LANDUSE-Map.pdf>
5. Imperial County Williamson Act FY 2016/2017  
[ftp://ftp.consrv.ca.gov/pub/dlrp/wa/Imperial\\_16\\_17\\_WA.pdf](ftp://ftp.consrv.ca.gov/pub/dlrp/wa/Imperial_16_17_WA.pdf)
6. Renewable Energy and Transmission Element, County of Imperial General Plan  
<http://www.icpds.com/CMS/Media/Renewable-Energy-and-Transmission-Element-2015.pdf>
7. California Official Tsunami Inundation Maps  
<http://www.icpds.com/CMS/Media/Renewable-Energy-and-Transmission-Element-2015.pdf>
8. Imperial County Public Safety Element  
<http://www.icpds.com/CMS/Media/Seismic-and-Public-Safety-Element.pdf>
9. EnviroStor Database  
<http://www.envirostor.dtsc.ca.gov/public/>
10. California Department of Forestry and Fire Protection "Draft Fire Hazard Severity Zones in the LRA" Map of Imperial County

**VI. NEGATIVE DECLARATION – County of Imperial**

---

*The following Negative Declaration is being circulated for public review in accordance with the California Environmental Quality Act Section 21091 and 21092 of the Public Resources Code.*

---

**Project Name:**

Conditional Use Permit #20-0009, 0010, 0011 & 0012

**Project Applicant:**

Ron Pratte (Gordons Well II, LLC)

**Project Location:**

The project is located at 6626 E Evan Hewes Hwy, Winterhaven CA 92283.

**Description of Project:**

Applicant is requesting an increase in the current permitted water allocation per CUP's #10-0018, #10-0021, and #1205-96(B) and the approval for a new well, for a total allocation of 1000 acre-feet of water yearly. The proposed use of the water includes domestic for residential structures, a restaurant, dust suppression, and landscape and agricultural irrigation.

**VII. FINDINGS**

**This is to advise that the County of Imperial, acting as the lead agency, has conducted an Initial Study to determine if the project may have a significant effect on the environmental and is proposing this Negative Declaration based upon the following findings:**



The Initial Study shows that there is no substantial evidence that the project may have a significant effect on the environment and a **NEGATIVE DECLARATION** will be prepared.



The Initial Study identifies potentially significant effects but:

- (1) Proposals made or agreed to by the applicant before this proposed Negative Declaration was released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur.
- (2) There is no substantial evidence before the agency that the project may have a significant effect on the environment.
- (3) Mitigation measures are required to ensure all potentially significant impacts are reduced to levels of insignificance.

A **NEGATIVE DECLARATION** will be prepared.

**If adopted, the Negative Declaration means that an Environmental Impact Report will not be required. Reasons to support this finding are included in the attached Initial Study. The project file and all related documents are available for review at the County of Imperial, Planning & Development Services Department, 801 Main Street, El Centro, CA 92243 (442) 265-1736.**

**NOTICE**

The public is invited to comment on the proposed Negative Declaration during the review period.

11-20-2020

Date of Determination

  
Jim Minnick, Director of Planning & Development Services

*The Applicant hereby acknowledges and accepts the results of the Environmental Evaluation Committee (EEC) and hereby agrees to implement all Mitigation Measures, if applicable, as outlined in the MMRP.*

  
Applicant Signature

11/19/20  
Date

## **SECTION 4**

### **VIII. RESPONSE TO COMMENTS**

(ATTACH DOCUMENTS, IF ANY, HERE)

**IX. MITIGATION MONITORING & REPORTING PROGRAM (MMRP)**

(ATTACH DOCUMENTS, IF ANY, HERE)

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## SECTION 4

### VIII. RESPONSE TO COMMENTS

(ATTACH DOCUMENTS, IF ANY, HERE)

**AIR POLLUTION CONTROL DISTRICT**



August 19, 2020

Jim Minnick, Director  
Imperial County Planning & Development Services  
801 Main Street  
El Centro, CA 92243

**SUBJECT: Conditional Use Permits (CUP) 20-0009, 20-0010, 20-0011, 20-0012—Gordon's Well II, LLC**

Dear Mr. Minnick:

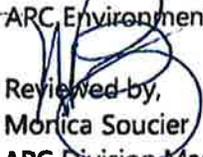
The Imperial County Air Pollution Control District ("Air District") would like to thank you for the opportunity to review and comment on the Conditional Use Permits (CUP) 20-0009, 20-0010, 20-0011, and 20-0012 that would amend three existing CUPs and allow the drilling and operation of a fourth new well at 6626 East Evan Hewes Highway in Winterhaven, California (also identified as Assessor Parcel Number 056-210-001, -008, -042, -044, -052, -053, -054, -061, -063, -066, -067).

Upon review, the Air District reminds the applicant that all earthmoving and construction activities must adhere to Regulation VIII which is designed to mitigate fugitive dust during construction activities. Also, if any generators above 50 horsepower are used on site either during construction or operation, the applicant needs to secure the proper permit from the Air District's Engineering and Permitting Division.

The Air District's Rules and Regulations can be found on its website at [www.apcd.imperialcounty.org](http://www.apcd.imperialcounty.org). Please feel free to contact the Air District should you have any questions at (442) 265-1800.

Respectfully,

  
Curtis Blondell  
ARC Environmental Coordinator

  
Reviewed by,  
Morica Soucier  
APC Division Manager



## COUNTY OF IMPERIAL

# PUBLIC HEALTH DEPARTMENT

JANETTE ANGULO, M.P.A.  
*Director*

STEVEN MUNDAY, M.P.H., M.S.  
*Health Officer*

August 13, 2020

Joe Hernandez, Planner IV  
IC Planning & Development Services  
801 Main Street  
El Centro, CA 92243

Subject: Environmental Health Comments for Proposed Conditional Use Permit #20-0009 through CUP #20-0012

Dear Mr. Hernandez:

The Imperial County Division of Environmental Health (DEH) is providing the comments below in response to the request for review and comments for Conditional Use Permit #20-0009 through #20-0012. The project as described is an increase in the current permitted water allocation per CUP's #10-0018, #10-0018, #10-0021, and #1205-96(b) and the approval for a new well, for a total allocation of 1000 acre-feet of water yearly. The proposed project is located at 6626 E. Even Hewes Hwy, Winterhaven, CA. The property is identified on assessor's parcel number 056-210-001, - 008, - 042, - 044, - 052, - 053, - 054, - 061, - 063, - 066, - and, - 067. Please consider the following comments for the proposed project:

1. A well construction design must be submitted by a California-licensed (C57 License) well driller for review and approval by the LPA (DEH). Well drilling specification must be provided. All wells must be drilled in compliance with the Department of Water Resources Bulletin 74-81 and 74-90 Water Well Standards, and shall include a minimum 50-foot deep sanitary seal. Above ground features shall also be indicated for the well in accordance with Part II, Section 10 of the California Water Well Standards.
2. The water supplied from the well shall comply with the Primary and Secondary Drinking Water Standards in Title 22, California Code of Regulations. A water treatment system approved by the Local Primacy Agency (LPA) shall be installed to treat the groundwater supply to meet potable water standards, if deemed necessary.
3. Submit a complete and correct Well Driller's Report to the LPA once the well has been drilled.
4. If the well is intended to be used as "Domestic" as stated on page #3, second paragraph of the submitted application packet, the water well must serve as a primary well since the existing well is currently not meeting water well standards (does not have a minimum 50 ft. sanitary seal).

Division of Environmental Health, 797 Main Street, Suite B, El Centro, CA 92243  
(442) 265-1888 • (442) 265-1903 Fax • icphd.org

EEC ORIGINAL PKG

This letter is being provided as a guide for project planning. DEH reserves the right to provide specific comments concerning your project at any time during the environmental review process. DEH encourages applicants to come into our office to discuss the project in detail.

If you have any questions, please do not hesitate to contact me at 442-265-1888.

Sincerely,

*Mario Salinas*

Mario Salinas, MBA  
Environmental Compliance Specialist



# IID

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*Since 1911*

August 6, 2020

Mr. Joe Hernandez  
Planner IV  
Planning & Development Services Department  
County of Imperial  
801 Main Street  
El Centro, CA 92243

**SUBJECT:** Gordon Wells II, LLC Water Wells; CUP Nos. 20-0009, -0010, -0011 and -0012

Dear Mr. Hernandez:

On August 3, 2020, the Imperial Irrigation District received from the Imperial County Planning & Development Services Dept. a request for agency comments on Conditional Use Permit applications nos. 20-0009 thru -0012. The applicant, Ron Pratte/Gordon Wells II, LLC is requesting an increase in the current permitted water allocation per CUP nos. 10-0018, 10-0021 and 1205-96(b) and the approval for a new well for a total allocation of 1000 acre-feet of water yearly. The wells sites are located at 6626 E. Evan Hewes Hwy., Winterhaven, CA.

The Imperial Irrigation District has reviewed the information and has the following comments:

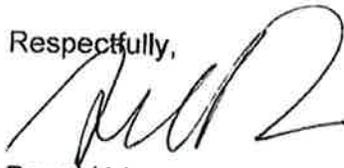
1. To request electrical service for the new well pump, the applicant should be advised to contact Joel Lopez, IID Customer Project Development Planner, at (760) 482-3300 or e-mail Mr. Lopez at [JFLopez@IID.com](mailto:JFLopez@IID.com) to initiate the customer service application process. In addition to submitting a formal application (available at <http://www.iid.com/home/showdocument?id=12923>), the applicant will be required submit a complete set of approved plans (including CAD files), construction schedule, completion date, one-line electrical diagrams, electrical loads, panel sizes, and the applicable fees, permits, easements and environmental compliance documentation pertaining to the provision of electrical service to the pump. The applicants shall be responsible for all costs and mitigation measures related to providing electrical service to the pump.
2. Please note that electrical capacity is limited in the area. A circuit study may be required. Any improvements identified in the circuit study to allow electrical service to the pump for the new well shall be the financial responsibility of the applicant.

Joe Hernandez  
August 6, 2020  
Page 2

3. IID has an existing overhead 34.5 kV transmission line ("A-3") in the vicinity of the suggested well location. See attached aerial depicting IID power lines in the general site location.
4. Any construction or operation on IID property or within its existing and proposed right of way or easements including but not limited to: surface improvements such as proposed new streets, driveways, parking lots, landscape; and all water, sewer, storm water, or any other above ground or underground utilities; will require an encroachment permit, or encroachment agreement (depending on the circumstances). A copy of the IID encroachment permit application and instructions are available at <http://www.iid.com/departments/real-estate>. The IID Real Estate Section should be contacted at (760) 339-9239 for additional information regarding encroachment permits or agreements.
5. Any new, relocated, modified or reconstructed IID facilities required for and by the project (which can include but is not limited to electrical utility substations, electrical transmission and distribution lines, etc.) need to be included as part of the project's CEQA and/or NEPA documentation, environmental impact analysis and mitigation. Failure to do so will result in postponement of any construction and/or modification of IID facilities until such time as the environmental documentation is amended and environmental impacts are fully analyzed. **Any and all mitigation necessary as a result of the construction, relocation and/or upgrade of IID facilities is the responsibility of the project proponent.**

Should you have any questions, please do not hesitate to contact me at 760-482-3609 or at [dvargas@iid.com](mailto:dvargas@iid.com). Thank you for the opportunity to comment on this matter.

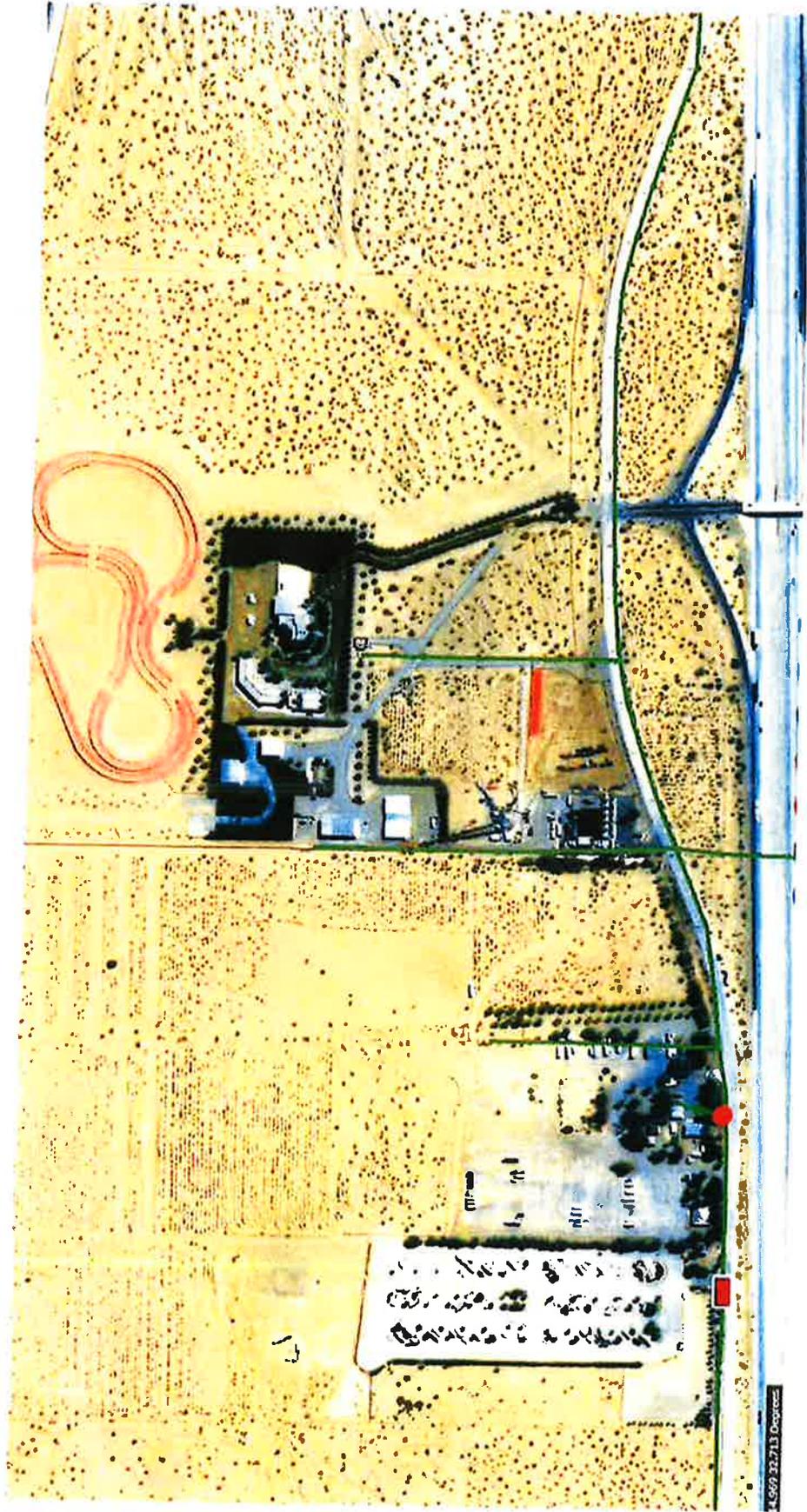
Respectfully,



Donald Vargas  
Compliance Administrator II

Enrique B. Martinez – General Manager  
Mike Pacheco – Manager, Water Dept.  
Marilyn Del Bosque Gilbert – Manager, Energy Dept.  
Sandra Blain – Deputy Manager, Energy Dept.  
Constance Bergmark – Mgr. of Planning & Eng /Chief Eic. Engineer, Energy Dept.  
Jamie Asbury – Asst. General Counsel  
Vance Taylor – Asst. General Counsel  
Michael P. Kemp – Superintendent, Regulatory & Environmental Compliance  
Laura Cervantes. – Supervisor, Real Estate  
Jessica Humes – Environmental Project Mgr. Sr., Water Dept.

EEC ORIGINAL PKG



IID Transmission Lines in Project Vicinity

## Joe Hernandez

---

**From:** Quechan Historic Preservation <historicpreservation@quechantribe.com>  
**Sent:** Tuesday, August 4, 2020 9:25 AM  
**To:** Gabriela Robb; ICPDSCCommentLetters  
**Cc:** Joe Hernandez  
**Subject:** RE: Request for Comments - CUP20-0009, 20-0010, 20-0011, 20-0012

**CAUTION: This email originated outside our organization; please use caution.**

This email is to inform you that we have no comments on this project.

**From:** Gabriela Robb [mailto:GabrielaRobb@co.imperial.ca.us]  
**Sent:** Monday, August 3, 2020 3:48 PM  
**To:** Carlos Ortiz; Sandra Mendivil; Jolene Dessert; Matt Dessert; Monica Soucier; Adam Crook; Esperanza Colio; Jeff Lamoure; Jorge Perez; Alphonso Andrade; Mario Salinas; Robert Menvielle; Alfredo Estrada Jr; Robert Malek; Andrew Loper; John Gay; Carlos Yee; Raymond Loera; rbenavidez@icso.org; Donald Vargas - IID; rleal@iid.com; jbarrett@cvwd.org; ndlscdda@citlink.net; rdaniels@cityofneedles.com; Magdalena Rodriguez; csahagun@blm.gov; mramirez@usbr.gov; felicia\_sirchia@fws.gov; hhaines@augustinetribe.com; rgoff@campo-nsn.gov; chairman@cit-nsn.gov; cocotcsec@cocopah.com; tashina.harper@crit-nsn.gov; wmicklin@leaningrock.net; historicpreservation@quechantribe.com; frankbrown@viejas-nsn.gov; Quechan Indian Tribe ; ljbirdsinger@aol.com; lp13boots@aol.com; thomas.tortez@torresmartinez-nsn.gov; Joseph.mirelez@torresmartinez-nsn.gov; katy.sanchez@nahc.ca.gov; ttrujillo@crb.ca.gov; crb@crb.ca.gov; sha-lcr-webcomments@usbr.gov  
**Cc:** Rosa Soto; Carina Gomez; Maria Scoville; John Robb; Kimberly Noriega; Valerie Grijalva; Joe Hernandez; Michael Abraham  
**Subject:** Request for Comments - CUP20-0009, 20-0010, 20-0011, 20-0012

Good Afternoon,

Please see attached Request for Comments Packet for **CUPs 20-0009, 20-0010, 20-0011 & 20-0012**. Comments are due by **August 19, 2020 at 5:00 PM**.

In an effort to increase the efficiency at which information is distributed and reduce paper usage, the Request for Comments Packet is being sent to you via this email.

Should you have any questions regarding this project, please feel free to contact Planner Joe Hernandez at (442)265-1736 ext. 1748 or submit your comment letters to [icpdscommentletters@co.imperial.ca.us](mailto:icpdscommentletters@co.imperial.ca.us)

Thank you,

Gabriela Robb

Office Assistant III

Imperial County Planning & Development Services

801 Main Street

El Centro, CA 92243

(442) 265-1736

(442) 265-1735 (Fax)

[gabrielarobb@co.imperial.ca.us](mailto:gabrielarobb@co.imperial.ca.us)





# IID

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October 20, 2020

Mr. Joe Hernandez  
Planner IV  
Planning & Development Services Department  
County of Imperial  
801 Main Street  
El Centro, CA 92243

**SUBJECT:** Gordon's Well II, LLC Water Wells; CUP Nos. 20-0009, -0010, -0011 and -0012 – Additional Comments

Dear Mr. Hernandez:

In addition to the comments provided in the Imperial Irrigation District letter dated August 6, 2020 (see attached letter) on Conditional Use Permits nos. 20-0009, -0010, -0011 and -0012 pertaining to Gordon's Well II, LLC's request to increase its current permitted water allocation per CUP nos. 10-0018, 10-0021 and 1205-96(b) and to approve a new well for a total allocation of 1000 acre-feet of water yearly at wells sites located at 6626 E. Evan Hewes Hwy., Winterhaven, CA, the IID has the the following observations.

1. IID Water Department has reviewed the Groundwater Extraction Feasibility Analysis and Hydrogeologic Report, dated June 2020, prepared by Dudek for the Ron Pratte property which references Conditional Use Permit no. 19-0022. The report, however, is attached to Imperial County Planning and Development Services CUP application for CUP no. 20-0009, no. 20-0010, no. 20-0011 and no. 20-0012. The property is more commonly referred to as Gordon's Well.
2. The proposed project is located within the Lower Colorado River Accounting Surface, which in response to the 1964 United States Supreme Court decision requires a determination of whether the proposed groundwater pumping will result in extracted water being replaced by water drawn from the Colorado River. It is IID's understanding that such an assessment and determination has not been made for the proposed project. Absent a hydrological analysis that demonstrates the groundwater the project proposes to pump from the LCRAS will not be replaced by groundwater, and concurrence by the Bureau of Reclamation, the extracted water is assumed to be from IID's Colorado River entitlement, and as such IID would be opposed to any extraction.
3. The aforementioned June report attached to the CUP application concludes that groundwater extractions at the project site will cause groundwater elevations to



# IID

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August 6, 2020

Mr. Joe Hernandez  
Planner IV  
Planning & Development Services Department  
County of Imperial  
801 Main Street  
El Centro, CA 92243

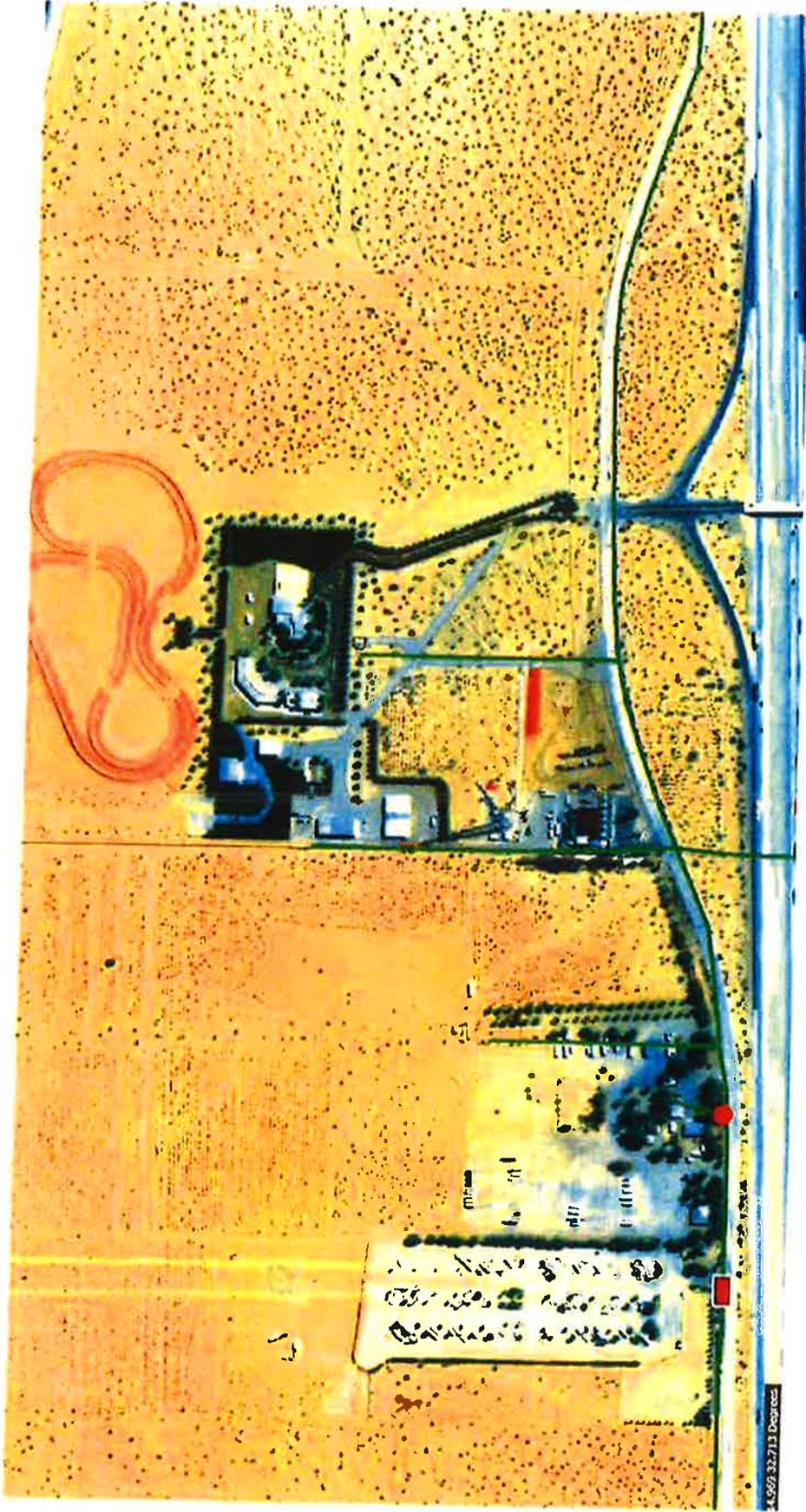
**SUBJECT:** Gordon Wells II, LLC Water Wells; CUP Nos. 20-0009, -0010, -0011 and -0012

Dear Mr. Hernandez:

On August 3, 2020, the Imperial Irrigation District received from the Imperial County Planning & Development Services Dept. a request for agency comments on Conditional Use Permit applications nos. 20-0009 thru -0012. The applicant, Ron Pratte/Gordon Wells II, LLC is requesting an increase in the current permitted water allocation per CUP nos. 10-0018, 10-0021 and 1205-96(b) and the approval for a new well for a total allocation of 1000 acre-feet of water yearly. The wells sites are located at 6626 E. Evan Hewes Hwy., Winterhaven, CA.

The Imperial Irrigation District has reviewed the information and has the following comments:

1. To request electrical service for the new well pump, the applicant should be advised to contact Joel Lopez, IID Customer Project Development Planner, at (760) 482-3300 or e-mail Mr. Lopez at [JFLopez@IID.com](mailto:JFLopez@IID.com) to initiate the customer service application process. In addition to submitting a formal application (available at <http://www.iid.com/home/showdocument?id=12923>), the applicant will be required submit a complete set of approved plans (including CAD files), construction schedule, completion date, one-line electrical diagrams, electrical loads, panel sizes, and the applicable fees, permits, easements and environmental compliance documentation pertaining to the provision of electrical service to the pump. The applicants shall be responsible for all costs and mitigation measures related to providing electrical service to the pump.
2. Please note that electrical capacity is limited in the area. A circuit study may be required. Any improvements identified in the circuit study to allow electrical service to the pump for the new well shall be the financial responsibility of the applicant.



IID Transmission Lines in Project Vicinity



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October 20, 2020

Mr. Joe Hernandez  
Planner IV  
Planning & Development Services Department  
County of Imperial  
801 Main Street  
El Centro, CA 92243

**SUBJECT:** Gordon's Well II, LLC Water Wells; CUP Nos. 20-0009, -0010, -0011 and -0012 – Additional Comments

Dear Mr. Hernandez:

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2. The proposed project is located within the Lower Colorado River Accounting Surface, which in response to the 1964 United States Supreme Court decision requires a determination of whether the proposed groundwater pumping will result in extracted water being replaced by water drawn from the Colorado River. It is IID's understanding that such an assessment and determination has not been made for the proposed project. Absent a hydrological analysis that demonstrates the groundwater the project proposes to pump from the LCRAS will not be replaced by groundwater, and concurrence by the Bureau of Reclamation, the extracted water is assumed to be from IID's Colorado River entitlement, and as such IID would be opposed to any extraction.
3. The aforementioned June report attached to the CUP application concludes that groundwater extractions at the project site will cause groundwater elevations to

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August 6, 2020

Mr. Joe Hernandez  
Planner IV  
Planning & Development Services Department  
County of Imperial  
801 Main Street  
El Centro, CA 92243

SUBJECT: Gordon Wells II, LLC Water Wells; CUP Nos. 20-0009, -0010, -0011 and -0012

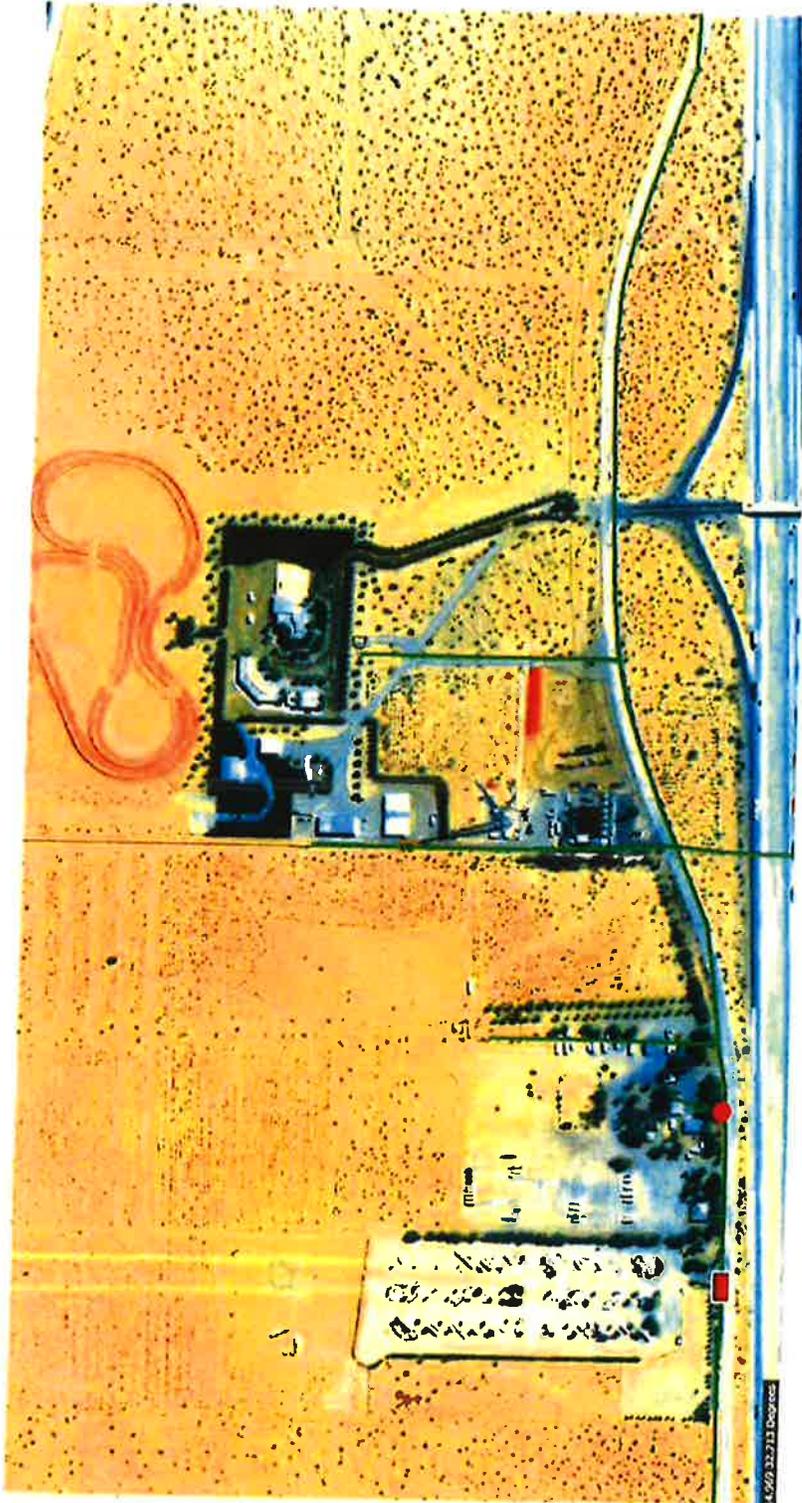
Dear Mr. Hernandez:

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2. Please note that electrical capacity is limited in the area. A circuit study may be required. Any improvements identified in the circuit study to allow electrical service to the pump for the new well shall be the financial responsibility of the applicant.

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IID Transmission Lines in Project Vicinity

## Response to Comment Letter TBD

Imperial Irrigation District  
 Donald Vargas, Compliance Administrator II  
 October 20, 2020

- IID-1** The County notes that in addition to Imperial Irrigation District's (IID) comment letter dated October 20, 2020, you also refer to the IID letter dated August 6, 2020.
- IID-2** The County notes your comment that the Dudek report references conditional use permit (CUP) no. 19-0022 whereas the CUP application references CUP nos. 20-0009, 20-0010 and 20-0011.
- IID-3** The County notes IID's position that IID is opposed to any extraction because the Project is located within the Lower Colorado River Accounting Surface, and that an assessment and determination has not been made as to whether extracted groundwater will be replaced by water drawn from the Colorado River. In general, if groundwater elevations go below the Accounting Surface elevation, then subsequent groundwater withdrawals are considered Colorado River extractions and infringe on water rights established in the Law of the River.

The Project's proposed well(s) are located within the boundary of the Lower Colorado River Aquifer "Accounting Surface" (Wiele et al., 2009). To assess the effects of the proposed extractions on underlying groundwater elevations, Dudek used available data to estimate pumping-induced drawdown using the Theis equation and a regional-scale numerical groundwater flow model developed by Argonne National Laboratories (Greer et al., 2013). Results from the Theis equation and numerical groundwater flow model (Imperial East SEZ model) suggest that the proposed extractions will drawdown water levels at the pumping well by up to 8 feet over the next 20 years. Pumping from the single well would draw groundwater elevations down by up to 2 feet approximately 1-mile away from the well. These drawdown estimates correspond to a total loss of groundwater in storage that ranges from approximately 1,000 to 1,600 acre-feet over the next 20 years. Based on the analysis presented in the Dudek report, there is "Available Supply" in the East Mesa Groundwater Management Area as defined by Section 92201.04 of the County Groundwater Ordinance. The East Mesa Groundwater Management Area of the California Department of Water Resources (DWR) Imperial Valley Groundwater Basin (Basin) (DWR Basin Number 7-030) is not adjudicated.

A comparison of groundwater levels measured at RV Park Well 3 (adjacent to the Project site), and the updated Lower Colorado River Accounting Surface, indicates that groundwater levels are currently below the Accounting Surface (Wiele et al., 2009). The most recent update to the Accounting Surface indicates that groundwater below approximately 81 feet relative to the NGVD 1929 is replenished by Colorado River water and is accordingly subject to the laws of the river. Groundwater elevations at RV Park Well 3 have declined from 96 feet relative to NGVD 1929 in December of 2009 to the current water level of 66 feet relative to NGVD 1929, measured on March 17, 2020. Groundwater elevations at RV Park Well 3 dropped below the Accounting surface in 2014.

The Accounting Surface method employed by Wiele is based on a simplified concept of a River Aquifer. The Accounting Surface within the River Aquifer includes the floodplain and valley adjacent to the Colorado River and some tributary valleys in Arizona, California, Nevada, and Utah. The subsurface limit of the River Aquifer is the contact of unconsolidated sediments and sedimentary rocks with less

(AFY), 30% or 300 AFY would be attributable to depletion of Colorado River water for a time of 100 years since pumping onset.

**IID-4** IID’s position is that the County deny any extraction well permits within the Lower Colorado River Accounting Surface that are unable to demonstrate zero impacts to groundwater and IID’s water supply, or until these concerns are resolved to IID’s satisfaction. The East Mesa Groundwater Management Area of the Imperial Valley Groundwater Basin is not adjudicated. The County’s Groundwater Ordinance contained in Title 9, Division 22 of the Land Use Ordinance. Section 92201.01, Purpose of the Ordinance, of the County Groundwater Ordinance states (County of Imperial, 2017),

The Board of Supervisors hereby finds and declares that the preservation, protection and management of the groundwater within the County for the protection of domestic, commercial, agricultural, industrial, municipal, wildlife habitat, and other uses is in the public interest, that protection is necessary to ensure availability of groundwater reasonably required to meet the present and future beneficial needs of the County, and that the adoption of a system of regulation of groundwater is for the common benefit of all County water users.

Section 92201.04 of the County Groundwater Ordinance defines several terms to govern the interpretation of the Ordinance, a select few of which are included below as defined by the Ordinance:

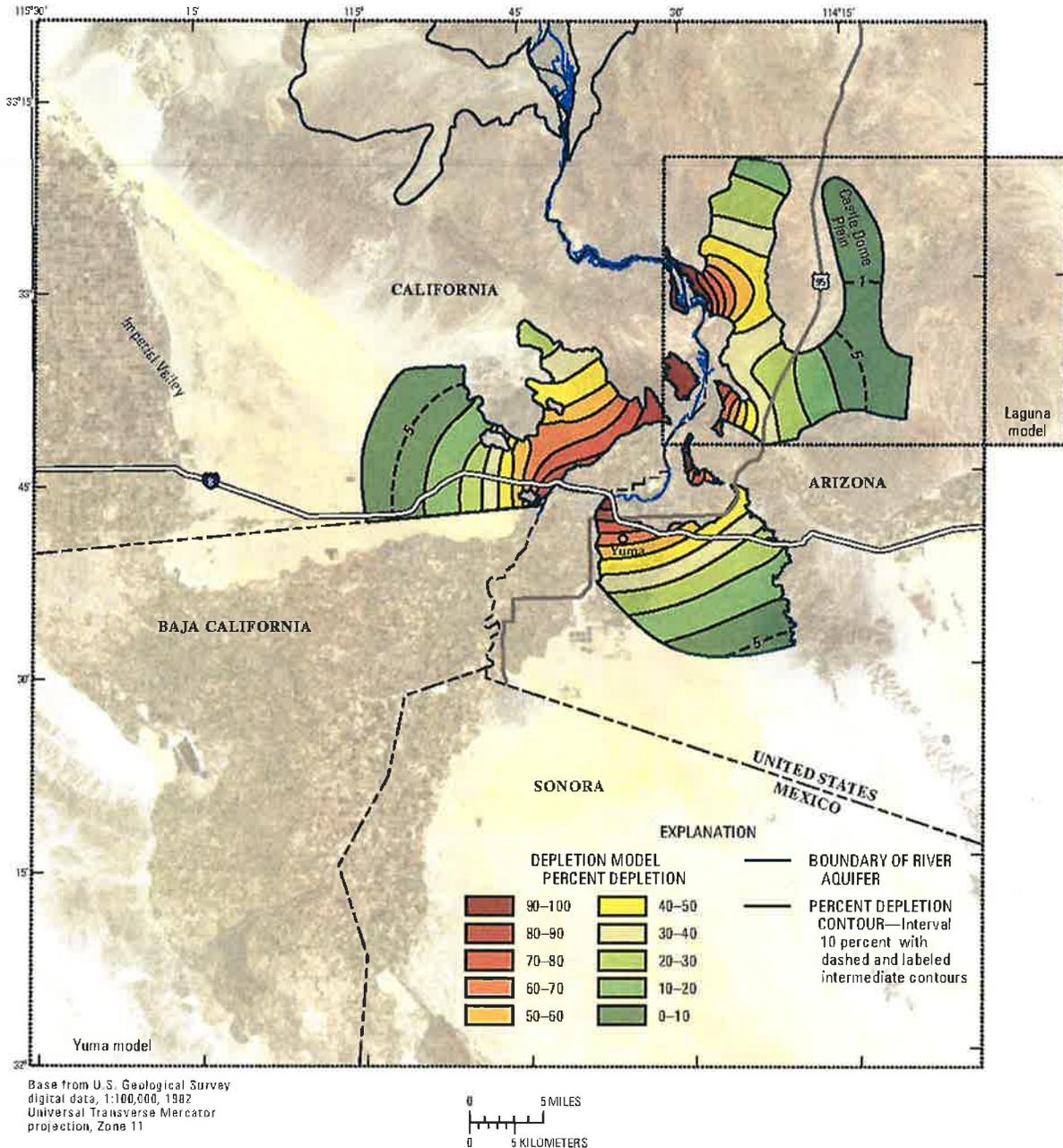
“Available Supply” means the quantity of groundwater which can be withdrawn annually from a groundwater basin without resulting in or aggravating conditions of overdraft, subsidence, groundwater quality degradation, or other environmental damage. Available supply of a groundwater basin includes the average annual natural water supply, imported water or other water which has been spread to the basin or otherwise added to the basin, and return flows to the basin attributable to these sources reaching the groundwater basin in the course of use.

“Overdraft” means the condition of a groundwater basin where the average annual amount of water extracted exceeds the average annual supply of water to the basin plus any temporary surplus.

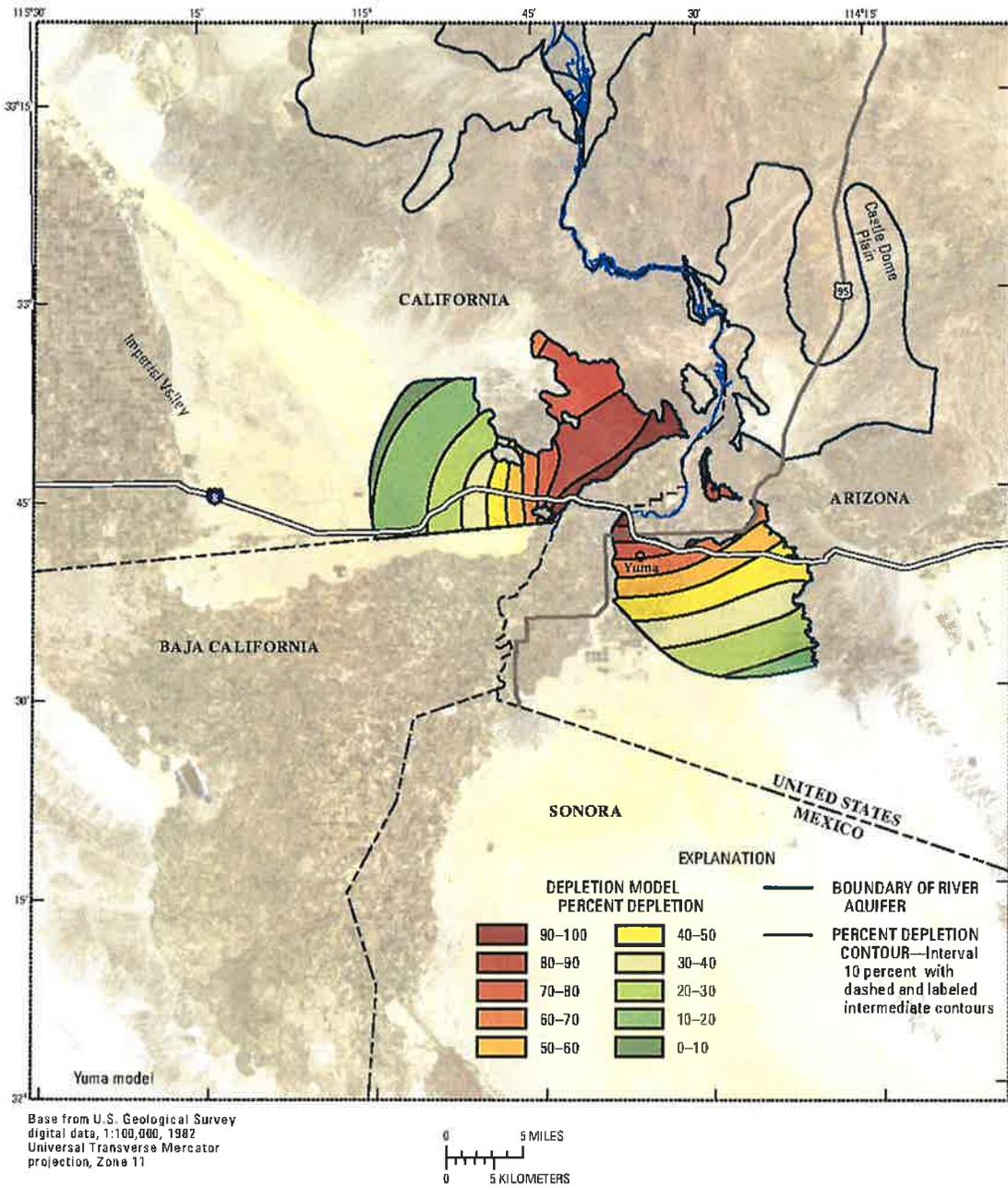
“Well interference” means a substantial water level decline in a short time period in a localized area caused by extraction.

Based on the findings of the Groundwater Extraction Feasibility Analysis and Hydrogeologic Report, there is Available Supply in the East Mesa Groundwater Management Area as defined by Section 92201.04 of the County Groundwater Ordinance. In addition, potential impacts to biological resources, hydrology and water quality, and well interference were determined to be less than significant.

Based on the analyses performed to date, it is uncertain what percentage of groundwater extracted at the Project site would be replaced by underflow from the Colorado River versus native water derived from groundwater storage and recharge within the East Mesa Groundwater Management Area and tributary watershed areas. As discussed in the Groundwater Extraction Feasibility Analysis and Hydrogeologic Report, Dudek recommended that pumping tests be conducted for existing production well(s) to determine site-specific values for transmissivity and storativity. These site specific values should be used to update the impact analysis presented in this report. In addition, baseline water quality samples should be collected from Project wells for general minerals, and nitrate, fluoride, sulfate, boron, and selenium,



**Figure 14.** Percent depletion in 100 years by pumping wells within the Yuma and Laguna model areas of the Colorado River aquifer assuming a transmissivity rate of 6,300 feet squared per day (47,000 gallons per day per foot).



**Figure 16.** Percent depletion in 100 years by pumping wells within the Yuma model area of the Colorado River aquifer assuming a transmissivity rate of 15,500 feet squared per day (116,000 gallons per day per foot).

# **APPLICATION SUBMITTAL**

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# CONDITIONAL USE PERMIT

I.C. PLANNING & DEVELOPMENT SERVICES DEPT.  
801 Main Street, El Centro, CA 92243 (760) 482-4236

- APPLICANT MUST COMPLETE ALL NUMBERED (black) SPACES - Please type or print -

1. PROPERTY OWNER'S NAME Ron Pratte (Gordons Well II, llc)	EMAIL ADDRESS c/o jurgheuberger@gmail.com	
2. MAILING ADDRESS (Street / P O Box, City, State) 4450 W. Earhart Way, Chandler, AZ	ZIP CODE 85226	PHONE NUMBER Jurg 760-996-0313
3. APPLICANT'S NAME Ron Pratte	EMAIL ADDRESS prattpx1@gmail.com	
4. MAILING ADDRESS (Street / P O Box, City, State) 4450 W. Earhart Way, Chandler, AZ	ZIP CODE 85226	PHONE NUMBER Jurg 760-996-0313
4. ENGINEER'S NAME NA	CA. LICENSE NO.	EMAIL ADDRESS
5. MAILING ADDRESS (Street / P O Box, City, State) NA	ZIP CODE	PHONE NUMBER
6. ASSESSOR'S PARCEL 66-210-00144	SIZE OF PROPERTY (in acres or square foot) 40 ac (see attached for details)	ZONING (existing) S-2
7. PROPERTY (site) ADDRESS 6626 Evan Hewes HWY, Winterhaven, Ca.		
8. GENERAL LOCATION (i.e. city, town, cross street) Along frontage road of I - 8, by Gordon's Well		
9. LEGAL DESCRIPTION W2 of NW4 of NE4 & E2 of NE4 of NW4 Sec 36 16-19		

**PLEASE PROVIDE CLEAR & CONCISE INFORMATION (ATTACH SEPARATE SHEET IF NEEDED)**

10. DESCRIBE PROPOSED USE OF PROPERTY (list and describe in detail)	
New CUP to increase the aggregate amount of water that can be used for the land owned by Mr. Pratte, see attached to clarify overall water demand/usage.	
11. DESCRIBE CURRENT USE OF PROPERTY	vacant
12. DESCRIBE PROPOSED SEWER SYSTEM	farming, none required
13. DESCRIBE PROPOSED WATER SYSTEM	well water for farming
14. DESCRIBE PROPOSED FIRE PROTECTION SYSTEM	none required
15. IS PROPOSED USE A BUSINESS? <input type="checkbox"/> Yes <input type="checkbox"/> No	IF YES, HOW MANY EMPLOYEES WILL BE AT THIS SITE?

I / WE THE LEGAL OWNER (S) OF THE ABOVE PROPERTY CERTIFY THAT THE INFORMATION SHOWN OR STATED HEREIN IS TRUE AND CORRECT.

jurg heuberger for Ron Pratte  
 Print Name \_\_\_\_\_ Date 5/14/20  
 Signature   
 Print Name \_\_\_\_\_ Date \_\_\_\_\_  
 Signature \_\_\_\_\_

**REQUIRED SUPPORT DOCUMENTS**

A. SITE PLAN	_____
B. FEE	_____
C. OTHER	_____
D. OTHER	_____

APPLICATION RECEIVED BY: _____	DATE 5/18/20	REVIEW / APPROVAL BY OTHER DEPT'S required.
APPLICATION DEEMED COMPLETE BY: _____	DATE _____	<input type="checkbox"/> P. W.
APPLICATION REJECTED BY: _____	DATE _____	<input type="checkbox"/> E. H. S.
TENTATIVE HEARING BY: _____	DATE _____	<input type="checkbox"/> A. P. C. D.
FINAL ACTION: <input type="checkbox"/> APPROVED <input type="checkbox"/> DENIED	DATE _____	<input type="checkbox"/> O. E. S.
		<input type="checkbox"/> _____
		<input type="checkbox"/> _____

**CUP #**  
20-0009

**RECEIVED**

JUL 31 2020

IMPERIAL COUNTY  
PLANNING & DEVELOPMENT SERVICES

May 13, 2020

TO: Jim Minnick, Director & Joe Hernandez, Planner IV  
FROM: Jurg Heuberger for Mr. Pratte  
RE: Water well amendments to three existing CUP's and one New CUP

Jim and Joe:

Per our discussion yesterday, please find attached hereto four CUP application forms. These reflect the "amending" of three existing CUP's (10-0021, 10-0018 and 1205-96(b)). The fourth being a request for a new well.

As previously requested via the application filed on Oct. 7, 2019, which resulted in your office requesting a "groundwater study", that we understand is in progress at this time, the full amount that was being requested was 1000 ac. ft. /yr.

Given that there exist three wells that have limited use at this time, and given that our intent was to have an aggregate amount of 1000 ac. ft./yr. for the four wells, you requested that we;

- a) Provide a CUP application form for each well, existing and proposed
- b) Provide an estimated amount that each well would be limited to, provided further that this could be a "range" since the aggregate amount would be the true limiting factor.

Recognizing your concern that if one of the parcels were to be segregated/sold from the singular ownership that now exists, the county would have difficulty determining what amount that well was limited to we agreed to provide an estimated amount in the form of a range for each well.

Therefore, we propose the following methodology to allocate quantities to each well while not exceeding the aggregate total of 1000 ac. ft./year for all four wells. These allocations are only for limiting the wells should they become under separate ownership. While owned by the same owner, the 1000 ac. ft. per year shall be the governing control.

Restaurant parcel	APN 056-210-066	20 ac. ft./yr	(dust control and restaurant)
Primary Residence	APN 056-210-063	200 ac. ft./yr	(domestic/dust control/landscape/ag.)
Caretakers Residence	APN 056-210-067	140 ac. ft./yr.	(domestic/dust control/landscape/ag.)
<u>New Well</u>	<u>APN 056-210-044</u>	<u>640 ac. ft./yr</u>	<u>(dust control/ag.)</u>

Aggregate Total 1000 ac. ft./yr.

The owner shall have flexibility to use more or less than estimated above, as long as all parcels are owed by the same owner. However, in the event any of the parcels shown above are transferred to different owners, then the maximum allowed for that (sold) APN shown above shall be the amount shown.

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Additionally, if one of the above parcels is sold, then the aggregate total of 1000 ac. ft/yr shall be reduced by the amount of the parcel sold.

Well water from the three existing and new well may be used on any parcel owned by Mr. Pratte, which at this time includes APN's ( 056-210-052; 053; 054; 066; 042; 044; 001; 044 and 008) provided the use is agricultural and domestic and dust control and provided further that all parcels are under the same ownership. If ownership of any one of the parcels ceased to be under the same ownership, then it shall no longer be entitled to use of water from these wells.

**RECEIVED**

JUL 31 2020

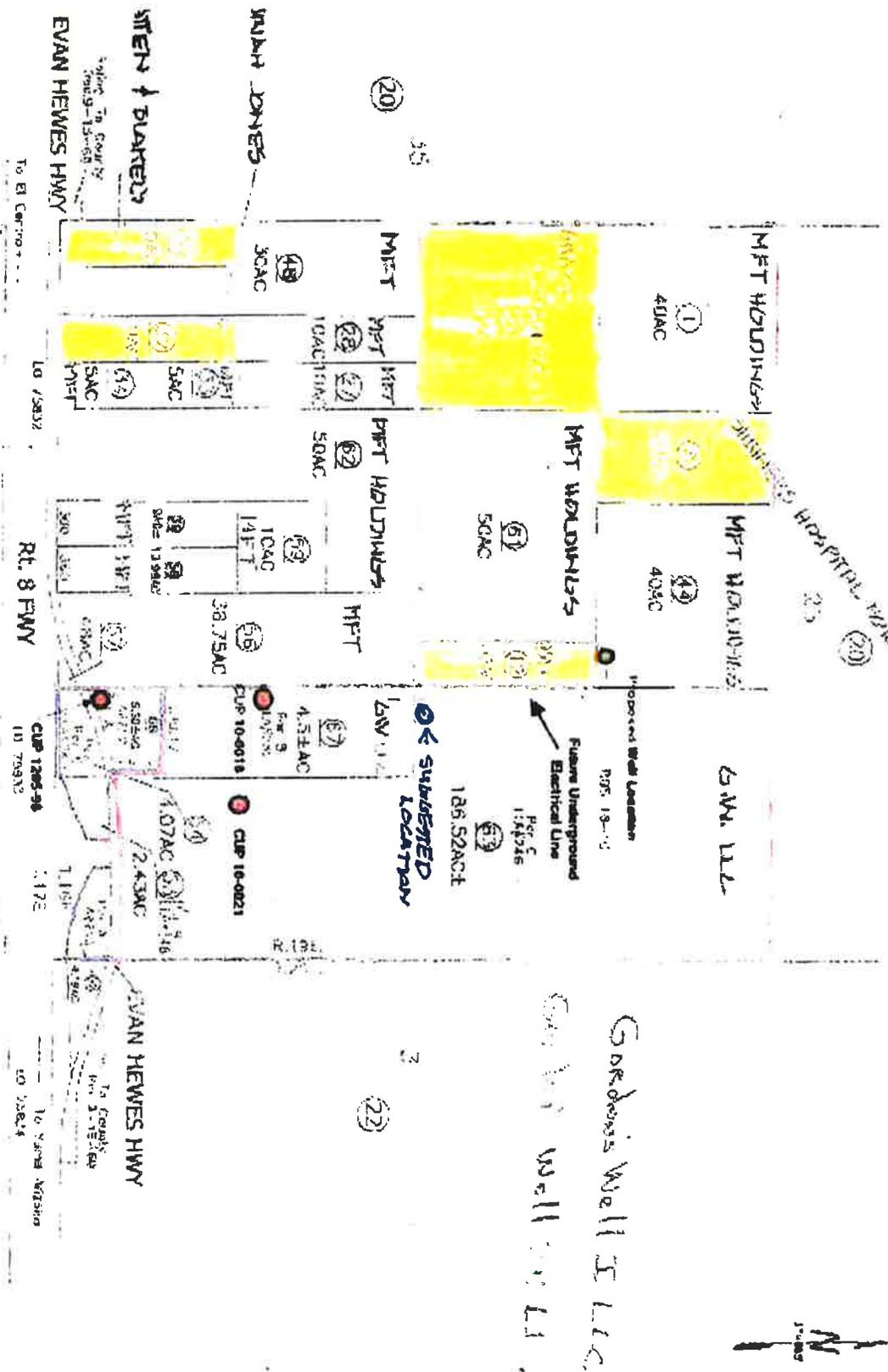
IMPERIAL COUNTY  
PLANNING & DEVELOPMENT SERVICE

EEC ORIGINAL PKG

SEC. 36, T. 16S., R. 19E., N.

Tax Area Code  
94-002

56-21



**NOTES:**  
 THIS IS NOT AN OFFICIAL MAP.  
 THIS MAP WAS CREATED FOR THE FORTY-FIFTH ANNUAL MEETING OF THE BOARD OF SUPERVISORS FOR THE COUNTY OF IMPERIAL, CALIF., ON THE 15TH DAY OF MARCH, 2011, FOR THE PURPOSE OF THE ASSESSMENT OF THE PARCELS SHOWN ON THIS MAP AND FOR THE PURPOSES OF THE ASSESSMENT OF THE PARCELS SHOWN ON THIS MAP AND FOR THE PURPOSES OF THE ASSESSMENT OF THE PARCELS SHOWN ON THIS MAP AND FOR THE PURPOSES OF THE ASSESSMENT OF THE PARCELS SHOWN ON THIS MAP.

BK 59  
 PG 32

Assessor's Map BK 56-Pg. 21  
 County of Imperial, Calif.

# CONDITIONAL USE PERMIT

I.C. PLANNING & DEVELOPMENT SERVICES DEPT.  
801 Main Street, El Centro, CA 92243 (760) 482-4236

- APPLICANT MUST COMPLETE ALL NUMBERED (black) SPACES - Please type or print -

1. PROPERTY OWNER'S NAME Ron Pratte (Gordons Well II, llc)	EMAIL ADDRESS c/o jurgheuberger@gmail.com	
2. MAILING ADDRESS (Street / P O Box, City, State) 4450 W. Earhart Way, Chandler, AZ	ZIP CODE 85228	PHONE NUMBER Jurg 760-996-0313
3. APPLICANT'S NAME Ron Pratte	EMAIL ADDRESS pratexp1@gmail.com	
4. MAILING ADDRESS (Street / P O Box, City, State) 4450 W. Earhart Way, Chandler, AZ	ZIP CODE 85228	PHONE NUMBER Jurg 760-996-0313
4. ENGINEER'S NAME N A	CA. LICENSE NO. N A	EMAIL ADDRESS
5. MAILING ADDRESS (Street / P O Box, City, State) N A	ZIP CODE	PHONE NUMBER
6. ASSESSOR'S PARCEL 056-210-063	SIZE OF PROPERTY (In acres or square foot) 186.52 ac	ZONING (existing) S-2
7. PROPERTY (site) ADDRESS 6626 Evan Hewes HWY, Winterhaven, Ca.		
8. GENERAL LOCATION (i.e. city, town, cross street) Along frontage road of I - 8, by Gordon's Well		
9. LEGAL DESCRIPTION <u>Par. C LLA 246, being E2 of NE4 &amp; E2 of E2 NLY of Frontage Rd., Sec 36 16-19</u>		

**PLEASE PROVIDE CLEAR & CONCISE INFORMATION (ATTACH SEPARATE SHEET IF NEEDED)**

10. DESCRIBE PROPOSED USE OF PROPERTY (list and describe in detail)	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
11. DESCRIBE CURRENT USE OF PROPERTY	_____ residential & Landscaping/ac existing
12. DESCRIBE PROPOSED SEWER SYSTEM	_____ septic existing
13. DESCRIBE PROPOSED WATER SYSTEM	_____ well water existing
14. DESCRIBE PROPOSED FIRE PROTECTION SYSTEM	_____ storage tanks existing
15. IS PROPOSED USE A BUSINESS? <input type="checkbox"/> Yes <input type="checkbox"/> No	IF YES, HOW MANY EMPLOYEES WILL BE AT THIS SITE?

I / WE THE LEGAL OWNER (S) OF THE ABOVE PROPERTY CERTIFY THAT THE INFORMATION SHOWN OR STATED HEREIN IS TRUE AND CORRECT.

jurg heuberger for Ron Pratte 5/14/20  
 \_\_\_\_\_  
 Print Name Date  
 \_\_\_\_\_  
 Signature  
 \_\_\_\_\_  
 Print Name Date  
 \_\_\_\_\_  
 Signature

**REQUIRED SUPPORT DOCUMENTS**

A. SITE PLAN	_____
B. FEE	_____
C. OTHER	_____
D. OTHER	_____

APPLICATION RECEIVED BY: _____	DATE <u>5/14/20</u>	REVIEW / APPROVAL BY OTHER DEPT'S required.
APPLICATION DEEMED COMPLETE BY: _____	DATE _____	<input type="checkbox"/> P. W.
APPLICATION REJECTED BY: _____	DATE _____	<input type="checkbox"/> E. H. S.
TENTATIVE HEARING BY: _____	DATE _____	<input type="checkbox"/> A. P. C. D.
FINAL ACTION: <input checked="" type="checkbox"/> APPROVED <input type="checkbox"/> DENIED	DATE _____	<input type="checkbox"/> O. E. S.
		<input type="checkbox"/> _____
		<input type="checkbox"/> _____

**CUP #**  
20-0010

**RECEIVED**

JUL 31 2020

IMPERIAL COUNTY  
PLANNING & DEVELOPMENT SERVICES

May 13, 2020

TO: Jim Minnick, Director & Joe Hernandez, Planner IV  
FROM: Jurg Heuberger for Mr. Pratte  
RE: Water well amendments to three existing CUP's and one New CUP

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<u>New Well</u>	<u>APN 056-210-044</u>	<u>640 ac. ft./yr</u>	<u>(dust control/ag.)</u>

Aggregate Total 1000 ac. ft./yr.

The owner shall have flexibility to use more or less than estimated above, as long as all parcels are owed by the same owner. However, in the event any of the parcels shown above are transferred to different owners, then the maximum allowed for that (sold) APN shown above shall be the amount shown.

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Well water from the three existing and new well may be used on any parcel owned by Mr. Pratte, which at this time includes APN's ( 056-210-052; 053; 054; 066; 042; 044; 001; 044 and 008) provided the use is agricultural and domestic and dust control and provided further that all parcels are under the same ownership. If ownership of any one of the parcels ceased to be under the same ownership, then it shall no longer be entitled to use of water from these wells.

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# CONDITIONAL USE PERMIT

I.C. PLANNING & DEVELOPMENT SERVICES DEPT.  
801 Main Street, El Centro, CA 92243 (760) 482-4238

- APPLICANT MUST COMPLETE ALL NUMBERED (black) SPACES - Please type or print -

1. PROPERTY OWNER'S NAME Ron Pratte (Gordons Well II, llc)	EMAIL ADDRESS c/o Jurgheuberger@gmail.com	
2. MAILING ADDRESS (Street / P O Box, City, State) 4450 W. Earhart Way, Chandler, AZ	ZIP CODE 85226	PHONE NUMBER Jurg 760-996-0313
3. APPLICANT'S NAME Ron Pratte	EMAIL ADDRESS prattpx1@gmail.com	
4. MAILING ADDRESS (Street / P O Box, City, State) 4450 W. Earhart Way, Chandler, AZ	ZIP CODE 85226	PHONE NUMBER Jurg 760-996-0313
4. ENGINEER'S NAME N A	CA. LICENSE NO.	EMAIL ADDRESS
5. MAILING ADDRESS (Street / P O Box, City, State) N A	ZIP CODE	PHONE NUMBER
6. ASSESSOR'S PARCEL NO. 056-210-066	SIZE OF PROPERTY (in acres or square foot) 6.65 ac	ZONING (existing) S-2
7. PROPERTY (site) ADDRESS 6626 Evan Hewes HWY, Winterhaven, Ca.		
8. GENERAL LOCATION (i.e. city, town, cross street) Along frontage road of I - 8, by Gordon's Well		
9. LEGAL DESCRIPTION Par. A LLA 252, Por. E2 of SW4 of SE4 Sec 36 T16S-R19E		

**PLEASE PROVIDE CLEAR & CONCISE INFORMATION (ATTACH SEPARATE SHEET IF NEEDED)**

10. DESCRIBE PROPOSED USE OF PROPERTY (list and describe in detail)	
amend/update CUP 1205-b to increase the amount of water that can be used on this project site; see attached documents to clarify overall water demand/usage.	
11. DESCRIBE CURRENT USE OF PROPERTY	restaurant existing
12. DESCRIBE PROPOSED SEWER SYSTEM	septic existing
13. DESCRIBE PROPOSED WATER SYSTEM	well water existing
14. DESCRIBE PROPOSED FIRE PROTECTION SYSTEM	storage tanks existing
15. IS PROPOSED USE A BUSINESS? <input type="checkbox"/> Yes <input type="checkbox"/> No	IF YES, HOW MANY EMPLOYEES WILL BE AT THIS SITE?

I / WE THE LEGAL OWNER (S) OF THE ABOVE PROPERTY CERTIFY THAT THE INFORMATION SHOWN OR STATED HEREIN IS TRUE AND CORRECT.

Jurg heuberger for Ron Pratte 5/14/20  
 Print Name \_\_\_\_\_ Date \_\_\_\_\_  
 Signature \_\_\_\_\_  
 Print Name \_\_\_\_\_ Date \_\_\_\_\_  
 Signature \_\_\_\_\_

**REQUIRED SUPPORT DOCUMENTS**

A. SITE PLAN	_____
B. FEE	_____
C. OTHER	_____
D. OTHER	_____

APPLICATION RECEIVED BY: _____	DATE 5/19/20	REVIEW / APPROVAL BY OTHER DEPT'S required. <input type="checkbox"/> P. W. <input type="checkbox"/> E. H. S. <input type="checkbox"/> A. P. C. D. <input type="checkbox"/> O. E. S. <input type="checkbox"/> _____ <input type="checkbox"/> _____
APPLICATION DEEMED COMPLETE BY: _____	DATE _____	
APPLICATION REJECTED BY: _____	DATE _____	
TENTATIVE HEARING BY: _____	DATE _____	
FINAL ACTION: <input type="checkbox"/> APPROVED <input type="checkbox"/> DENIED	DATE _____	

**CUP #**  
20-0011

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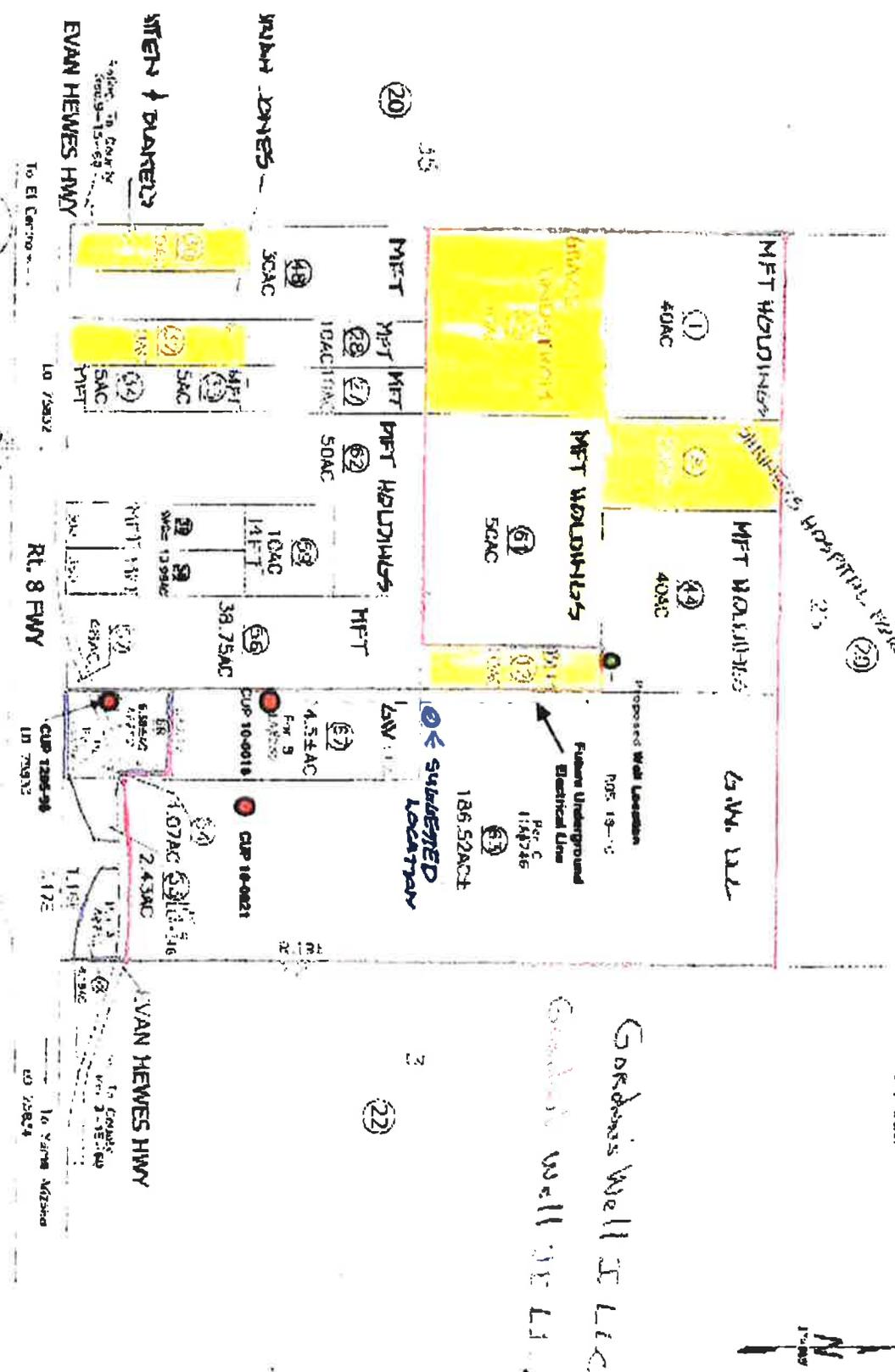
SEC. 36, T.16S., R.19E

Tax Area Code  
94-002

56-21



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**REQUIREMENTS**  
 THIS IS NOT AN OFFICIAL MAP  
 THIS MAP WAS CREATED FROM THE PUBLIC COUNTY  
 RECORDS FOR THE PURPOSE OF SHOWING THE  
 APPROXIMATE LOCATION OF THE PROPERTY  
 BY REFERENCE TO CROSSINGS IN THIS MAP AND FOR

Assessor's Map Bk. 56-Pg. 21  
 County of Imperial, Calif.

# FINAL DRAFT

## Groundwater Extraction Feasibility Analysis and Hydrogeologic Report

**Conditional Use Permit (CUP) #19-0022  
Ron Pratte Property  
Gordon's Well  
Unincorporated Imperial County, California**

*Prepared for:*

### **Imperial County Planning and Development Services**

801 Main Street  
El Centro, California 92243  
*Contact: Joe Hernandez, Planner IV*

*Prepared by:*

## **DUDEK**

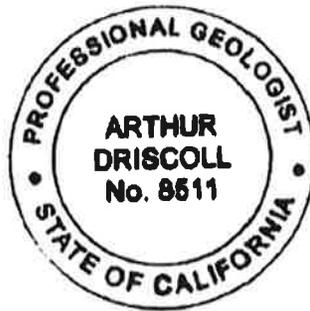
605 Third Street  
Encinitas, California 92024  
*Contact: Trey Driscoll, PG No. 8511, CHG No. 936  
Ron Schnabel, PG No. 7836, CHG No. 867  
Trevor Jones  
Devin Pritchard-Peterson*

## JUNE 2020

**EEC ORIGINAL PKG**

## SIGNATURE PAGE

This final draft Groundwater Extraction Feasibility Analysis and Hydrogeologic Report has been prepared under the direction of a professional geologist licensed in the State of California in accordance with Business and Professions Code sections 6735, 7835 and 7835.1, and consistent with professional standards of practice.



*Arthur S. Driscoll*

Arthur Storer Driscoll, III (Trey)  
PG No. 8511, CHG No. 936

Printed on 30% post-consumer recycled material.

EEC ORIGINAL PKG

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**DUDEK**

12486  
June 2020

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# Acronyms and Abbreviations

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Acronym/Abbreviation	Definition
AAC	All-American Canal
AF	acre-feet
AFY	acre-feet per year
APN	Assessor Parcel Number
bgs	below ground surface
BLM	Bureau of Land Management
CEQA	California Environmental Quality Act
County	County of Imperial
CUP	Conditional Use Permit
DWR	California Department of Water Resources
GDE	Groundwater Dependent Ecosystem
GMA	Groundwater Management Area
GPM	Gallons per Minute
GSP	Groundwater Sustainability Plan
ICPDS	Imperial County Planning and Development Services
MAF	million acre-feet
MCL	Maximum Contaminant Level
NCCAG	Natural Communities Commonly Associated with Groundwater
NGVD	National Geodetic Vertical Datum
msl	mean sea level
SEZ	Solar Energy Zone
SGMA	Sustainable Groundwater Management Act
TDS	total dissolved solids
USDA	U.S. Department of Agriculture
USGS	U.S. Geological Survey

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# 1 Introduction

---

## 1.1 Project Description and Purpose

In October 2019, the Project applicant (Gordons Well II, LLC) applied for an additional Conditional Use Permit (CUP) with the Imperial County Planning and Development Services (ICPDS or County) to extract groundwater from the East Mesa Groundwater Management Area (GMA) of the California Department of Water Resources (DWR) Imperial Valley Groundwater Basin (Basin) (DWR Basin Number 7-030). The additional CUP for a potential new groundwater supply well, when combined with existing CUPs that provide for groundwater extraction of up to 45 acre-feet per year (AFY), would allow for an aggregate groundwater extraction of 1,000 AFY. The ICPDS, in cooperation with the Project applicant, seeks an investigation and preparation of a Hydrogeologic Report to establish that groundwater quality and quantity are adequate, and will not adversely impact uses allowed or exacerbate any potential for overdraft condition in the Basin or East Mesa GMA.

## 1.2 Project Location

The Project site lies in the East Mesa GMA of the Salton Trough, southwest of the Algodones Dunes and north of the Mexico border, on the north side of Evan Hewes Highway (frontage road to Interstate 8) at a location commonly referred to as Gordons Well in unincorporated Imperial County, California (Figures 1 and 2). The Project site is owned by Ron Pratte and located at Township 16S, Range 19E, Section 36, Assessor Parcel Numbers (APNs) 056-210-001, 056-210-008, 056-210-042, 056-210-044, 056-210-052, 056-210-053, 056-210-054, 056-210-061, 056-210-063, 056-210-066, and 056-210-067, totaling approximately 418.36-acres.

## 1.3 Applicable Groundwater Regulations

The Imperial Valley Groundwater Basin is not adjudicated and is designated by DWR as having a very low priority in regards to enacting the Sustainable Groundwater Management Act (SGMA). For this reason, the Basin is not required to prepare a Groundwater Sustainability Plan (GSP) at this time. Groundwater underlying the Project site is managed by the County's Groundwater Ordinance contained in Title 9, Division 22 of the Land Use Ordinance. Section 92201.01, Purpose of the Ordinance, of the County Groundwater Ordinance states (County of Imperial, 2017),

The Board of Supervisors hereby finds and declares that the preservation, protection and management of the groundwater within the County for the protection of domestic, commercial, agricultural, industrial, municipal, wildlife habitat, and other uses is in the public interest, that protection is necessary to ensure availability of groundwater reasonably required to meet the present and future beneficial needs of the County, and that the adoption of a system of regulation of groundwater is for the common benefit of all County water users.

Section 92201.04 of the County Groundwater Ordinance defines several terms to govern the interpretation of the Ordinance, a select few of which are included below as defined by the Ordinance:

"Available supply" means the quantity of groundwater which can be withdrawn annually from a groundwater basin without resulting in or **aggravating** conditions of overdraft, subsidence, groundwater quality degradation, or other environmental damage. Available supply of a groundwater basin includes the average annual natural water supply, imported water or other water which has been spread to the basin or otherwise added to the basin, and return flows to the basin attributable to these sources reaching the groundwater basin in the course of use.

"Overdraft" means the condition of a groundwater basin where the average annual amount of water extracted exceeds the average annual supply of water to the basin plus any temporary surplus.

"Well interference" means a substantial water level decline in a short time period in a localized area caused by extraction.

The Project is subject to a California Environmental Quality Act (CEQA) review process. CEQA Guidelines contained in Appendix G, Environmental Checklist Form pertinent to analysis provided in this report are provided below:

Section IV. Biological Resources: Will the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? Will the Project have a substantial adverse effect on state or federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

Section X. Hydrology and Water Quality: Will the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality? Will the Project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? Will the Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Section XIX. Utilities and Service Systems: Will the Project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

The Project is located within the Lower Colorado River Accounting Surface (Accounting Surface), which in response to the 1964 U.S. Supreme Court decision requires a determination of whether Project groundwater pumping will result in extracted water being replaced by water drawn from the Colorado River. If Project-related groundwater pumping results in the static groundwater level equal to, or below the Accounting Surface in the East Mesa GMA, that consumption shall be considered subject to the Law of the River (Colorado River Compact of 1922 and amendments). The concepts, principles, and general methodology used in the Colorado River Accounting Surface Method, as defined in U.S. Geological Survey (USGS) Scientific Investigations Report 2008-5113 (Wiele et al., 2009), or a similar methodology, are considered the best available data for assessing project-related groundwater impacts in the Colorado River Hydrologic Region.

## 2 Existing Conditions

---

### 2.1 Topography and Drainage

Regionally, the Project is located in the East Mesa GMA part of the Salton Trough, southwest of the Algodones Dunes and north of the Mexico border (Figures 1 and 2). The East Mesa GMA is a gently sloping plain that dips towards the central Imperial Valley. Locally, the Project site is nearly flat, ranging in elevation from approximately 145 feet above mean sea level (msl) to 160 feet above msl. Under existing conditions, stormwater runoff is likely to pond in shallow depressions and/or swales with minimal runoff conveyed off the Project site.

The Project is located in the Deer Peak watershed (USGS Hydrologic Unit Area 10 Watershed), which is contained in the Brawley Hydrologic Area (HA 723.10), and the Imperial Hydrologic Unit (HU 723.00), all within the Colorado River Hydrologic Region (Figure 2). The Deer Peak watershed is a closed basin that primarily drains west towards the central Imperial Valley and Salton Sea.

### 2.2 Land Use

The Project site currently consists of a main residence, several outbuildings, and a restaurant. The land use surrounding the Project site is currently undeveloped land, with the exception of Gordons Well RV Park, which is located adjacent and to the west of the Project site. The Imperial Sand Dunes Recreation Area managed by the Bureau of Land Management (BLM) borders the Project site to the east. The County's General Plan Land Use map categorizes the land use in the East Mesa GMA, including the Project site, as recreation/open space.

### 2.3 Existing Groundwater Wells and Water Demand

#### 2.3.1 On-Site Groundwater Wells and Water Demand

Three wells are located at the Project site. The wells are identified as the Store, House, and Caretaker wells (Figure 3). All three wells are actively used for domestic, irrigation, or dust suppression purposes. The Store Well is located near Duner's Diner restaurant and serves as the primary potable water supply for the restaurant. The Store Well is also used for landscape irrigation. The House Well is located near the main house and serves as the primary potable water supply for the residence, in addition to irrigation supply for landscaping. The House Well is typically pumped at a reported production rate of 300 gallons per minute (GPM). Extracted groundwater is stored in a 10,000-gallon underground storage tank as well as a 2,000-gallon above ground storage tank. The Caretaker Well is located near the workshop and is primarily used for irrigation and dust suppression purposes. The Caretaker Well is typically pumped at a reported production rate of 350 GPM. All three wells have sanding issues (i.e., produce sand) as evidenced by sand separators installed at the wellhead. Well sanding is a condition where sand size sediment grains are drawn in to a well and discharged in suspension when a well is pumped. Well sanding can occur as a consequence of one or more factors associated with well design, construction, development, and/or water quality. A summary of the characteristics of each on-site well are presented in Table 2-1.

Three existing CUPs provide for groundwater extraction of up to 45 AFY, however, current production is estimated to be about 25 AFY.

### 2.3.2 Nearby Off-Site Groundwater Wells

Three wells are located nearby the Project site at Gordon's Well RV Park and Storage (Figure 3). The three wells are identified as RV Park Well 1 (16S/19E-36P01S), RV Park Well 2 (unknown State Well Number), and RV Park Well 3 (16S/19E-36Q01S). RV Park Well 1 and 2 are used for domestic purposes while RV Park Well 3 is used for irrigation purposes. A summary of the characteristics of each off-site RV Park well are presented in Table 2-1.

Table 2-1. On-Site and Off-Site Groundwater Wells

Local Well Name	State Well Number	Casing Diameter (in) <sup>a</sup>	Stick-Up (ft)	Depth to Water (ft, below top of casing)	Depth to Water (ft, below ground surface)	Latitude	Longitude
<b>On-Site Wells</b>							
Store Well	Unknown	8	1.36	88.20	86.84	32.709815	-114.960933
House Well	Unknown	20	1.70	86.77	85.07	32.712474	-114.958719
Caretaker Well	Unknown	22	2.84	91.38	88.54	32.713054	-114.960808
<b>Off-Site Wells</b>							
RV Park Well 1	16S/19E-36P01S	12	1.51	90.56	89.05	32.709168	-114.963675
RV Park Well 2 <sup>b</sup>	Unknown	12	NM	NM	NM	32.70903	-114.965486
RV Park Well 3	16S/19E-36Q01S	8	1.50	91.69	90.19	32.711442	-114.963098

Notes: NM = not measured; in = inches; ft = feet; depth to water measurements were made on March 17, 2020.

<sup>a</sup> Diameter was determined based on measurement of exposed section (above ground) of well casing. Actual diameter may differ.

<sup>b</sup> An obstruction was encountered in RV Park Well 2 and depth to groundwater was not measured.

Photographs of the on-site wells and RV Park wells are included in Appendix A and available well logs are provided in Appendix B.

## 2.4 Climate

The Project area is a typical desert climate and experiences warm summer months and cool winters. Average temperatures vary greatly within the region. Mean maximum temperatures during the summer frequently exceed 100 degrees Fahrenheit (°F). In the winter, mean minimum temperatures often drop below 50 °F. Table 2-2 displays the average monthly and daily record extreme temperatures for the National Oceanic and Atmospheric Administration (NOAA) El Centro station (station no. 42713) located approximately 35 miles west of the Project site at 32.7669° north latitude, -115.5617° west longitude, and an elevation of -9.10 feet msl.

Table 2-2. Climate Temperature Data Recorded at El Centro Station, California

Month	Temperature (*F) 1932 to 2020				
	Monthly Averages			Daily Extremes	
	Maximum	Minimum	Mean	Record High	Record Low
January	70.13	40.29	55.07	90	16
February	73.83	43.82	58.71	93	22
March	79.66	48.28	63.73	102	21
April	86.80	53.72	70.13	109	30
May	94.73	60.40	77.44	116	39
June	103.61	67.64	85.70	121	43
July	108.14	76.05	92.02	122	52
August	106.83	76.49	91.54	122	54
September	102.70	69.93	86.17	120	48
October	91.93	58.89	75.24	112	33
November	79.14	47.33	63.23	98	24
December	70.32	40.46	55.35	95	22
Annual/Record	89.19	56.65	72.32	122	16

Source: WRCC, 2020.

The precipitation record for the El Centro station was obtained in order to determine annual average rainfall at the Project site. According to historical precipitation data recorded at the El Centro station for the period from water year<sup>1</sup> 1933 to 2019, the average annual precipitation is approximately 2.54 inches per year (Figure 4). As shown in Figure 4, 2018 was the driest year on record (0.04 inches), while 1983 was the wettest year on record (7.89 inches). The cumulative departure from mean precipitation curves shows a short-term wet period from 1938 to 1946, followed by an extended, nearly 20-year dry period from 1946 to 1975. The dry period was then followed by a 20-year wet period from 1975 to 1995. From 1995 to 2019, the cumulative departure from mean curve steadily declined indicating a general decrease in precipitation (Figure 4).

## 2.5 Geology

The Project site is in the Salton Trough section of the Basin and Range physiographic province. The Salton Trough is a topographic and structural depression that is approximately 130 miles long and nearly 70 miles wide, and is a landward extension of the Gulf of California. The southern portion of the Salton Trough is bordered to the north by the Salton Sea, to the northeast by the Chocolate Mountains, and to the southwest by the Peninsular Ranges. The basement of the Salton Trough lies thousands to tens of thousands of feet below land surface and is composed of plutonic rocks of the early and late Mesozoic Era<sup>2</sup> which intrude Mesozoic Era and older metamorphic rocks. Overlying the Mesozoic Era basement complex is a sequence of predominantly non-marine sedimentary rocks that range in age from Eocene to Holocene (Cenozoic Era)<sup>3</sup> that have been estimated to be more than 20,000 feet thick in the south-central Salton Trough. The Cenozoic Era deposits can be broadly grouped into the following three categories: 1) a lower sequence of non-marine sedimentary rocks of early to middle Tertiary Period; 2) a middle marine unit, the Imperial Formation, of late Tertiary Period; and 3) an upper heterogeneous sequence composed of

<sup>1</sup> Water year is from October 1 to September 30.

<sup>2</sup> Mesozoic Era spans the from 251.0 to 65.5 million years ago.

<sup>3</sup> Cenozoic Era spans from 65.5 million years ago to present and includes the Eocene Epoch (55.8 to 33.9 million years ago) and Holocene Epoch (11,700 years ago to present).

predominately non-marine deposits of late Tertiary and Quaternary Periods (Loeltz et al., 1975).<sup>4</sup> The late Tertiary and Quaternary valley-fill deposits are many hundreds to thousands of feet thick and include discontinuous interlayered fine- and coarse-grained sediments deposited by the Colorado River and ancient Lake Cahuilla, and on the basin margins consist of locally derived coarse-grained sediments deposited in alluvial fans (Coes et al., 2015).

The western extent of the East Mesa GMA roughly coincides with the traceable shoreline of the pre-historic Lake Cahuilla (Coes et al., 2015). Sediments of the East Mesa GMA portion of the Salton Trough underlying the Project site consist of sand of aeolian origin derived from ancient Lake Cahuilla underlain by alluvial deposits of sand, silt, and clay deposited by the Colorado River. Sediments in the East Mesa GMA are generally considered to be coarser-grained than sediments in the central Imperial Valley (Loeltz et al., 1975; GEI, 2012a).

The Salton Trough is an active rift between the Pacific and North American plates. The San Andreas fault system is the major strike-slip fault system that traverses the Salton Trough. Various faults associated with the San Andreas fault system in the southern portion of the Salton Trough, and in the vicinity of the Project site, include the Sand Hills, Algodones, and Imperial faults (Loeltz et al., 1975). The Sand Hills and Algodones faults are mapped along the eastern edge of the Salton Trough to the east of the Project site. The Algodones fault, a northwest trending dip-slip fault, is commonly mapped as the eastern-most fault in the region. The Algodones fault is located approximately 8 miles east of the Project site. This fault crosses the All-American Canal (AAC) just west of Pilot Knob, but there has been no measured vertical displacement in this area (Coes et al., 2015). The Imperial Fault, a right-lateral strike-slip fault, is located approximately 23 miles west of the Project site. The Imperial Fault is active and has an estimated slip rate of approximately 15 to 20 millimeters per year. The Brawley Fault, also referred to as the Brawley Seismic Zone, is a predominantly extensional (pull-apart) tectonic zone that connects the southern terminus of the San Andreas Fault with the Imperial Fault, and the seismicity in this area is characterized by earthquake swarms where hundreds of earthquakes occur at once in events with many of the earthquakes close to the largest magnitude earthquake (Caltech, 2020). The geologic units and faults in the vicinity of the Project site are shown in Figure 5.

## 2.6 Surface Water

The All-American Canal is the sole conveyance source for surface water into the Imperial Valley. The AAC is an engineered canal that was constructed during the 1930s to convey Colorado River water from the Imperial Dam to the Imperial and Coachella valleys. The AAC began delivering water to the Imperial Valley in the early 1940s (USBR, 2006). Approximately 3.1 million acre-feet (MAF) of Colorado River water, less water transfer obligations, is conveyed annually through the AAC to the Imperial Valley.

Prior to the 1940 completion of the AAC, groundwater was recharged primarily by underflow from the Colorado River Valley. After construction of the AAC, groundwater elevations increased by as much as 50 to 70 feet above steady state conditions in the Project area as seepage of Colorado River water from the AAC and other canals contributed significant recharge (Coes et al., 2015; Tompson et al., 2008).

In the early 1980s Coachella Canal lining began, starting at the AAC and continuing through the East Mesa GMA. By 2006, the entire Coachella Canal was lined. The AAC Lining Project began in early 2007 and ended in late 2010. The lining project constructed a concrete-lined canal parallel to an approximately 24-mile section of existing AAC between Pilot Knob and Drop 3, with the exception of a 0.5-mile stretch immediately west of Drop 1 (GEI, 2012a).

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<sup>4</sup> The Tertiary and Quaternary Periods are part of the Cenozoic Era and are from 65.5 to 2.6 million years ago and 2.6 million years ago to present, respectively.

The lining projects, which were completed to reduce the seepage from the canals, have significantly reduced the volume of artificial recharge to the Imperial Valley Groundwater Basin.

## 2.7 Groundwater

### 2.7.1 Water Bearing Formations

The Salton Trough groundwater reservoir consists of Cenozoic valley-fill deposits. Although the deposits have been estimated to be upwards of 20,000 feet thick, the primary zone for water supply is the Tertiary and Quaternary non-marine sediments in the upper few thousand feet of the aquifer system. At depths greater than a few thousand feet, groundwater is generally considered to be too saline for domestic and agricultural use (Loeltz et al., 1975). The Imperial Valley Groundwater Basin consists of two major aquifer units including a shallow, unconfined aquifer that is bounded at depth by an aquitard, and a deeper, semi-confined aquifer. The shallow aquifer has a maximum thickness of 450 feet, while the deeper aquifer has a maximum thickness of 1,500 feet, for a combined thickness of about 2,000 feet (DWR, 2004).

Potential barriers to groundwater flow in the Basin include the San Andreas, Algodones, and Imperial faults. While it has been documented that the Algodones fault acts as a groundwater barrier in the area of Yuma, Arizona, there is no evidence that the fault acts as a barrier to flow in the Algodones Dunes area of California (Coes et al., 2015). Similarly, data is lacking on whether the San Andreas and Imperial faults control groundwater movement (DWR 2004). The only known barriers to groundwater flow are the low permeability fine-grained deposits of silt and clay most prevalent in the central Imperial Valley and West Mesa GMA of the Basin, which in some areas create locally confined groundwater conditions (DWR, 2004; Loeltz et al., 1975).

As discussed previously, alluvial deposits in the East Mesa GMA tend to be coarser-grained and therefore more transmissive than sediments in other regions of the Basin. The eastern portion of the East Mesa GMA aquifer system in the vicinity of the Project site may be stratigraphically equivalent to the water-bearing deposits in Yuma, Arizona—these deposits are characterized as having an upper, fine-grained zone, middle coarse-gravel zone, and lower wedge zone<sup>5</sup> (Coes et al., 2015). In general, well logs and borings indicate that the permeability of deposits decreases westward and northwestward from the Project area (Loeltz et al., 1975).

A geologic cross-section (A—A') based on well completion reports for wells nearby the Project site is shown in Figure 6, and the location of the wells and cross-section are shown in Figure 7.

### 2.7.2 Aquifer Storage and Hydraulic Properties

The total storage capacity of the Imperial Valley Groundwater Basin is estimated at approximately 14 MAF. Recharge, which comes mostly from imported sources and canal seepage, totals approximately 250,000 AFY (DWR, 2004). Available aquifer storage within the East Mesa GMA is estimated at approximately one (1) MAF (GEI, 2012a). Recharge to the East Mesa GMA has historically been predominately artificial and resulted due to seepage from unlined portions of the All-American and Coachella Branch canals prior to their lining in the early 2000s.

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<sup>5</sup> The lower wedge zone is considered to be a single heterogeneous unit that constitutes the major part of the water-bearing deposits of Pliocene to Holocene age. The lithology of the unit consists of sandy alluvium with interlayered silt and clay.

Well yields near the Project site range from 80 GPM to 3,000 GPM, and estimates of aquifer transmissivity range from 50,000 gallons per day per foot (gpd/ft) to 880,000 gpd/ft (GEI, 2012a; Loeltz et al., 1975). Estimates of aquifer transmissivity from individual well pumping tests as reported in Loeltz et al. (1975) are provided in Table 2-3, and the locations of the wells tested relative to the Project site are shown in Figure 7.

**Table 2-3. Aquifer Transmissivity Estimated from Pumping Tests**

Well ID	Owner Name	Date of Test	Interval Tested (ft bgs)	Well Yield (GPM)	Transmissivity (gpd/ft)
16S/20E-31K01S	LCRP 6	5/2/1962	340-520	1,035	880,000
16S/19E-11D01S	LCRP 12	5/14/1963	300-610	990	240,000
16S/18E-32R01S	LCRP 18	6/29/1964	140-360	900	140,000

Source: Loeltz et al., 1975.

Notes: ft = feet; bgs = below ground surface; GPM = gallons per minute; gpd/ft = gallons per day per foot; LCRP = Lower Colorado River Supply Project.

In addition, in August 2009 the USGS conducted an aquifer pumping test in the Lower Colorado River Supply Project 2 well (LCWSP-2 or well 16S/20E-49R01S). LCWSP-2 is 400 feet in total depth and screened from 200 feet to 400 feet below ground surface (bgs). LCWSP-2 was pumped at a constant rate of 3,000 GPM and drawdown and recovery were recorded with a vented pressure transducer. The Tartakovsky-Neuman method was used to fit a solution to the measured data, which yielded an estimated aquifer hydraulic conductivity of 46 feet per day (ft/day) and a specific yield of 0.2 (Coes et al., 2015).

Aquifer specific yield in the East Mesa GMA is estimated to range from about 4 percent near the East Highline Canal to 25 percent along the Coachella and All-American canals (GEI, 2012a).

### 2.7.3 Groundwater Levels

Depth to groundwater near the Project site was measured in Gordon's Well #3 (16S/19E-36Q01S) in 1981 by the USGS. From 1981 to 2009 groundwater levels declined 9.2 feet, or about 0.33 feet per year, suggesting a relatively stable groundwater conditions in the vicinity of the Project site prior to lining of the AAC. Since lining of the AAC, groundwater levels have declined 30 feet since 2009 when measurements have been taken more frequently, or about 3 feet per year (Figure 7). These data may indicate that the rate of decline in the nearest monitored well to the Project site have increased by a factor of 10, which is probably attributable to the canal lining and the resulting loss of artificial recharge.

Additional wells monitored by the USGS in the southern portion of the East Mesa GMA indicate a similar rate of groundwater level decline after canal lining, with an average groundwater level decline of about 45 feet for the period from spring 2007 to fall 2019 (Figure 7). Groundwater levels measured at well 16S/20E-27B01S located approximately 3.5 miles east of the Project site, suggests that the rate of groundwater level decline may be starting to slow as groundwater levels in the area approach a new post-canal-lining equilibrium (Figure 7).

### 2.7.4 Groundwater Quality

Groundwater quality in the Imperial Valley Groundwater Basin is highly variable. Salinity is the primary water quality issue, particularly at greater depths. Additional, constituents that occur at concentrations that are higher than

recommended for drinking water include nitrate, fluoride, sulfate, boron, and selenium. Total dissolved solids (TDS) concentrations in the Basin range from in the low hundreds to over 10,000 milligrams per liter (mg/L) (GEI, 2012a).

Groundwater quality in the East Mesa GMA is generally regarded as moderate to poor and has been locally influenced by seepage from the old unlined reaches of the Coachella and All-American canals (GEI, 2012a). TDS concentrations measured in wells in the East Mesa GMA reportedly range from as low as 250 mg/L to as high as 7,151 mg/L, however, TDS concentrations commonly range from about 700 mg/L to 1,000 mg/L (Coes et al., 2015; GEI 2012a).

Historical groundwater quality data for select constituents collected from wells in the vicinity of the Project site between 2009 and 2010 by the USGS are provided in Table 2-4, and the locations of the wells are shown in Figure 7. The data indicate that in general, specific conductance, TDS, and sulfate are commonly measured at levels that exceed California recommended secondary drinking water standards in wells nearby the Project site.

**Table 2-4. Groundwater Quality in the Project Area**

Well Number	Well Name	pH	Specific Conductance (µS/cm)	TDS (mg/L)	Chloride (mg/L)	Fluoride (mg/L)	Sulfate (mg/L)	Arsenic (µg/L)	Boron (µg/L)	Iron (µg/L)	Manganese (µg/L)
16S/18E-32R01S	LORP-18	8.2	1,200	773	110	0.74	297	NM	209	38	3.71
16S/19E-36P01S	Gordon's Well #1	7.8	1,320	878	131	0.44	307	0.95	174	3.3	<3.60
16S/20E-07E01S	PK-7	8.0	1,760	1,040	278	5.65	221	NM	886	<3.2	<3.60
16S/20E-21Q03S	P-10.3	7.7	1,170	760	114	0.39	285	1.0	159	6	<3.60
16S/20E-49R02S	P-9.3	7.9	1,230	803	114	0.38	293	NM	165	450	15.8
16S/20E-28H01S	P-7.2	7.9	1,230	804	114	0.39	298	NM	177	13	5.44
16S/20E-31Q01S	P-6.4	7.8	1,120	713	108	0.45	269	1.1	132	<3.2	<3.60
16S/20E-49R01S	LCWSP-2	7.5	1,200	781	117	0.34	292	0.67	162	9.6	<3.60
17S/18E-01F01S	P-2.2	7.9	1,260	815	117	0.51	298	NM	218	2.8 <sup>a</sup>	<3.60
17S/18E-03H01S	P-1.3	7.8	1,240	812	118	0.41	288	2	196	<3.2	<3.60
<b>California Drinking Water MCLs</b>											
-	-	6.5-8.5 <sup>b</sup>	900/1,600 <sup>c</sup>	500/1,000 <sup>c</sup>	250/500 <sup>c</sup>	2	250/500 <sup>c</sup>	10	1,000 <sup>d</sup>	300 <sup>b</sup>	50 <sup>b</sup>

Source: Coes et al., 2015

Notes: NM = not measured; MCL = maximum contaminant level; mg/L = milligrams per liter; µS/cm = microsiemens per centimeter; µg/L = micrograms per liter.

- <sup>a</sup> Estimated or having a higher degree of uncertainty.
- <sup>b</sup> Secondary MCLs.
- <sup>c</sup> Recommended/Upper Secondary MCLs.
- <sup>d</sup> State Notification Level.

## 2.8 Land Subsidence

The Salton Trough is one of the most seismically active areas in Southern California. Recent satellite measurements from radar interferometry indicate ongoing tectonic rifting and associated horizontal movements and sediment compaction (subsidence) ongoing at a regional scale (Barbour et al., 2016). Several studies have evaluated subsidence in the Imperial Valley including for geothermal fields, fault studies, and regional tectonics. The potential for subsidence induced by groundwater extraction is of particular concern given the location of the Project site in relation to the critical infrastructure of the AAC. The Imperial Valley Groundwater Basin underlying the East Mesa GMA is characterized as unconfined, homogeneous, and comprised of coarse-grained deposits of sands, gravels, and clays (GEI, 2012a). While the potential for subsidence induced by groundwater extraction in the East Mesa GMA is likely not to be as extreme as in other areas of the Imperial Valley (higher potential for compaction of finer grained lakebed sediments), locally discontinuous clay layers may have the potential to compact as a result of groundwater extraction.

Imperial County states that subsidence has been naturally occurring throughout the Salton Trough area of Imperial County (County of Imperial, 1997). However, this natural subsidence averages nearly two inches per year at the center of the Salton Sea, but decreases to zero near the Project area at the Mexican border.

In the East Mesa GMA, there is the recognition for potential land subsidence resulting from the extraction of geothermal waters in the Imperial Valley. Imperial County established a countywide land subsidence monitoring network, which includes the East Mesa GMA in the 1970s. In the East Mesa GMA, land subsidence from the extraction of groundwater has not been identified (GEI, 2012b).

Inelastic land subsidence is a permanent lowering of the ground surface due to compaction of the geologic materials caused by groundwater extraction. The geologic material of well 16S/19E-36P01S (RV Park Well 1 or Gordon's Well #1, the nearest well to the Project area) consists of sand and gravel up to ¾-inch in size to a depth of 125 feet bgs. Clay and sand occurs from a depth of 125 feet to 140 feet, and sand and small boulders occur from 140 feet bgs to the total depth of the well at 228 feet bgs. Based on this geologic material, subsidence is only likely in clay material below 125 feet bgs. Because groundwater levels in the Project area due to Project pumping will be above 125 feet bgs where compaction could potentially occur, subsidence is unlikely.

## 2.9 Groundwater Dependent Habitat

The DWR's Natural Communities Commonly Associated with Groundwater (NCCAG) Dataset was reviewed to determine potential wetland features and vegetation that may be groundwater dependent in the vicinity of the Project site. While there are no potential groundwater dependent ecosystems (GDEs) mapped in the immediate vicinity of the Project site, GDEs are mapped along the AAC near Drop 3 approximately 10 miles west of the Project site where the canal becomes unlined (Figure 8). Imperial Irrigation District is currently evaluating a canal water seepage recovery project in the area of the East Mesa GMA between Drop 3 and Drop 4. Imperial Irrigation District is in the process of constructing a numerical groundwater model for evaluation of the canal water seepage project, but it is not expected to be completed in time to be used to determine potential impacts of this Project.

## 3 Impact Analysis

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### 3.1 Methods of Analysis

Groundwater extractions at the project site are expected to induce groundwater elevation declines. To assess the impact that the proposed CUP extractions have on the local water table, we simulated 20 years of pumping-induced drawdown using two methods: 1) an analytical method for estimating pumping-induced drawdown using the Theis equation, and 2) a numerical method for estimating drawdown using a large-scale groundwater flow model.

#### 3.1.1 Theis Solution

Pumping-induced drawdown,  $s$ , was estimated analytically using the Theis equation (equation 1).

$$s(r, t) = \frac{Q}{4\pi T} \int_u^{\infty} \frac{e^{-y}}{y} dy \quad (1)$$

where

$$u = \frac{r^2 S}{4Tt} \quad (2)$$

and  $r$  is the radial distance from the pumping well,  $S$  is the aquifer storativity,  $T$  is the aquifer transmissivity, and  $Q$  is the proposed groundwater extraction rate. Equation (1) assumes that the aquifer is confined, isotropic, and extends infinitely in the radial direction.

As stated in Section 2.7, groundwater underlying the Project Site may occur under unconfined conditions. Pumping in an unconfined aquifer draws down the water table, causing the saturated thickness of the aquifer, and thus the transmissivity, to change throughout time.

Jacob (1944) proposed a drawdown correction factor when using the Theis equation to predict late-time drawdown in unconfined aquifers. In his analysis, Jacob suggests the Theis predictions may be adjusted using the following:

$$s' = s - s^2/2b \quad (3)$$

Here,  $s'$  is the adjusted drawdown,  $s$  is the drawdown predicted using equation (1), and  $b$  is the saturated thickness of the aquifer. The term,  $s^2/2b$  is referred to as the drawdown adjustment factor. This adjustment to induced-drawdown is considered and described in the discussion of analytical results presented in Section 3.2.1.

#### 3.1.2 Groundwater Modeling

In addition to the analytical approach described above, groundwater elevation declines induced by extractions under the proposed CUP were simulated using the Imperial East Solar Energy Zone (SEZ) numerical groundwater flow model. The Imperial East SEZ model is a large-scale MODFLOW groundwater model developed by Argonne

National Laboratories to examine the influence of groundwater withdrawal to support utility-scale solar energy development in the East Mesa GMA (Greer et al, 2013). The spatial extent of the model is expansive, extending from the Salton Sea in the north, south of the International Border into the Mexicali Valley.

The Imperial East SEZ model uses a spatial discretization of 200 meters by 200 meters (656 feet by 656 feet), and extends vertically from land surface to depths of approximately 2,000 feet bgs in the West Mesa GMA. Following the hydrogeologic framework outlined by Tompson et al. (2008), the model represents aquifer materials across the entire Imperial and Mexicali valleys using two lithologic materials: clay and sand. The spatial distribution of sand and clay were determined using geographic distributions of soils (Davids Engineering, 2007), U.S. Department of Agriculture (USDA) soil textural classes (USDA, 2007), and the results of isotopic tracer analysis for the East Mesa GMA (Tompson et al., 2008). The model used a horizontal conductivity value of 0.56 ft/day for clay and 164 ft/day for sand. The Imperial East SEZ model assigned a specific storage<sup>6</sup> value of 0.00152 ft<sup>-1</sup> and a specific yield of 0.15 to both clay and sand.

The Imperial East SEZ model uses the groundwater extraction rates reported in Tompson et al. (2008). Tompson et al. (2008) provides estimates for regional extractions of 25,600 AFY in the Imperial Valley and 740,300 AFY in Mexicali Valley. These extraction rates were constant throughout the simulation period.

For the Imperial Valley, the number, location, and depths of pumping wells included in the model were set according to information in USGS's National Water Information Systems database (USGS, 2013), and a map of wells provided in Loeltz et al. (1975). For the Mexicali Valley, model wells were placed in layers 1, 3, and 9 at locations that were based on Figure 1 in Gracia et al. (2011). Groundwater extractions were evenly distributed across 38 wells in the Imperial Valley and 238 wells in the Mexicali Valley (Greer et al., 2013).

Recharge to groundwater in the Imperial Valley and Mexicali Valley occurs via three processes: 1) deep percolation of precipitation, 2) irrigation return flows, and 3) seepage of imported water through unlined portions of irrigation canals. Modeled rates of recharge from deep percolation of precipitation varies between  $1.2 \times 10^{-6}$  and 0.00015 ft/day across the model domain. Irrigation return flows ranged from 0 to 0.48 foot per year per acre. Seepage of imported water through the AAC, Coachella Canal, and New River changes throughout the simulation due to historical operations and lining of the canals.

The Imperial East SEZ model was calibrated to transient groundwater elevations measured between 1942 and 2013. This calibration period captures groundwater mounding in the East Mesa GMA as a result of initial operations of the AAC, and subsequent groundwater elevation declines in the East Mesa GMA after 24-miles of the canal were lined between 2007 and 2010. The model's ability to reproduce historical groundwater elevations in the Imperial and Mexicali Valleys was quantified using the root-mean-square error between simulated and observed groundwater elevations. The root-mean-square error was computed using groundwater elevations measured at 51 wells, the majority of which were located in the East Mesa GMA (Greer et al., 2013).

The Imperial East SEZ model uses a yearly time-step to simulate groundwater flow and corresponding changes in groundwater elevations. Accordingly, the Imperial East SEZ model did not explicitly simulate groundwater elevations on the date at which they were measured at the 51 observation wells. To account for this, Greer et al. (2013 page 19) state that:

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<sup>6</sup> Specific storage is the volume of water removed from a unit volume of a confined aquifer for a unit drop in hydraulic head [ft<sup>-1</sup>].

*"...annual model results at the end of the 71-year period were inspected and compared to recent heads in the various portions of the study area"*

Using this approach, the root-mean-square error between the simulated and observed groundwater elevations in the East Mesa GMA is 14.96 feet.

Following calibration, Greer et al. (2013) used the Imperial East SEZ model to simulate projected water table declines in the East Mesa GMA as a result of groundwater extractions north of Drops 3 and 4 of the AAC. The future scenario was simulated using the recharge values, hydraulic parameters, and groundwater extraction estimates described above. The future simulations were designed to run for the 20-year period between 2013 and 2033.

### 3.1.2.1 Model properties in the Project Vicinity

The Imperial East SEZ model represents the groundwater aquifer underlying the Project site as a locally homogeneous unconfined aquifer. In the vicinity of the Project site, the Imperial East SEZ model represents the aquifer as approximately 1,800 feet of sand. The Imperial East SEZ model estimates that the hydraulic conductivity of the sand underlying the Project site is 164 ft/day, with a specific storage and specific yield of 0.001524 ft<sup>-1</sup> and 0.15, respectively.

The Project site is north of the AAC. This section of the AAC was lined between 2007 and 2010. Following the canal lining, the Imperial East SEZ model represents this portion of the AAC as a lined canal that does not provide any recharge to the East Mesa GMA. The Coachella Canal does not provide groundwater recharge to the East Mesa GMA near the Project Site in the Imperial SEZ model.

The closest groundwater production well in the model is located approximately 1.5 miles southeast of the Project site. This well is located south of the AAC and east of the Coachella Canal (Figure 9). This well extracts approximately 840 AFY from the first 100-feet of aquifer materials. The well does not have an identifier in the model, but based on location it is likely well 17S/20E-04D01S.

### 3.1.2.1 Modifications to the Imperial East SEZ model

The future baseline simulation prepared by Greer et al. (2013) using the Imperial East SEZ model was modified to simulate the effects of groundwater extractions under the proposed CUP on the local groundwater table. The future baseline scenario simulation assumes that regional groundwater extractions are maintained at the rates simulated during the calibration period, no additional sections of the AAC are lined, and recharge rates are constant between 2013 and 2033. This baseline scenario does not simulate production from the proposed SEZ wells located north of the AAC between Drops 3 and 4.

Two primary changes were made to the future baseline simulation: 1) a groundwater production well was placed in the southeast corner of the Project Site (Figure 9), and 2) the future simulation was extended to simulate drawdown between 2013 and 2040. The groundwater extraction well pumped at a constant rate of 1,000 AFY throughout the simulation. Two production scenarios were considered—the first assumed that all groundwater was extracted from the first 100-feet of aquifer materials, and the second assumed that groundwater was extracted from the first 350 feet of aquifer materials. Results of these simulations are described in Section 3.2.2.

Hydraulic properties of the aquifer materials, groundwater recharge rates, irrigation canal seepage rates, and regional groundwater extractions rates were not adjusted during the simulation.

## 3.2 Reduction in Groundwater in Storage

### 3.2.1 Theis Solution

Figure 10 shows the groundwater elevation declines predicted from equation (1) within 1-mile of the proposed pumping well after 20-years of production. Using the aquifer thickness represented in the Imperial East SEZ model, the maximum drawdown adjustment factor predicted by equation (3) is approximately 0.03 feet. This indicates that the Theis solution provides a reasonable estimate of late-time drawdown induced by pumping under the proposed CUP.

Four aquifer storativity parameters were considered when using equation (1) to predict pumping-induced drawdown at the project site. The Imperial East SEZ model values of aquifer layer thickness and specific storage lead to estimates of storativity that range from approximately 0.15 to 0.5. Reported storativity estimates are as low as 0.0001 (GEI, 2012). The range of storativities shown in Figure 10 provide an estimate of groundwater elevation declines given the uncertainty in local storativity.

A transmissivity of 250,000 gallons per day per foot was used throughout the drawdown calculations (GEI, 2012).

Figure 10 indicates that 20-years of groundwater extractions under the proposed CUP may induce approximately 8 feet of drawdown at the proposed production well location. Equation (1) predicts that drawdown one mile away from the pumping will range between approximately 1.5 and 2 feet after 20-years of groundwater extractions at the Project site.

Figure 11 shows estimates of storage change within 1-mile of the proposed production well throughout time. After 20-years of production, equation (1) predicts that groundwater extractions under the proposed CUP may cause up to 1,000 AF of storage loss within 1-mile of the pumping well. As indicated by Figure 11, this estimate is uncertain and sensitive to the modeled value of storativity.

### 3.2.2 Groundwater model results

Figure 12 shows simulated groundwater elevations at the proposed production well between 2013 and 2040 using the Imperial East SEZ model. These simulated elevations were computed using the future baseline and modified future baseline simulations described in Section 3.1.2.1. In Figure 12, the black line represents the water table elevation at the proposed production location under the conditions where groundwater is not extracted from the Project site. The red line in Figure 12 indicates the predicted water table elevation under the conditions where 1,000 AFY is extracted from the first 100-feet of aquifer. The blue line in Figure 12 represents the predicted water table elevation when 1,000 AFY is extracted from the first 350-feet of aquifer.

Results of these three simulations indicate that the Imperial East SEZ model predicts that groundwater elevations will decline by approximately 15-feet between 2013 and 2040 at the Project site.

Figure 13 shows induced drawdown at the production well between 2013 and 2040. As in Figure 12, the red line denotes drawdown when pumping only occurs in the first 100-feet of the aquifer, and the blue line denotes drawdown when pumping occurs within the first 350-feet of the aquifer. Under these two conditions, the Imperial East SEZ model predicts that drawdown at the proposed pumping well will range from approximately 1 to 1.25 feet by 2040.

Table 3-1 provides the average annual water balance for the Project site under the conditions where: 1) groundwater is not extracted from the Project site (baseline), and 2) when groundwater is extracted from the first 100-feet of aquifer materials. Table 3-1 indicates that approximately 60 AFY of storage is lost per year regardless of local extractions. This results in a cumulative storage loss of approximately 1,600 AF by 2040—this is comparable to the storage loss predictions computed using the Theis equation and a storativity of 0.15.

**Table 3-1. Water Budgets for Proposed Pumping at the Project Site**

2013 to 2040 Averages	Simulation	Change in Storage within the Project Site	Pumping	Lateral flux into Project Site	Vertical Flux into Project Site from Deeper Aquifer Materials	Lateral Flux out of Project Site	Vertical Flux out of Project Site to Deeper Aquifer Materials
	Baseline	-56	0	896	0	1,004	81
	Extractions from first 100-feet	-57	1,000	1,099	3,072	932	54

**Notes:** All values are in acre-feet per year (AFY).

Table 3-1 indicates that the Imperial East SEZ model predicts that groundwater extracted from the Project site is replaced by groundwater stored deeper aquifer materials. These results suggest that deeper aquifer units may be pressurized. There is limited site-specific data to support this representation of the hydrogeology underlying the Project site. The storage change and water table declines predicted by the Imperial East SEZ model may be underestimating the effects of pumping due to this assumption.

Figure 14 provides a comparison between the simulated groundwater elevations predicted with the Imperial East SEZ model and groundwater elevations measured at RV Park Well 3. The modeled groundwater elevations were simulated under baseline conditions, assuming that the proposed groundwater extraction well is not pumping. By 2020, the Imperial East SEZ model predicts a groundwater elevation of approximately 98 feet at the RV Park Well 3 location. Measurements collected at RV Park Well 3 on March 17, 2020 indicate that groundwater is encountered at an elevation of 66 feet, approximately 32 feet lower than what the Imperial East SEZ model predicts. This difference of more than 30 feet suggests that induced drawdown of 1 to 1.25 feet predicted by the Imperial East SEZ model is within the range of the model's uncertainty.

The 30-foot difference between modeled and observed heads and the RV Park Well 3 location is approximately double the model-wide root-mean-square-error calculated by Greer et al (2013) for the period between 1942 and 2013. However, Greer et al (2013) cite similar model errors across the East Mesa and suggest that these differences may be attributed to the lack of local aquifer data. A map of the spatial distribution of model error (Figure 10 of Greer et al (2013)) indicates that these errors are distributed across the model domain and are not localized to regions surrounding the All American Canal or other irrigation canals in the Imperial Valley. Based on the calibration results presented in Greer et al (2013), it can be inferred that the relatively large error between simulated and observed head at the RV Park Well 3 is likely caused by the simplified representation of local aquifer properties.

### 3.3 Well Interference

Figure 9 shows the Lower Colorado River Accounting (Accounting) surface contours overlaid on top of the Project site boundary. In the vicinity of the Project site, the Accounting surface lies at an elevation of approximately 81 feet relative to the National Geodetic Vertical Datum of 1929 (NGVD 1929) (Wiele et al., 2009).

Figure 15 shows a plot of simulated and measured groundwater elevations at RV Park Well 3, but with the Accounting surface groundwater elevation superimposed on the figure (black dashed line). Figure 15 indicates that groundwater elevations in the vicinity of the Project site currently reside below the Accounting surface. While the estimated drawdown induced by extracting 1,000 AFY from the Project site is minimal over the next 20 years (e.g., estimates range between 1.5 and 8 feet of drawdown), current water levels indicate that this water would be extracted from the aquifer that is replenished by the Colorado River.

## 4 Summary of Project Impacts and Mitigation

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The proposed conditional use permit provides Gordons Well II, LLC the ability to extract groundwater at an aggregate rate of 1,000 AFY. Groundwater extractions at the Project site will cause groundwater elevations to decline, potentially drawing water from the aquifer that is replenished by the Colorado River. To assess the effects of the proposed extractions on underlying groundwater elevations, we estimated pumping-induced drawdown using the Theis equation and a regional-scale numerical groundwater flow model developed by Argonne National Laboratories (Greer et al., 2013). Throughout this approach, it was assumed that all 1,000 AFY was extracted from a single well, located in the southeast corner of the Project site.

Results from the Theis equation and numerical groundwater flow model (Imperial East SEZ model) suggest that the proposed extractions will drawdown water levels at the pumping well by up to 8 feet over the next 20 years. Pumping from the single well would draw groundwater elevations down by up to 2 feet approximately 1-mile away from the well. These drawdown estimates correspond to a total loss of groundwater in storage that ranges from approximately 1,000 to 1,600 AF over the next 20 years.

A comparison of groundwater levels measured at RV Park Well 3 and the updated Lower Colorado River Accounting Surface indicates that groundwater levels are currently below the Accounting surface (Wiele et al., 2009). The most recent update to the Accounting surface indicates that groundwater below approximately 81 feet relative to the NGVD 1929 is replenished by Colorado River water, and is accordingly subject to the laws of the river. Groundwater elevations at RV Park Well 3 have declined from 96 feet relative to NGVD 1929 in December of 2009 to the current water level of 66 feet relative to NGVD 1929, measured on March 17, 2020. Groundwater elevations at RV Park Well 3 dropped below the Accounting surface in 2014.

While the proposed extraction of 1,000 AFY is not expected to drawdown the water table significantly over the next 20 years, groundwater pumped from wells at the Project site is extracted from the aquifer that is naturally replenished by the Colorado River according to the Colorado River Accounting Surface Method (Wiele et al., 2009).

As local aquifer properties likely vary from those used in this report, Dudek recommends that pumping tests be conducted for existing and or new Project production wells to determine site-specific values for transmissivity and storativity. These site specific values should be used to update the impact analysis presented in this report. In addition, baseline water quality samples should be collected from Project wells for general minerals, and nitrate, fluoride, sulfate, boron, and selenium, which have been identified as potential contaminants of concern in the Imperial Valley Groundwater Basin. Dudek recommends that the Project annually report production, and groundwater level and groundwater quality data as a condition of the CUP. Dudek recommends that the production and groundwater level data be recorded on a monthly frequency and that water quality be analyzed semi-annually in the spring and fall. Groundwater quality results should be evaluated for trend and compared to available Colorado River water quality above Imperial Dam.

## 5 References

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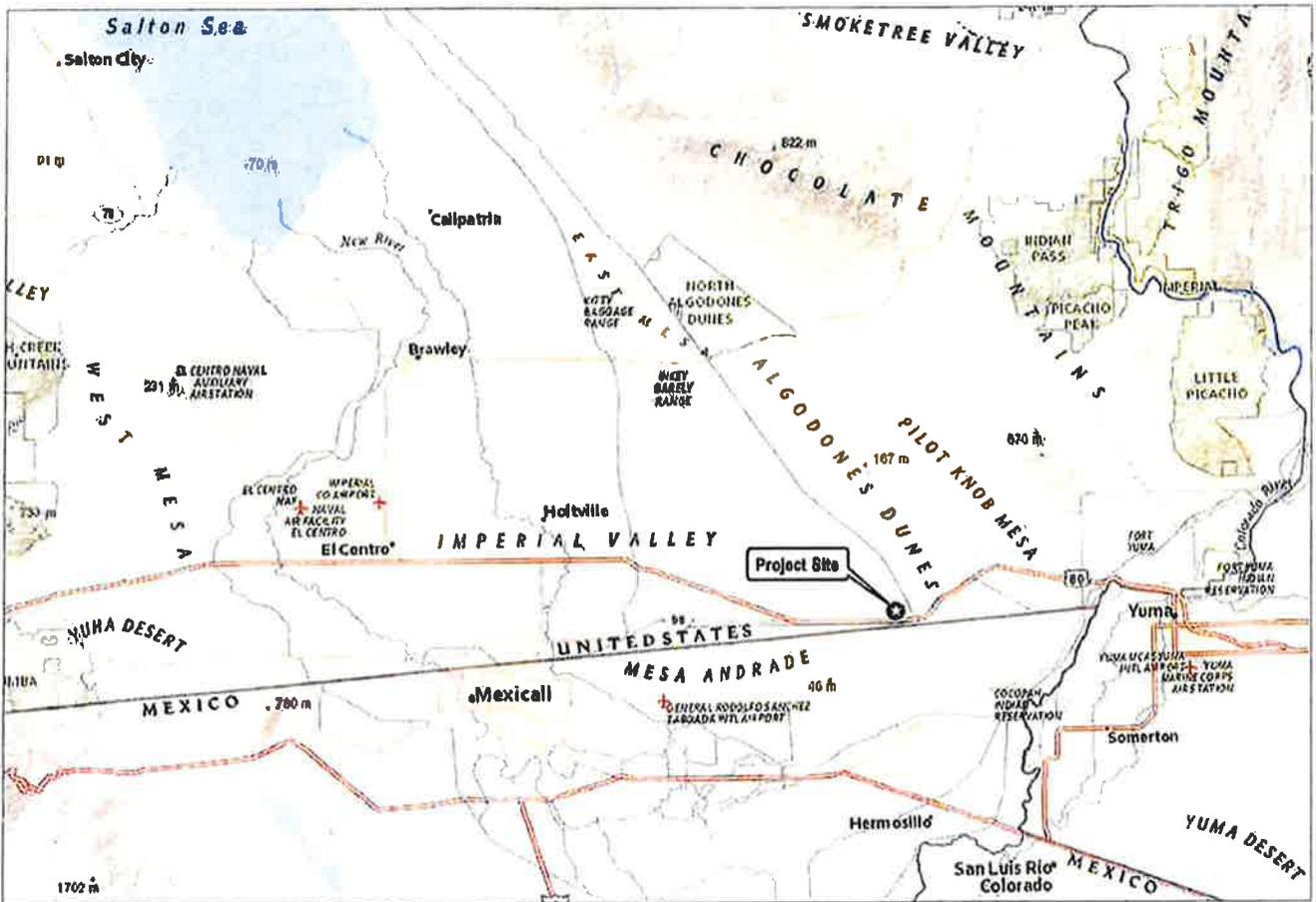
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## GROUNDWATER EXTRACTION FEASIBILITY ANALYSIS AND HYDROGEOLOGIC REPORT

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SOURCE EBRI

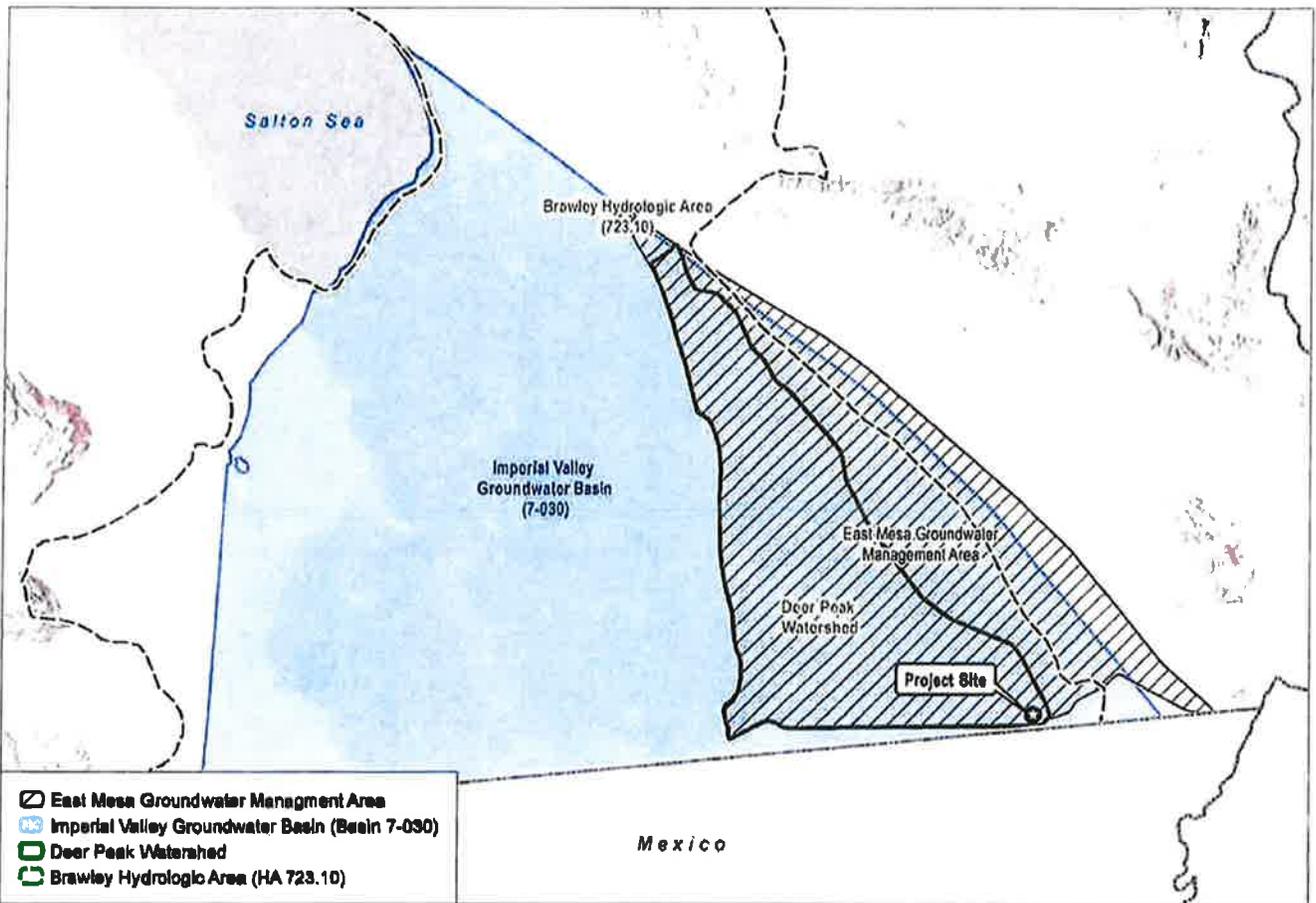


FIGURE 1

Regional Location

Groundwater Extraction Feasibility Analysis and Hydrogeologic Report Conditional Use Permit (CUP) #18-0022

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SOURCE: ESRI, DWR, USGS

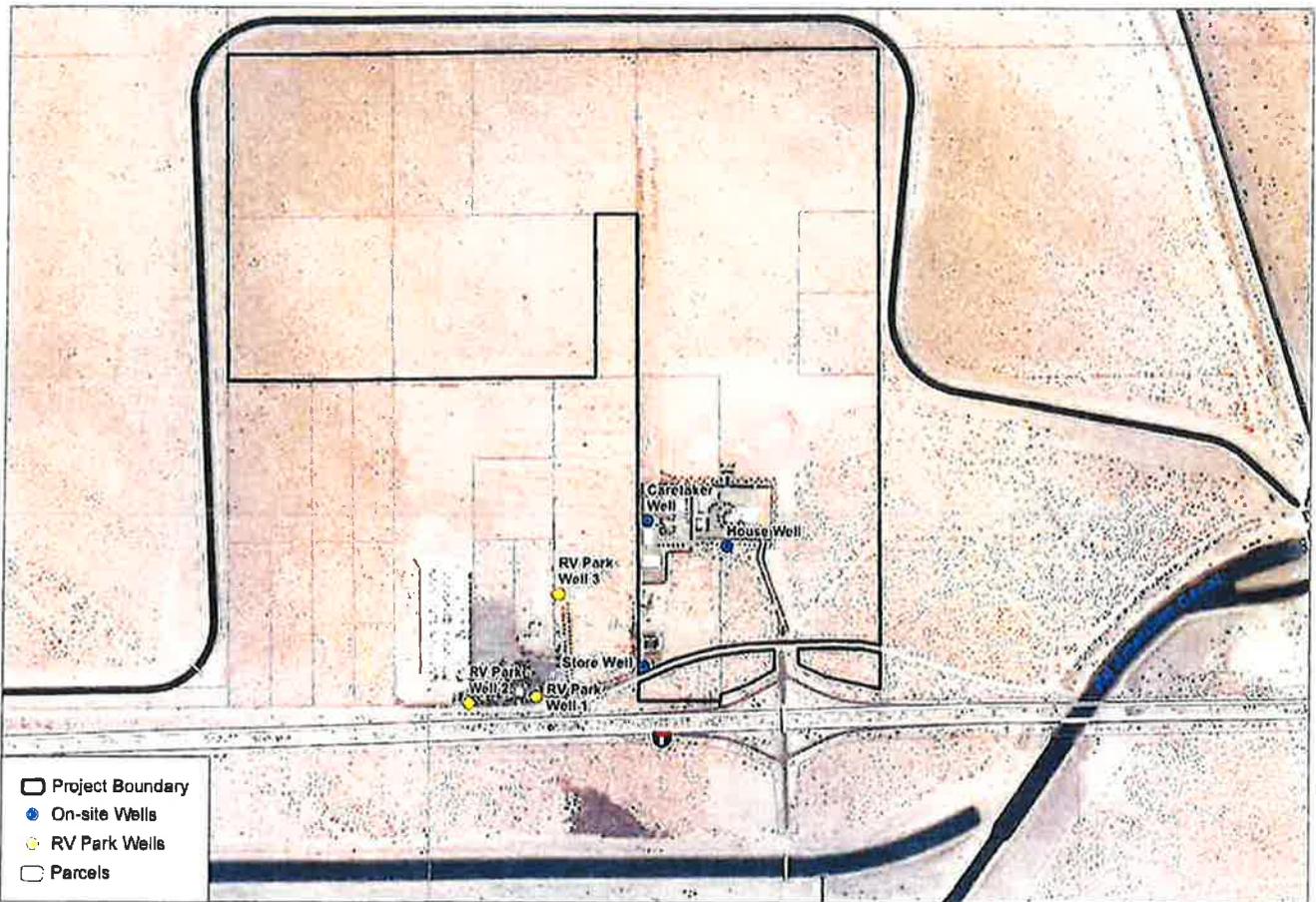


**FIGURE 2**

**Hydrologic Units**

Groundwater Extraction Feasibility Analysis and Hydrogeologic Report Conditional Use Permit (CUP) #19-0022

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SOURCE: ESRI County of Imperial

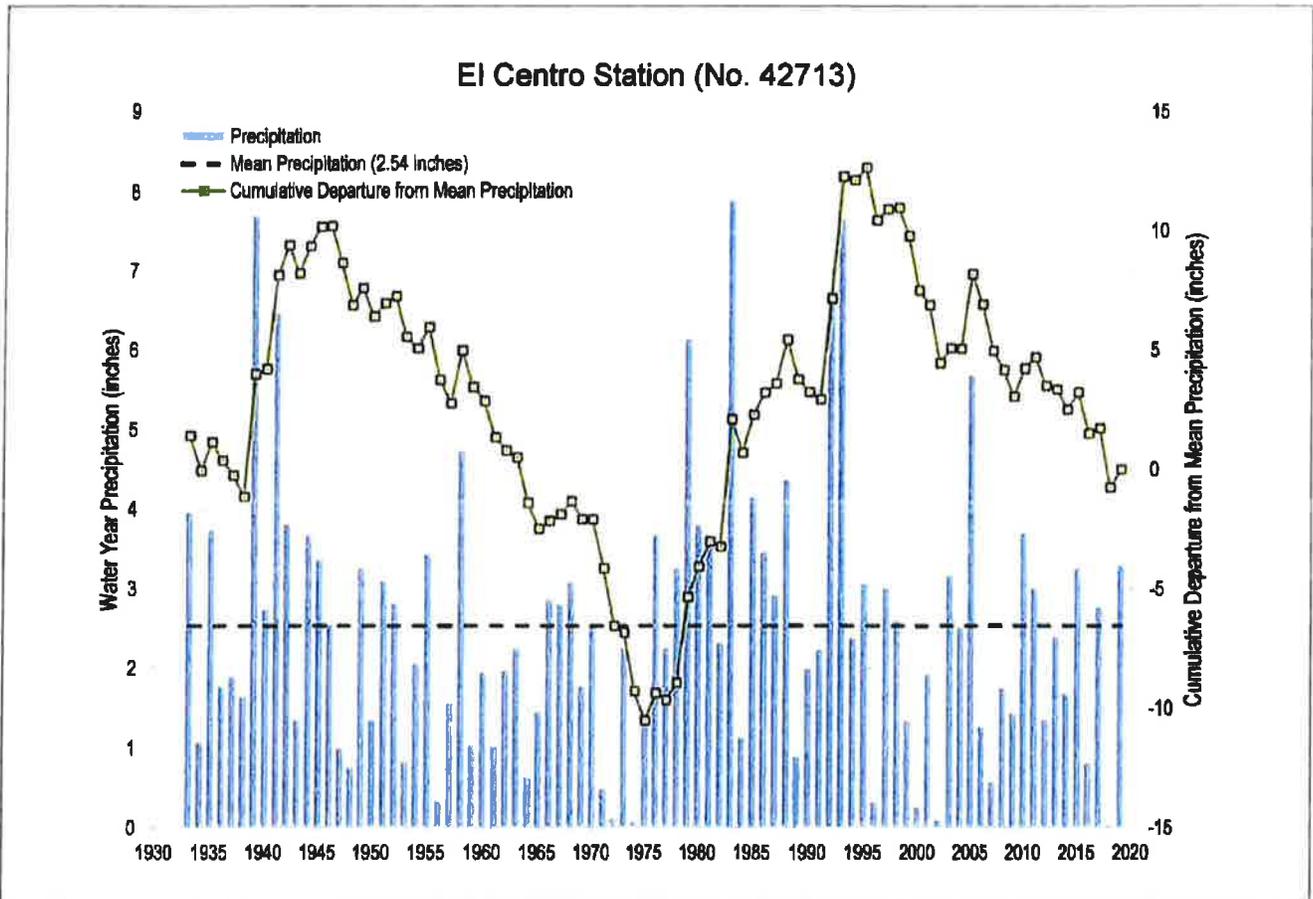
FIGURE 3

**DUDEK**  : 500 Feet

Project Site and Groundwater Wells

Groundwater Extraction Feasibility Analysis and Hydrogeologic Report Conditional Use Permit (CUP) #19-0022

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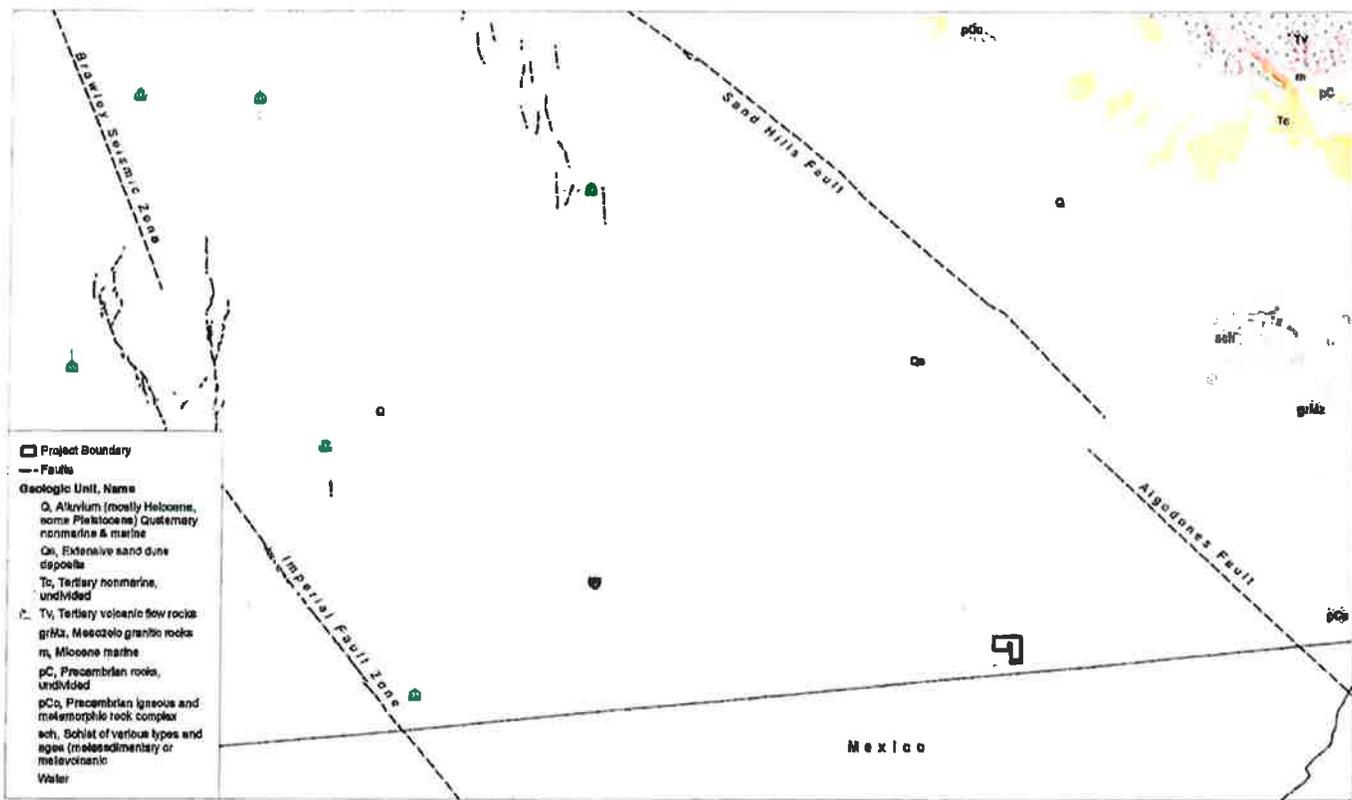
SOURCE NOAA

FIGURE 4

**DUDEK**

El Centro Station Water Year Precipitation  
Groundwater Extraction Feasibility Analysis and Hydrogeologic Report Conditional Use Permit (CUP) #19-0022

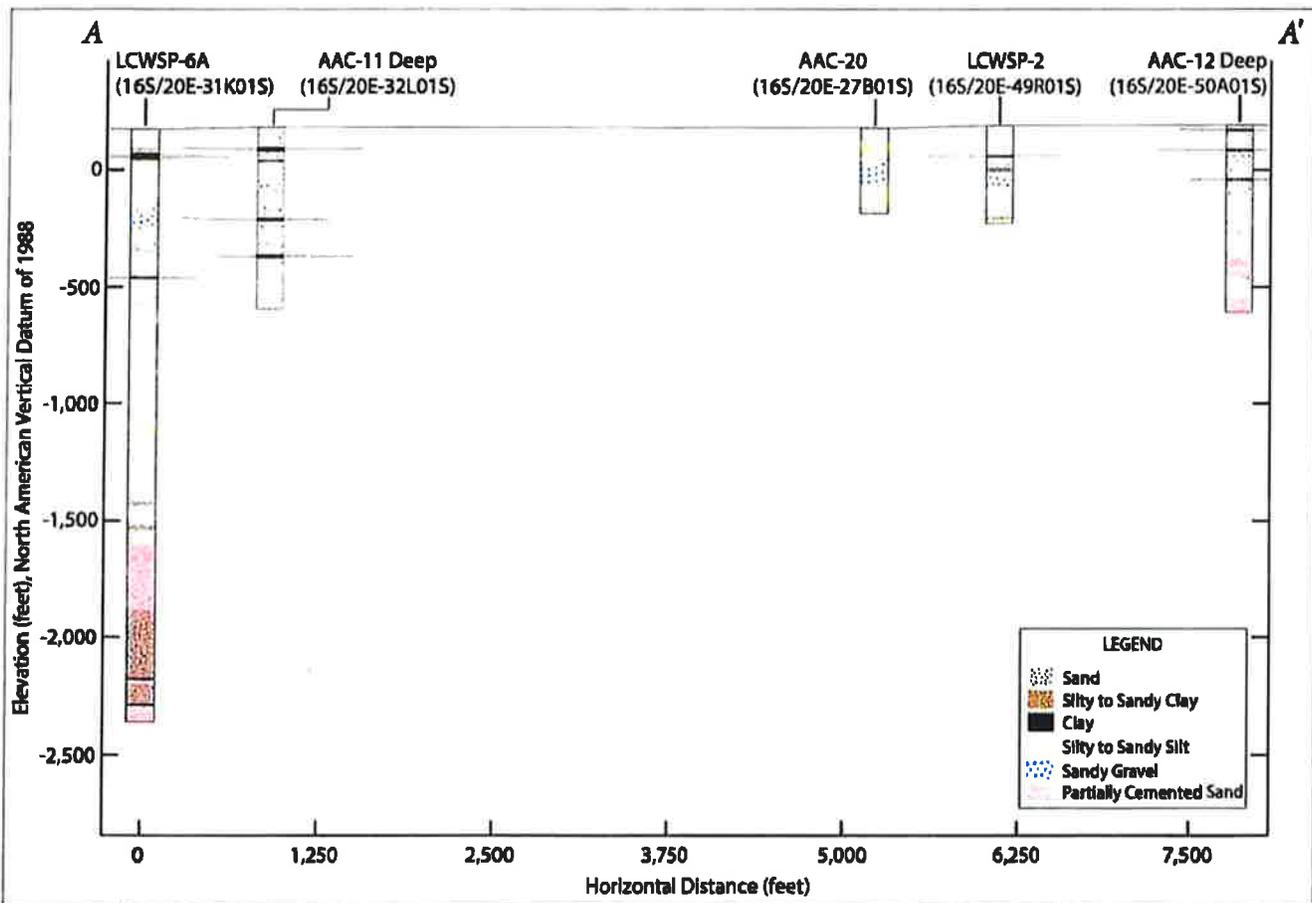
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FIGURE 5  
Geologic Units and Faults

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SOURCE: Adapted from Coese et al. 2015

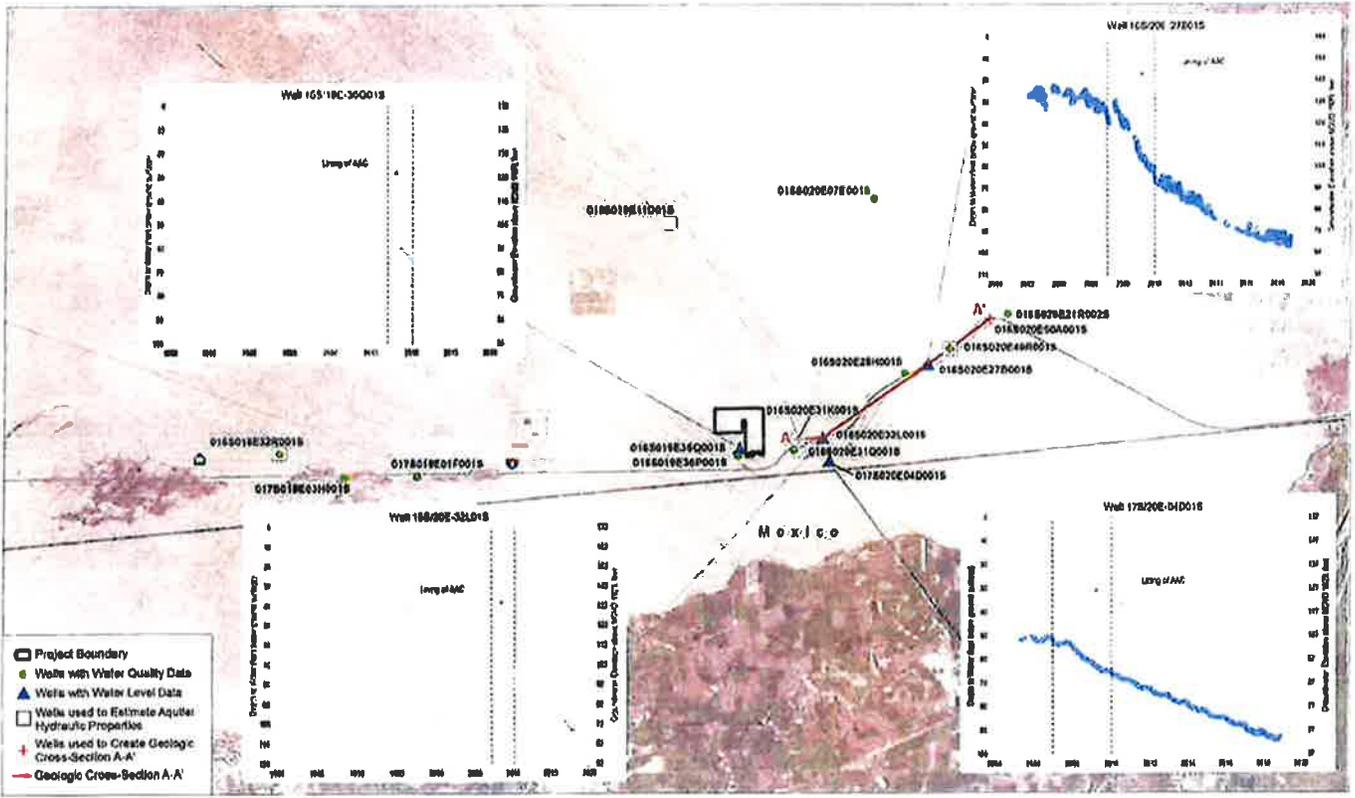
FIGURE 6

A-A' Geologic Cross Section

Groundwater Extraction Feasibility Analysis and Hydrogeologic Report Conditional Use Permit (CUP) #19-0022

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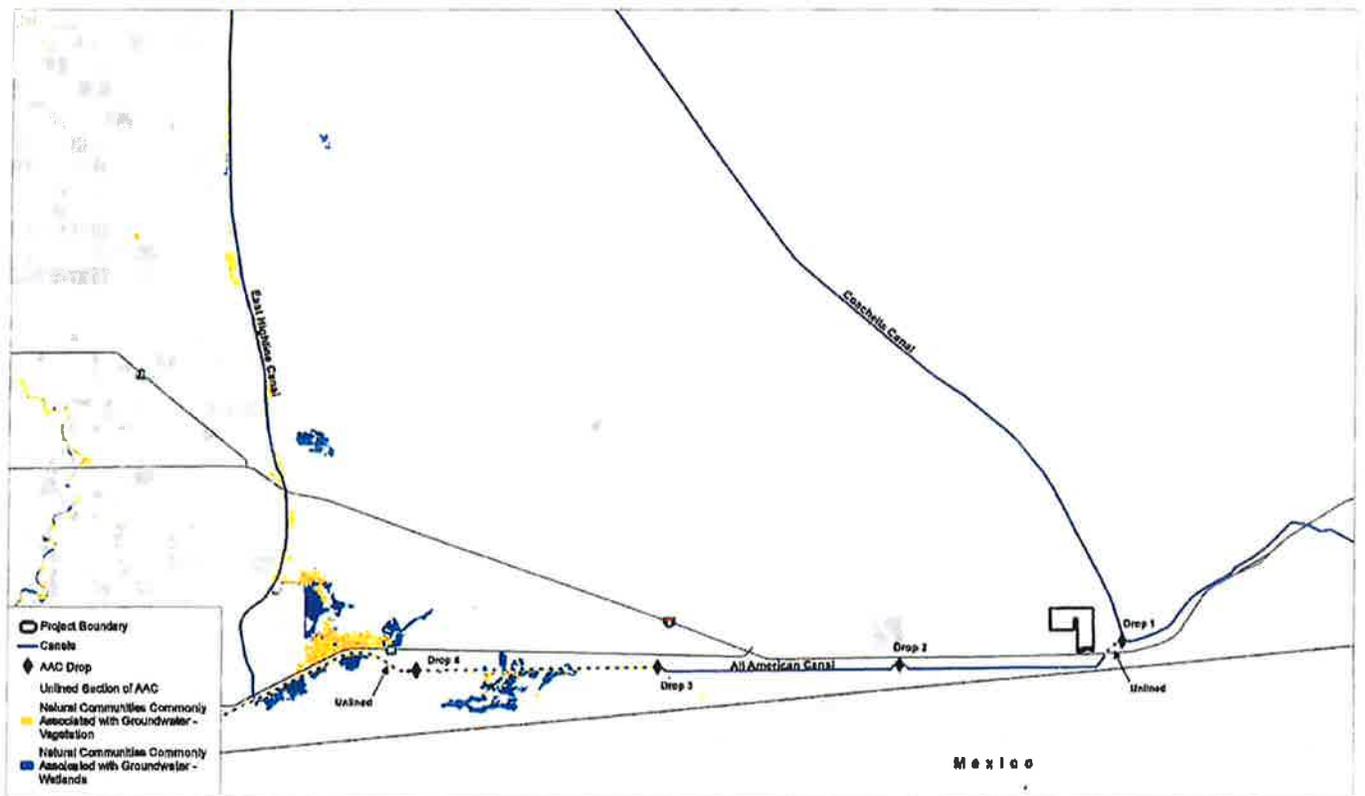


SOURCE: EPA, County of Santa Clara, USGS



FIGURE 7  
Groundwater Wells and Water Levels Nearby the Project Site

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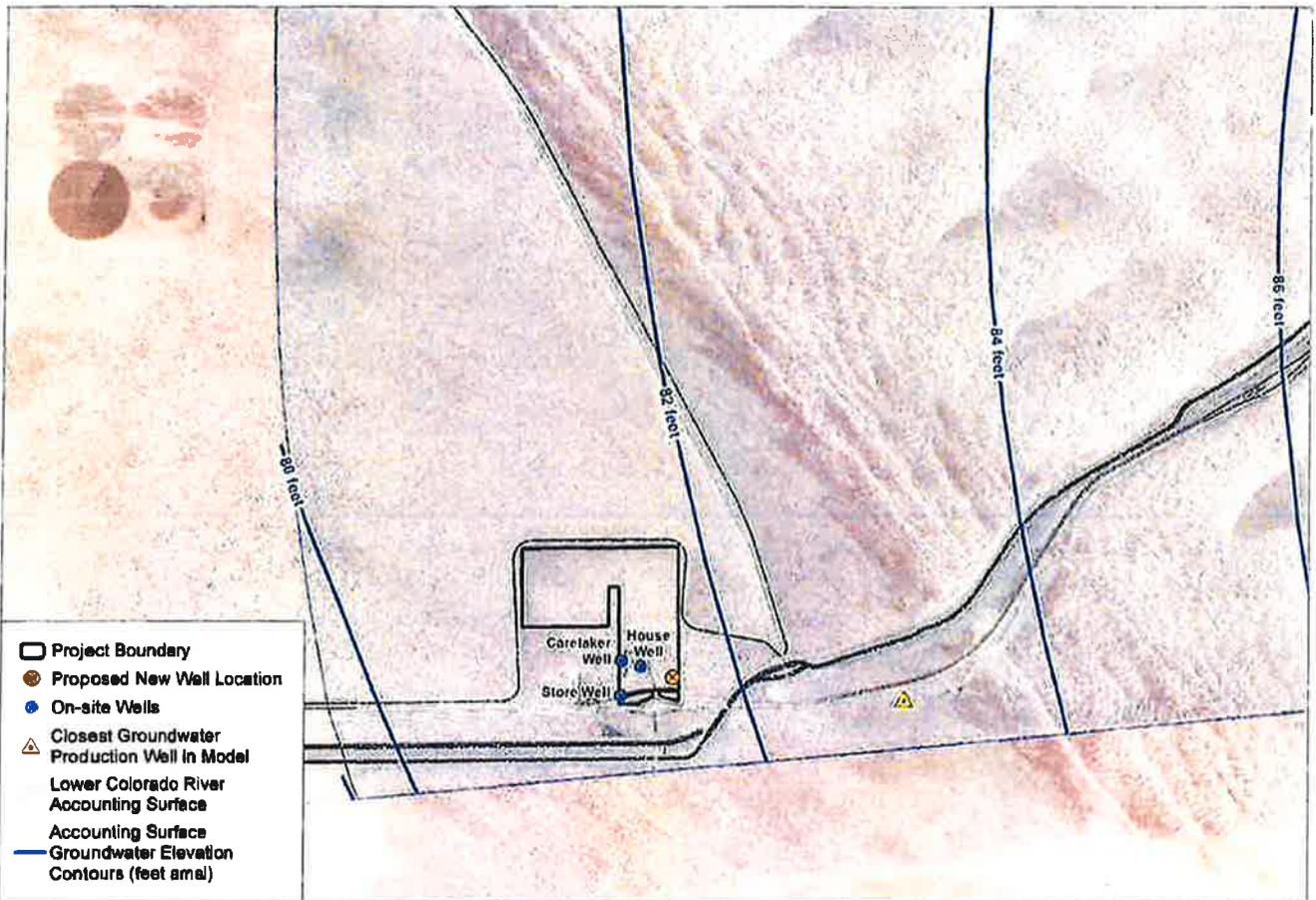


V:\1000 EA Summary.dwg

**DUDEK**

**FIGURE 8**  
**Potential Groundwater Dependent Habitat**  
 Date: 2010-11-01; 10:54 AM; 11/01/2010; 10:54 AM; 11/01/2010

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SOURCE ESRI County of Imperial USGS

FIGURE 9

Proposed Well Location and Lower Colorado River Accounting Surface  
 Groundwater Extraction Feasibility Analysis and Hydrogeologic Report Conditional Use Permit (CUP) #19-0022

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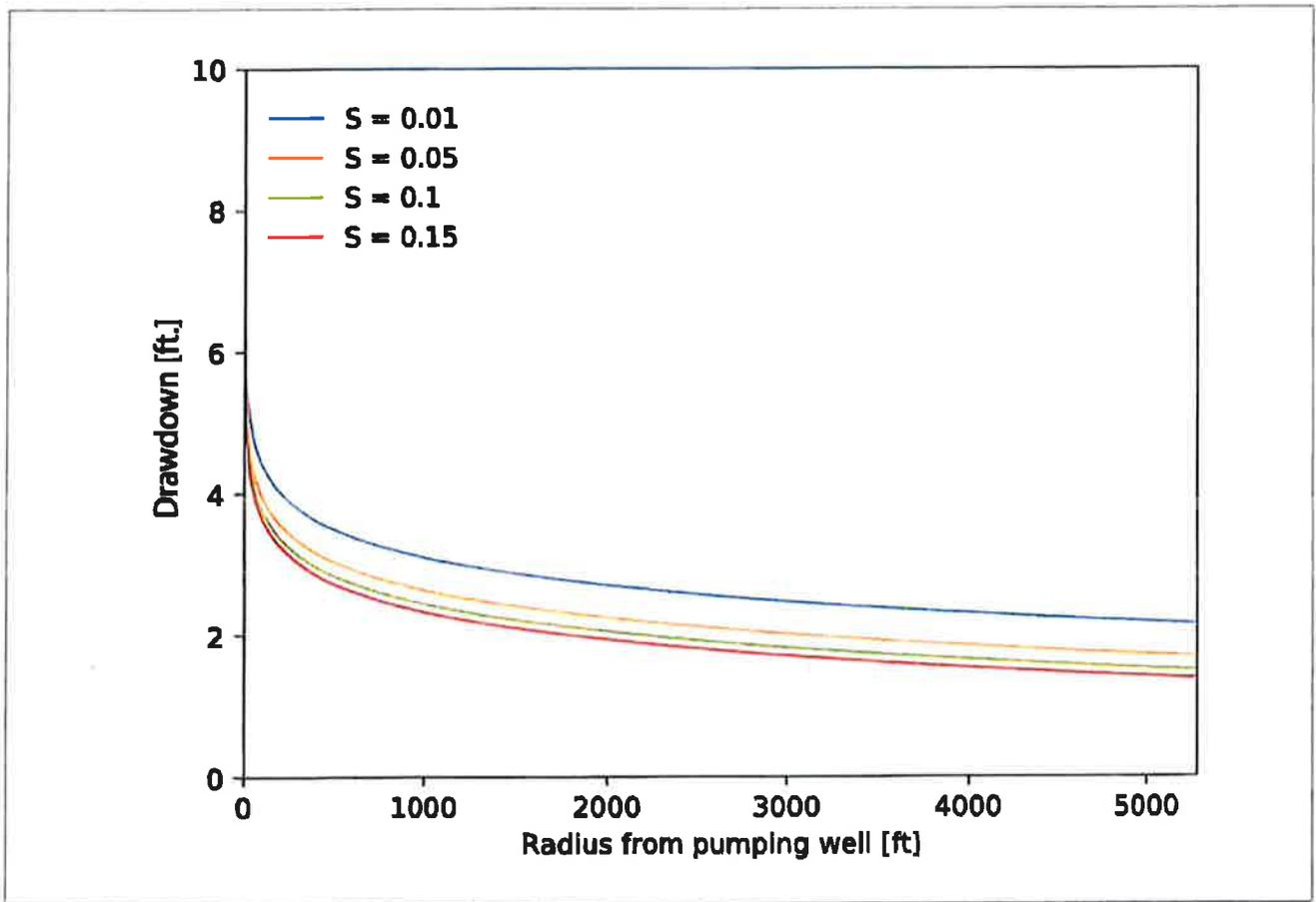


FIGURE 10

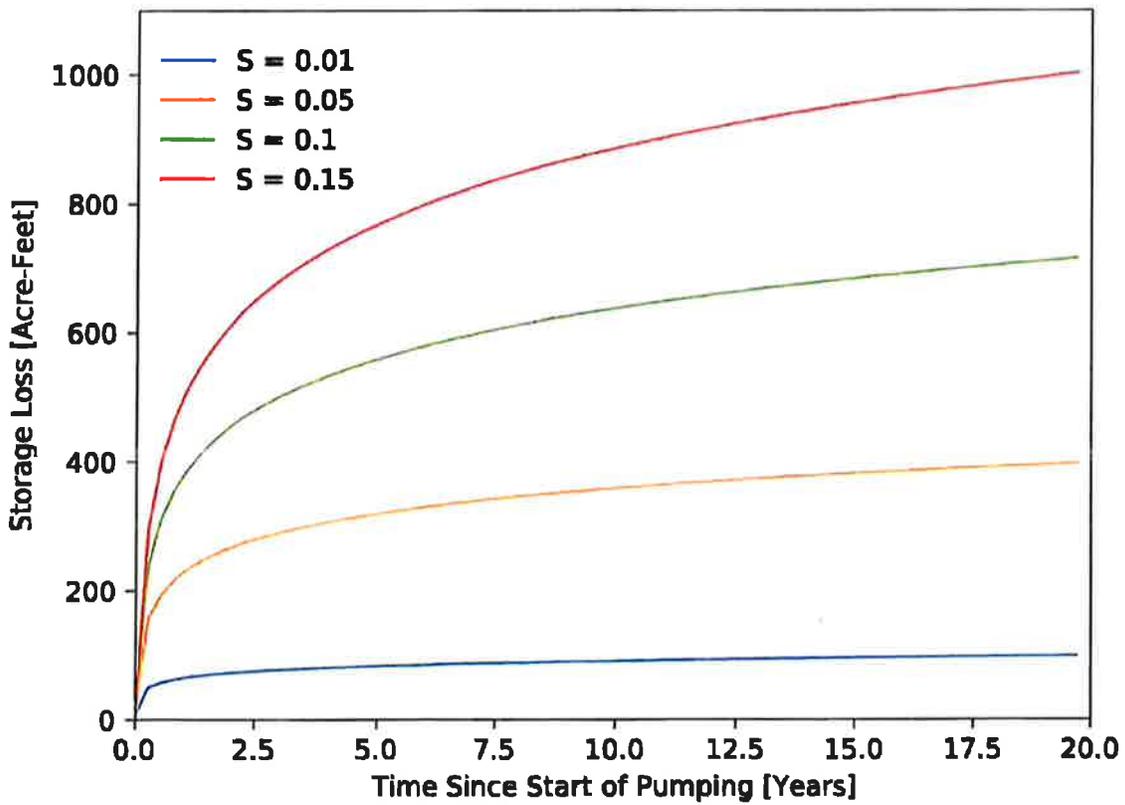
Estimated Drawdown Using the Theis Equation

Groundwater Extraction Feasibility Analysis and Hydrogeologic Report Conditional Use Permit (CUP) #19-0022

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**FIGURE 11**  
**Estimated Storage Loss Using the Theis Equation**  
 Groundwater Extraction Feasibility Analysis and Hydrogeologic Report Conditional Use Permit (CUP) #19-0022

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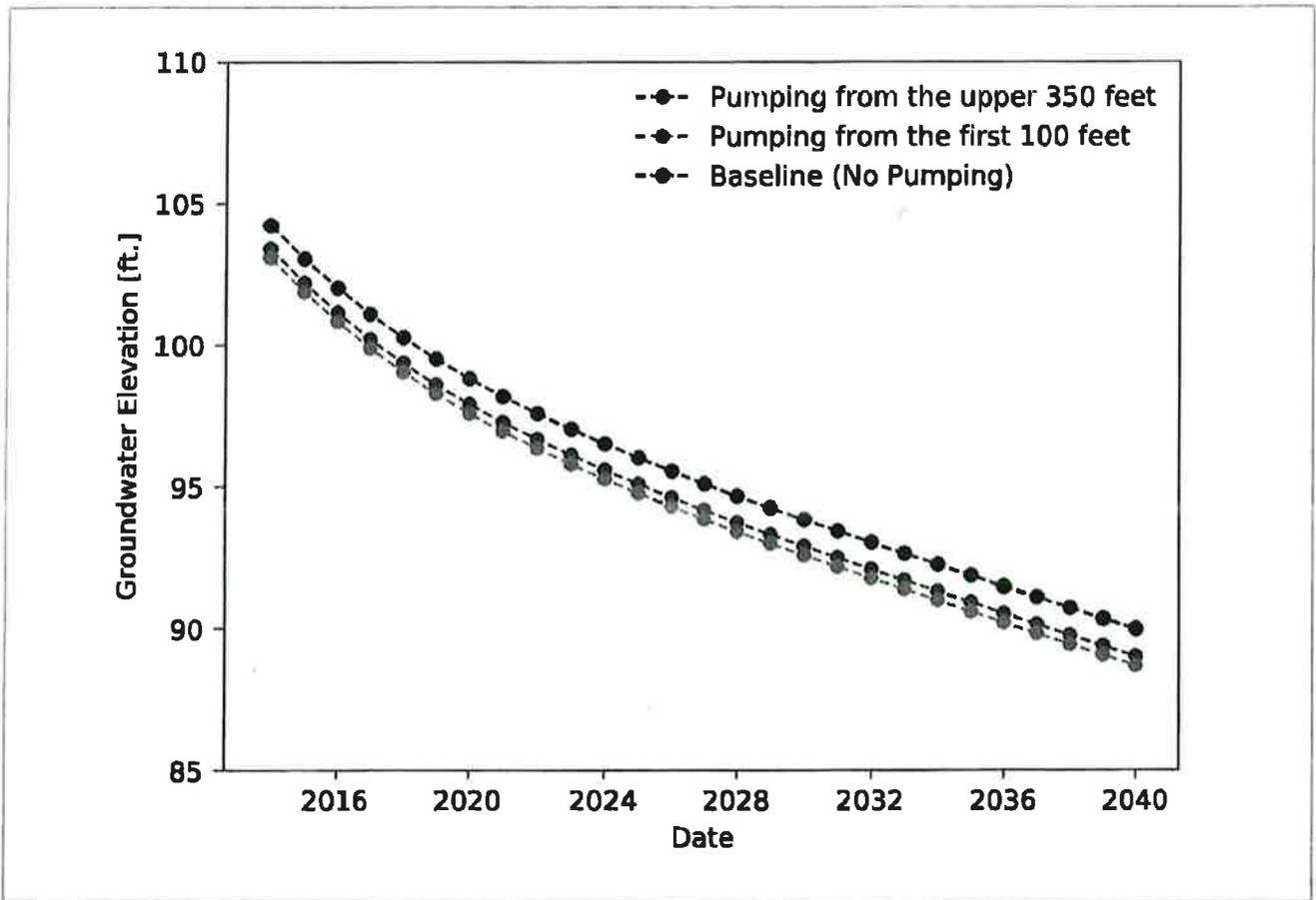


FIGURE 12

Groundwater Elevations Predicted Using the Imperial East SEZ Model  
 Groundwater Extraction Feasibility Analysis and Hydrogeologic Report Conditional Use Permit (CUP) #19-0022

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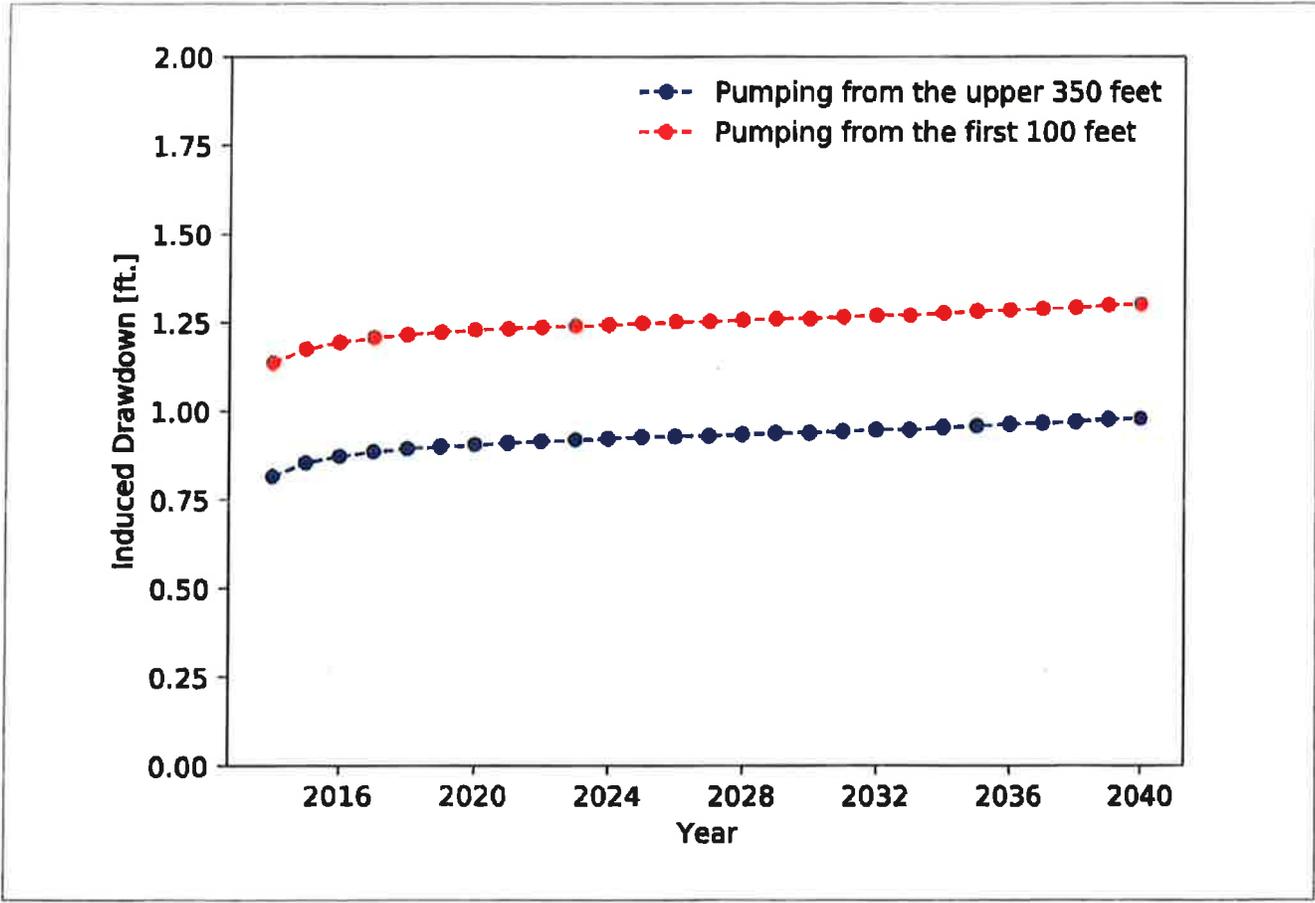


FIGURE 13

Induced Drawdown Predicted Using the Imperial East SEZ Model  
 Groundwater Extraction Feasibility Analysis and Hydrogeologic Report Conditional Use Permit (CUP) #19-0022

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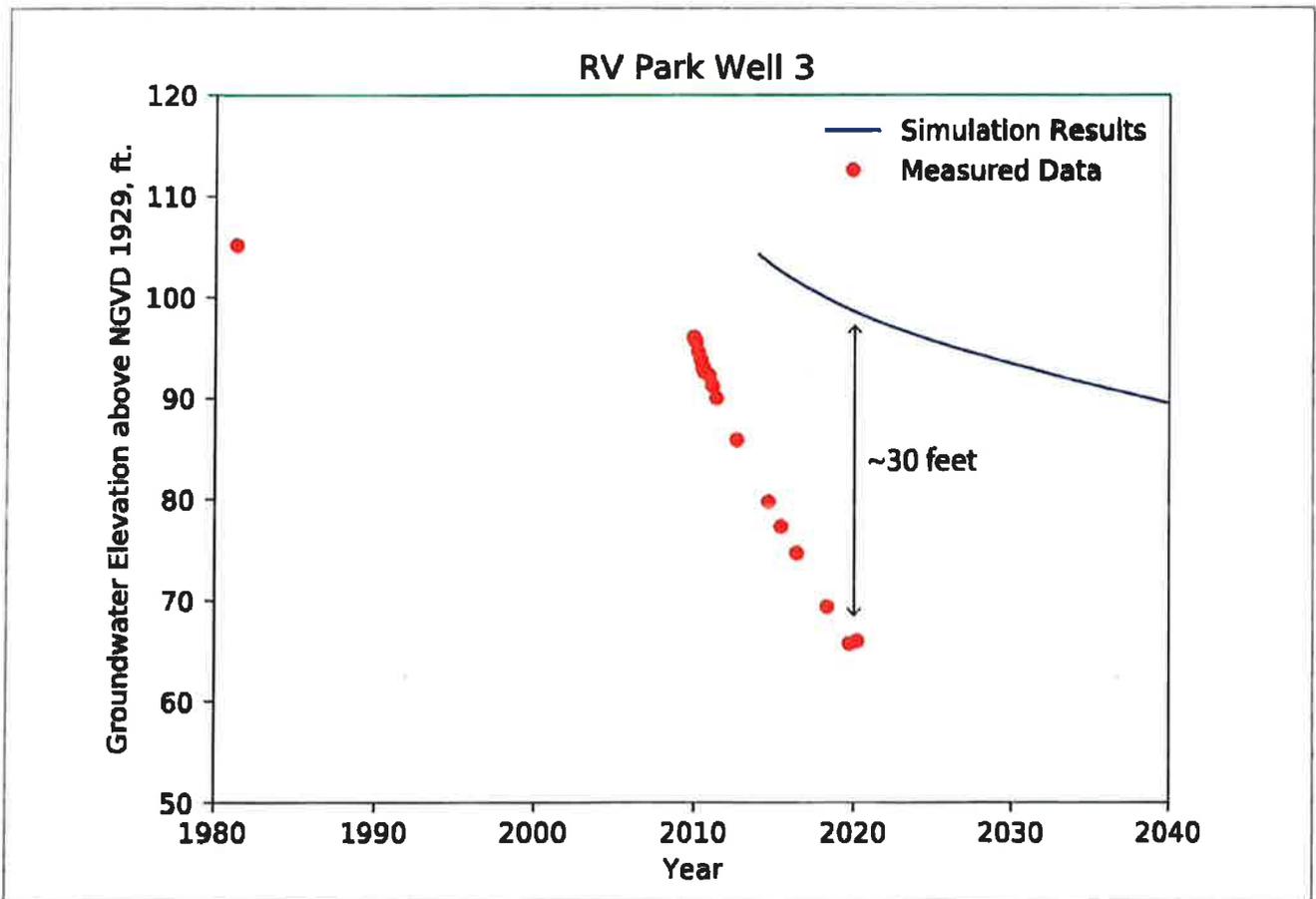


FIGURE 14

Comparison of Simulated and Observed Groundwater Elevations at RV Park Well 3  
 Groundwater Extraction Feasibility Analysis and Hydrogeologic Report Conditional Use Permit (CUP) #19-0022

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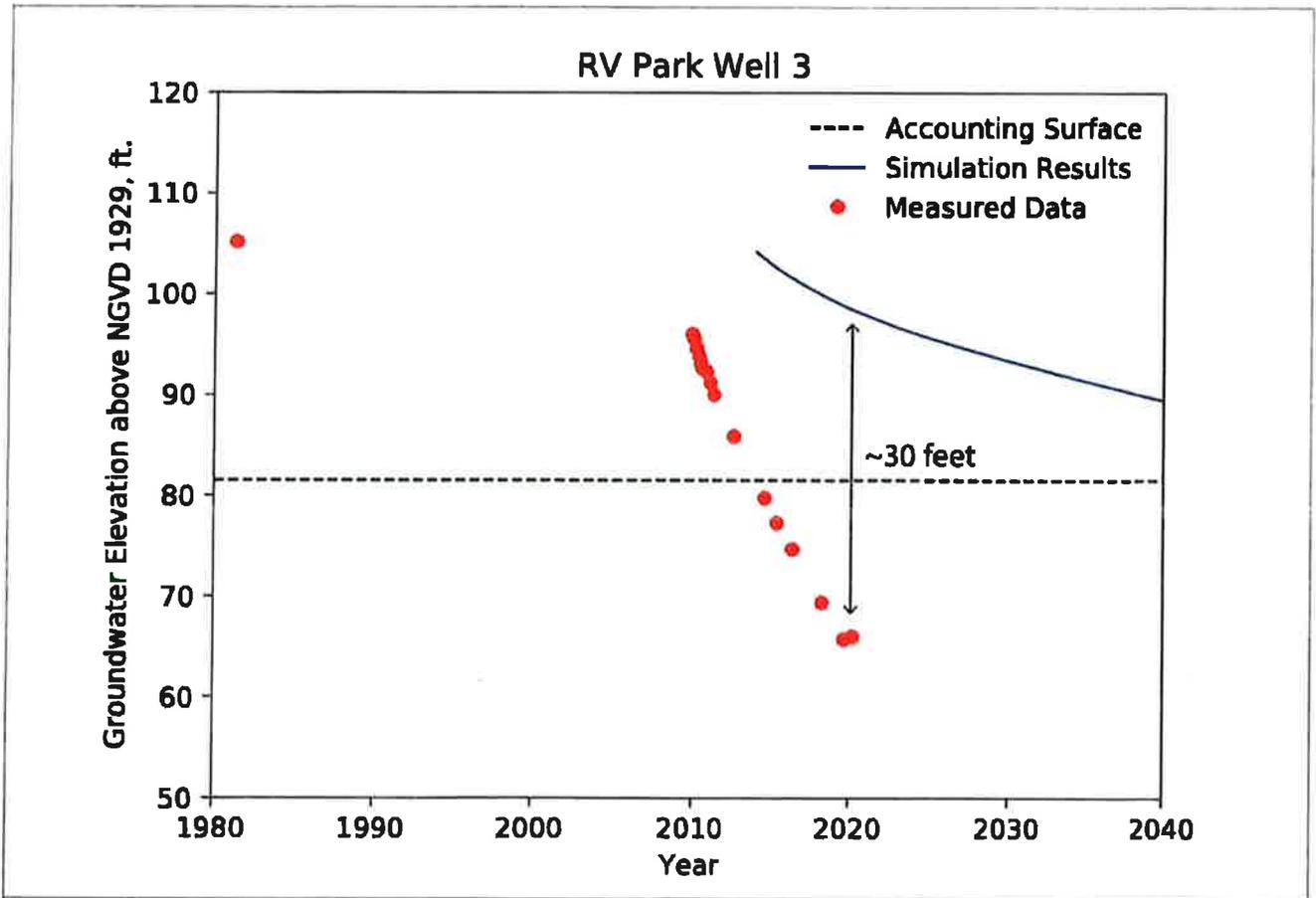


FIGURE 15

Comparison of Simulated and Observed Groundwater Elevations to the Colorado River Accounting Surface  
 Groundwater Extraction Feasibility Analysis and Hydrogeologic Report Conditional Use Permit (CUP) #19-0022

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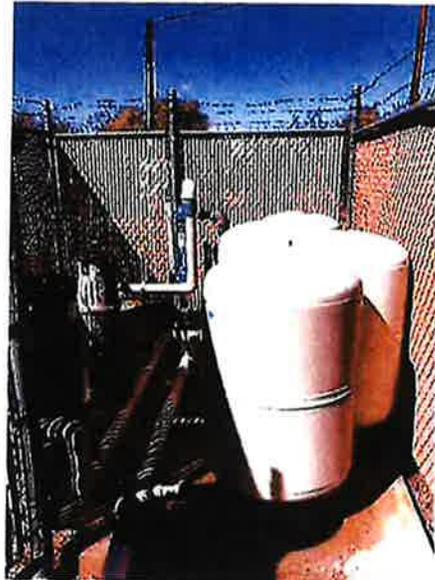
# Appendix A

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## Well Inspection Photographs



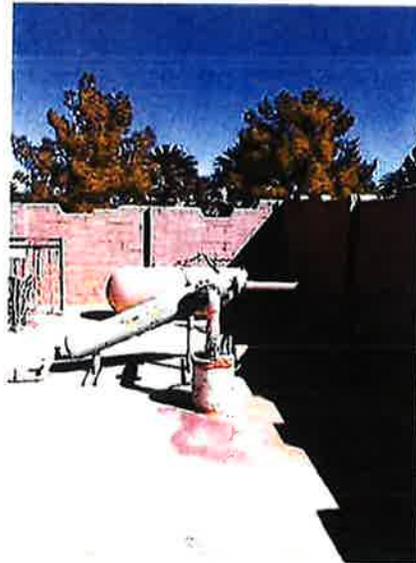
Photograph 1 - Store Well (1)



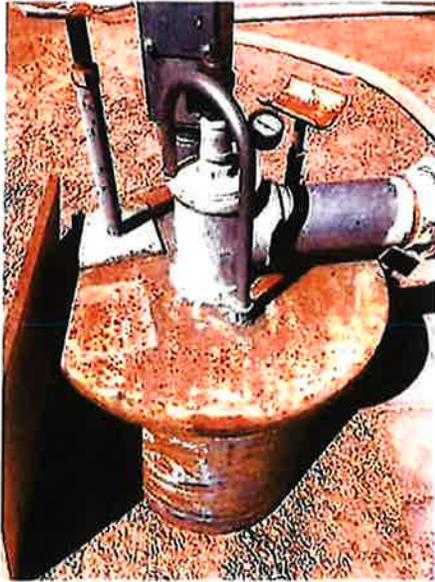
Photograph 2 - Store Well (2)



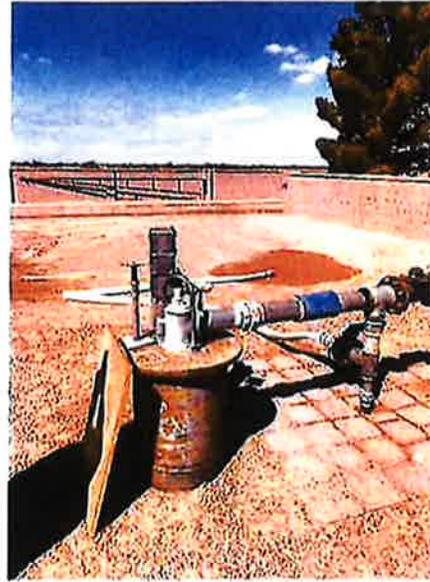
Photograph 3 - House Well (1)



Photograph 4 - House Well (2)



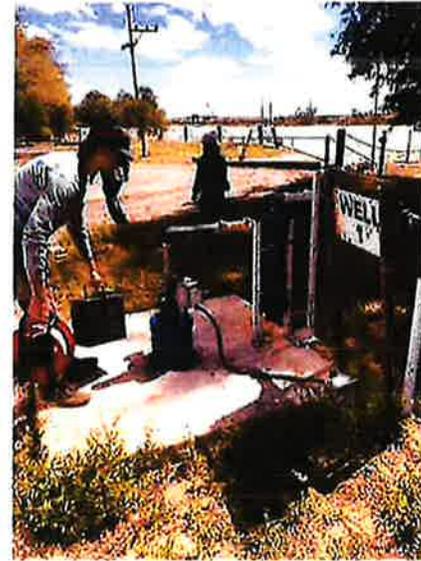
Photograph 5 - Caretaker Well (1)



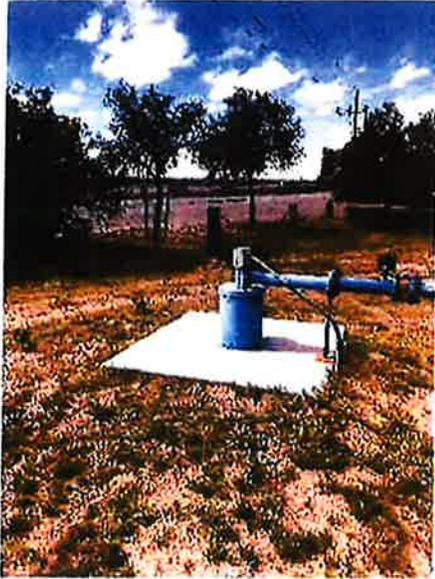
Photograph 6 - Caretaker Well (2)



Photograph 7 - RV Park Well 1 (1)



Photograph 8 - RV Park Well 1 (2)



Photograph 9 - RV Park Well 2 (1)



Photograph 10 - RV Park Well 2 (2)



Photograph 11 - RV Park Well 3 (1)



Photograph 12 - RV Park Well 3 (2)

# Appendix B

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## Available Well Logs



RV Park Well 1 (016S019E36P001S) Sheet 1

DUPLICATE  
File Original, Duplicate and Triplicate with the  
DIVISION OF WATER RESOURCES  
P. O. BOX 1079  
SACRAMENTO 5, CALIFORNIA

STATE OF CALIFORNIA  
DEPARTMENT OF PUBLIC WORKS  
DIVISION OF WATER RESOURCES

SHEET 1  
WCR # 13-2500

WATER WELL DRILLERS REPORT

(Sections 2076, 2077, 2078, Water Code)

Do Not Fill In  
State Well No. \_\_\_\_\_  
Other Well No. \_\_\_\_\_  
Region 7

(1) Driller: **F. L. Merrifield**  
Name: **Thermal, Calif.**  
Address: \_\_\_\_\_  
License No. **118658** Classification **0 37**

(2) Proposed use or uses (check):  
Domestic   
Irrigation   
Domestic and Irrigation   
Other   
(3) Equipment used (check):  
Municipal   
Industrial   
Test well   
Cable   
Dug well   
Other

Owner: **16777**  
Name: \_\_\_\_\_  
Address: \_\_\_\_\_

(4) Type of work (check):  
New well   
Reconditioning of well   
Deepening existing well

(5) Well log:  
Total depth of well **228** ft.

Depth From Ground Surface

ft.	ft. to	ft.
0	125	
125	140	
140	190	
190	228	

Give details of formations penetrated, such as silt, peat, muck, sand, gravel, clay, shale, sandstone, hardpan, rock. Include size of gravel (diameter) and sand (fine, medium, coarse), color of material, structure (loose, packed, cemented, soft, hard, brittle).

Sand & gravel  $\frac{1}{4}$ "  
Clay & sand  
Fine sand  
Sand & small boulders

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MICROFILMED

If additional space is required, continue on DWR Form No. 246—Supplement, and attach to respective report copies

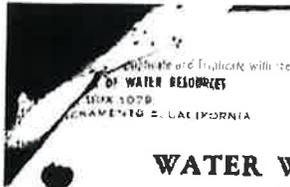
(6) Casing left in well:

LENGTH FT. **228** DIAMETER INCHES **10** SINGLE OR DOUBLE WELDED.  OTHER  GAGE OF CASING **12** SEATING BELOW GROUND SURFACE, FT. **228**

Type and size of shoe or well ring \_\_\_\_\_ Welded joints  Yes  No

DWR FORM NO. 246

DATE PRINTED



**WATER WELL DRILLERS REPORT**

(Sections 7074, 7075, 7078, Water Code)

SHEET 2  
 13-2500  
**Do Not Fill In**  
 State Well No.  
 Other Well No.  
 Region

(7) Perforations:

Type of perforator used	Torch	ft. Hole size	No. of holes
Perforated 100	228	1 7/8"	12 per ft.
"	"	"	"
"	"	"	"
"	"	"	"
"	"	"	"
"	"	"	"
"	"	"	"
"	"	"	"
"	"	"	"

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(8) Water levels:

Depth at which water first encountered: - ft.  
 Depth to water before perforating: - ft.  
 Depth to water after perforating: 45 ft.  
 Note any change in water level while drilling: -

(9) Well pumping test:

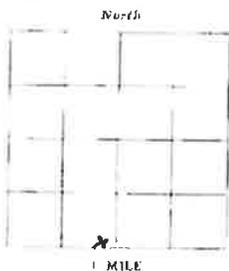
Date of test: 11-1-51 By whom: Self  
 Depth to water when test started: 45 ft.  
 G.P.M. at beginning of test: 80  
 Drawdown from standing level: x 88 ft.  
 G.P.M. at completion of test: 80  
 Drawdown at completion of test: 105 ft.  
 Length of time tested: 8 hr.  
 Temperature of water: 66.5°C  
 Was gas present in water? Yes X No

General:

Was well gravel packed? No. 2 - Size of rock: 65X10 Thickness of pack: XXXXX  
 Was a surface secondary seal provided?  
 Were any struts sealed against pollution? [ ] Yes [ ] No If yes, attach detailed description.  
 Strata sealed  
 Was analysis made of water? [ ] Yes [X] No If yes, attach copy  
 Was electric log made of well? [ ] Yes [X] No If yes, attach copy  
 If well abandoned, was it plugged and sealed?  
 Method of plugging and sealing

MICROFILMED

(11) Location:



Section No. 36  
 Township 16  
 Range 19  
 Base & Meridian Imperial Cty.  
 Show location of well in Section, thus (X)  
 Distances to section lines from well, N 150 ft. and E 150 ft. (234)  
 Show location of nearest known well, thus (O)  
 Distance to nearest known well: ft.

(12) Time of work:

Work started date: 11/1/51 Completed date: 11/1/51  
 Date of this report: 11/4/51

WELL DRILLER'S STATEMENT:

This well was drilled under my supervision and this report is true to the best of my knowledge and belief.

(Signature) F. S. Merrifield  
 in presence of Mrs. F. S. Merrifield  
 License No. 110650 Classification 0 37  
 Dated 11/15/51