



**Westside Canal Battery
Storage Project**

Final Environmental Impact Report

July 27, 2021

Prepared for:

Imperial County
Planning & Development Services
Attn: David Black, Planner III
801 Main Street
El Centro, California 92243

Prepared by:

Stantec Consulting Services Inc.
290 Conejo Ridge Avenue
Thousand Oaks, California 91361

TABLE OF CONTENTS

ACRONYMS AND ABBREVIATIONS	II
1.0 INTRODUCTION	1-1
1.1 BACKGROUND AND PURPOSE OF THE EIR	1-1
1.1.1 CEQA Review Process	1-1
1.1.2 Certification of the Final EIR/Project Consideration	1-2
1.2 INTENDED USE OF THE EIR	1-2
1.3 ORGANIZATION AND SCOPE OF THE EIR.....	1-3
2.0 COMMENTS AND RESPONSES TO THE DRAFT EIR	2-1
2.1 LIST OF COMMENTERS	2-1
2.2 COMMENTS AND RESPONSES	2-1
2.2.1 Requirements for Responding to Comments on a Draft EIR	2-1
2.2.2 Responses to Comments	2-2
3.0 MINOR REVISIONS TO THE DRAFT EIR	3-1
3.1 INTRODUCTION.....	3-1
3.2 MINOR CHANGES AND EDITS TO THE DRAFT EIR	3-1
3.2.1 Executive Summary	3-1
3.2.2 Project Description	3-1
3.2.3 Biological Resources.....	3-2
3.2.4 Hazards and Hazardous Materials, Section 3.7.....	3-2
3.2.5 Utilities and Service Systems, Section 3.11.....	3-3
3.2.6 Cumulative Impacts, Section 4.5.7.2	3-3

LIST OF TABLES

Table 2-1 List of Commenters	2-1
------------------------------------	-----

ATTACHMENTS

- Attachment A Mitigation Monitoring and Reporting Program
- Attachment B Updated Water Supply Assessment

Acronyms and Abbreviations

Applicant	Consolidated Edison Development
BESS	Battery Energy Storage System
BMP	Best Management Practices
CDFW	California Department of Fish and Wildlife
CED	Consolidated Edison Development
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFC	California Fire Code
CFR	Code of Federal Regulations
CNDDDB	California Natural Diversity Database
County	Imperial County
CUPA	Certified Unified Program Agency
EIR	Environmental Impact Report
ES	Executive Summary
ESS	energy storage system
Fire Department	Imperial County Fire Department Fire Prevention Bureau
HMBP	Hazardous Materials Business Plan
ICFD	Imperial County Fire Department
IID	Imperial Irrigation District
IS	Initial Study
ITP	Incidental Take Permit
Li-ion	Lithium-ion battery
MM	Mitigation Measure
MMRP	Mitigation Monitoring and Reporting Program
MSDS	Material Safety Data Sheets
NFPA	National Fire Protection Association
NOP	Notice of Preparation
NPDES	National Pollutant Discharge Elimination System
OSHA	Occupation Health and Safety Administration
Project	Westside Canal Battery Storage Project
UL	Underwriters Laboratory

1.0 INTRODUCTION

In accordance with the California Environmental Quality Act (CEQA) Guidelines Section 15088, Imperial County (County), as the lead agency, has evaluated the comments received on the Westside Canal Battery Storage Project Draft Environmental Impact Report (Draft EIR) (State Clearinghouse No. 2019049166). The Draft EIR was circulated for a 50-day public review between April 7, 2021, and May 27, 2021. The responses to the comments and other documents, which are included in this document, together with the Mitigation Monitoring and Reporting Program, comprise the Final Environmental Impact Report (Final EIR) for use by the Imperial County Board of Supervisors.

1.1 BACKGROUND AND PURPOSE OF THE EIR

CEQA requires a Lead Agency that has prepared a Draft EIR to provide a copy of the Draft EIR to responsible and trustee agencies that have jurisdiction by law with respect to the proposed Westside Canal Battery Storage Project and to provide the public with an opportunity to comment on the Draft EIR. The Final EIR is the mechanism for responding to these comments. This Final EIR has been prepared to respond to comments received on the Draft EIR, which are reproduced in this document; and to present corrections, revisions, and other clarifications and amplifications to the Draft EIR as a result of the County's ongoing planning efforts. The Draft EIR and Final EIR will be used to support the County's decision regarding whether to approve the Project.

This Final EIR can also be used by responsible and trustee agencies to ensure that they have met their requirements under CEQA before deciding whether to approve or permit Project elements over which they have jurisdiction. It may also be used by other state, regional, and local agencies that may have an interest in resources that could be affected by the Project or that have jurisdiction over portions of the Project.

The following agencies may serve as responsible and trustee agencies:

- United States Army Corps of Engineers
- United States Fish and Wildlife Service
- California Department of Transportation
- California Department of Fish and Wildlife
- California Regional Water Quality Control Board, Colorado River Basin Region 7
- California Department of Toxic Substances Control
- California Environmental Protection Agency
- California Native American Heritage Commission
- California Occupational Safety and Health Administration
- Imperial Irrigation District
- Imperial County Department of Public Works
- Imperial County Air Pollution Control District
- Imperial County Fire Department
- Imperial County Sheriff's Office

1.1.1 CEQA Review Process

The following provides a summary of the environmental review process to date for the Project that has resulted in the preparation of this Final EIR.

1.1.1.1 Notice of Preparation

The CEQA process is initiated when the lead agency identifies a proposed project. The lead agency then prepares an Initial Study (IS) to identify the preliminary environmental impacts of a project. An IS for the Project was prepared and determined that its implementation could have significant environmental impacts and an EIR is required. The County issued a Notice of Preparation (NOP)¹ for the preparation of an EIR (State Clearinghouse No. 2020040122) for the Westside Canal Battery Storage Project on April 13, 2020. Circulation of the NOP ended on May 18, 2020. The Project NOP and IS are included as Appendix A of the Draft EIR. During the public review period, the County, as lead agency, requested comments from agencies, interested parties, stakeholders, and the public on the scope and content of the environmental information to be included in the Draft EIR.

1.1.1.2 Draft EIR

The Draft EIR was released for a 10-day agency review on February 16, 2021, and ending on March 2, 2021, which was extended to March 8, 2021, to accommodate requests by agencies to provide written comments. The Draft EIR was then circulated for an additional 50-day public review and comment period on April 7, 2021, which ended on May 27, 2021. The Draft EIR contains a description of the Project, description of the environmental setting, identification of Project impacts, and mitigation measures for impacts found to be significant, as well as an analysis of Project alternatives. The Draft EIR was provided to interested public agencies and the public and was made available for review on the County's website.

1.1.1.3 Final EIR

The County received a total of three comment letters from public agencies regarding the Draft EIR. This document responds to the written comments received as required by CEQA. This document also contains minor edits to the Draft EIR, which are included in Chapter 3, Minor Revisions to the Draft EIR. This document constitutes the Final EIR.

1.1.2 Certification of the Final EIR/Project Consideration

The County will review and consider the Final EIR. If the County finds that the Final EIR is "adequate and complete," the County may certify the Final EIR. The rule of adequacy generally holds that the EIR can be certified if it does the following: (1) shows a good faith effort at full disclosure of environmental information; and (2) provides sufficient analysis to allow decisions to be made regarding the proposed project in contemplation of its environmental consequences.

Upon review and consideration of the Final EIR, the County may act to adopt, revise, or reject the proposed project. A decision to approve the proposed project would be accompanied by written findings in accordance with State CEQA Guidelines Sections 15091 and 15093. Public Resources Code Section 21081.6 also requires lead agencies to adopt a mitigation monitoring and reporting program to describe measures that have been adopted or made a condition of Project approval to mitigate or avoid significant impacts on the environment.

1.2 INTENDED USE OF THE EIR

The EIR is intended to evaluate the environmental impacts of the Project to the greatest extent possible. This EIR, in accordance with CEQA Guidelines Section 15126, should be used as the primary

¹ An NOP is prepared to notify public agencies and the general public that the lead agency is starting the preparation of an EIR for the project.

environmental document to evaluate all planning and permitting actions associated with the Project. Refer to Chapter 2, Project Description, of the Draft EIR for a detailed discussion of the Project.

1.3 ORGANIZATION AND SCOPE OF THE EIR

This document is organized into the following sections:

- **Chapter 1 – Introduction**

Chapter 1 provides an overview of the EIR process to date and the requirements of the Final EIR.

- **Chapter 2 – Responses to Written Comments on the Draft EIR**

Chapter 2 provides a list of the agencies, organizations, and individuals that commented on the Draft EIR. Copies of all the letters received regarding the Draft EIR and responses thereto are included in this chapter.

- **Chapter 3 – Minor Revisions to the Draft EIR**

Chapter 3 includes an errata listing of refinements and clarifications to the Draft EIR.

- **Attachment A – Mitigation Monitoring Reporting Program**

Measures that have been adopted or made a condition of the Project approval in order to mitigate or avoid significant environmental impacts are included in the Mitigation Monitoring Reporting Program, as provided in Attachment A of this Final EIR. The Mitigation Monitoring and Reporting Program (MMRP) has been prepared pursuant to Public Resources Code Section 21081.6, which requires adoption of a MMRP for projects in which the Lead Agency has required changes or adopted mitigation to avoid significant environmental effects. The County is the Lead Agency for the Project and, therefore, is responsible for administering and implementing the MMRP.

- **Attachment B – Updated Water Supply Assessment**

The Water Supply Assessment was updated to provide clarification on the Project's operational water usage. The revised report is provided as Attachment B of this Final EIR, while related revisions are noted in Chapter 3 of the Final EIR.

Because of its length, the text of the Draft EIR is not included with these written responses; however, it is incorporated by reference in this Final EIR. None of the revisions or clarifications to the Draft EIR identified in this document constitute "significant new information" pursuant to CEQA Guidelines Section 15088.5. As a result, recirculation of the Draft EIR is not required.

2.0 COMMENTS AND RESPONSES TO THE DRAFT EIR

2.1 LIST OF COMMENTERS

This chapter of the Final EIR presents the three comment letters submitted during the public comment period for the Draft EIR. A list of commenters is provided in Table 2.1-1. The letters are assigned a numerical identifier, as indicated in Table 2-1. Each comment letter has been assigned a number and bracketed by the relevant comment. For example, the first comment in Letter A would be Comment A-1, and the fourth comment in Letter B would be Comment B-4. The responses to each comment are then correspondingly numbered (i.e., Response A-1 and Response B-4). Each comment has been recopied verbatim, or as close as possible to verbatim, from the original letter submitted.

Table 2.1-1 List of Commenters

Commenter	Comment Date	Comment Number
Robert Malek, Deputy Chief Fire Marshall Imperial County Fire Department	May 27, 2021	A
Donald Vargas, Compliance Administrator II Imperial Irrigation District	May 24, 2021	B
Alisa Ellsworth, Environmental Program Manager California Department of Fish and Wildlife	May 27, 2021	C

2.2 COMMENTS AND RESPONSES

This chapter includes the written comments received during Draft EIR comment periods and the County's responses to significant environmental information raised by those comments (CEQA Guidelines, 14 CCR § 15132).

2.2.1 Requirements for Responding to Comments on a Draft EIR

State CEQA Guidelines Section 15088 requires that lead agencies evaluate all comments on environmental issues received on the Draft EIR and prepare a written response. The written response must address the significant environmental issues raised and must be detailed, especially when specific comments or suggestions (e.g., additional mitigation measures) are not accepted. In addition, there must be a good faith and reasoned analysis in the written response. However, lead agencies need only respond to significant environmental issues associated with the project and do not need to provide all the information requested by commenters, as long as a good faith effort at full disclosure is made in the EIR (State CEQA Guidelines Section 15204).

State CEQA Guidelines Section 15204 recommends that commenters provide detailed comments that focus on the sufficiency of the Draft EIR in identifying and analyzing the possible impacts on the environment and ways that the significant effects of the project might be avoided or mitigated. State CEQA Guidelines Section 15204 also notes that commenters should provide an explanation and evidence supporting their comments. Pursuant to State CEQA Guidelines Section 15064, an effect shall not be considered significant in the absence of substantial evidence supporting such a conclusion.

State CEQA Guidelines Section 15088 also recommends that where a response to comments results in revisions to the Draft EIR, those revisions be incorporated as a revision to the Draft EIR or as a separate section of the Final EIR.

Letter A

ADMINISTRATION / TRAINING

1078 Dogwood Road
Heber, CA 92249

Administration

Phone: (442) 265-6000
Fax: (760) 482-2427

Training

Phone: (442) 265-6011



OPERATIONS/PREVENTION

2514 La Brucherie Road
Imperial, CA 92251

Operations

Phone: (442) 265-3000
Fax: (760) 355-1482

Prevention

Phone: (442) 265-3020

May 27, 2021

RE: New Fire Department Comment Letter
CED Westside Canal Battery Storage, LLC

(GPA) 19-0003, (ZC) 19-0004, (CUP) 19-0015
APN: 051-350-010 & 011, 051-350-019 & 018, 051-350-009

A-1

Imperial County Fire Department Fire Prevention Bureau (“Fire Department”) appreciates the opportunity to review and comment on GPA 19-0003, ZC 19-0004, and CUP 19-0015 for the proposed CED Westside Canal Battery Storage Facility (“Project”).

A-2

The Project is a utility-scale energy storage complex with the capacity of up to 2,000 Megawatts. The site is 163 acres of land with 148 owned by the applicant. The Project would be either lithium ion and/or flow battery energy storage systems. The project has not decided on how these energy storage systems will be structured or built. Given conversations with applicants and developers, the size and megawatt allowed for this Project, the Fire Department has based the following comments on utility-scale commercial/industrial size structures and components.

A-3

Energy storage facilities create extreme hazards for firefighters and emergency responders with the possibility of explosions, flammable gases, toxic fumes, water-reactive materials, electrical shock, corrosives, chemical burns. Utility-scale energy storage requires specialized and reliable equipment to perform firefighting operations safely and effectively to NFPA, OSHA and ICFD standards and requirements. They would use either lithium ion and/or flow battery energy storage systems.

A-4

Standards and requirements for energy storage system include, but are not limited to, the following:

NFPA:

- 1 Fire Code
- 68 Standard on Explosion Protection by Deflagration Venting
- 69 Standard on Explosion Prevention Systems.
- 70 National Electrical Code
- 855 Standard for the installation of Energy Storage System
- 111 Stored Electrical Energy Emergency and Standby Power System
- 1072: Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications.

ADMINISTRATION / TRAINING

1078 Dogwood Road
Heber, CA 92249

Administration

Phone: (442) 265-6000
Fax: (760) 482-2427

Training

Phone: (442) 265-6011



OPERATIONS/PREVENTION

2514 La Brucherie Road
Imperial, CA 92251

Operations

Phone: (442) 265-3000
Fax: (760) 355-1482

Prevention

Phone: (442) 265-3020

1710 Standard for Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments.

OSHA:

29 CFR 1910.134(g)(4)

29 C.F.R. 1910.1000. Limits for Air Contaminants. Regulation, Occupational Safety and Health Administration

CFC:

Chapter 1 section

Chapter 12 section 1206 Electrical Energy Storage System

Chapter 9 Fire Protection and Life Safety System

UL:

UL 9540 Standard for Energy Storage Systems and Equipment.

UL 9540A Test Method for Evaluating Thermal Runaway Fire Propagation in Battery Energy Storage Systems

NFPA 1710 Chapter 5 section 5.2.3.1.2.1 states: In first –due response zones with tactical hazards, high hazard occupancies, or dense urban areas, as identified by the AHJ, these fire companies shall be staffed with a minimum of six on duty members. OSHA 29 CFR 1910.134(g)(4) states: Procedures for interior structural firefighting. In addition to the requirements set forth under paragraphs (g)(3), in interior structural fires, the employer shall ensure that:

1910.134(g)(4)(i): At least two employees enter the IDLH atmosphere and always remain in visual or voice contact with one another.

1910.134(g)(4)(ii): At least two employees are located outside the IDHL atmosphere; and

1910.134(g)(4)(iii): All employees engage in interior structural firefighting use SCBAs.

Additional requirements to follow but not limited to:

- An approved water supply capable of supplying the required fire flow determined by appendix B in the California Fire Code shall be installed and maintained. Private fire service mains and appurtenance shall be installed in accordance with NFPA 24.

- An approved automatic fire suppression system shall be installed on all required structures as per the California Fire Code. All fire suppression systems will be installed and maintained to the current adapted fire code and regulations.

ADMINISTRATION / TRAINING

1078 Dogwood Road
Heber, CA 92249

Administration

Phone: (442) 265-6000
Fax: (760) 482-2427

Training

Phone: (442) 265-6011



OPERATIONS/PREVENTION

2514 La Brucherie Road
Imperial, CA 92251

Operations

Phone: (442) 265-3000
Fax: (760) 355-1482

Prevention

Phone: (442) 265-3020

A-7

- An approved automatic fire detection system shall be installed on all required structures as per the California Fire Code. All fire detection systems will be installed and maintained to the current adapted fire code and regulations.

A-8

- Fire department access roads and gates will be in accordance with the current adopted fire code and the facility will maintain a Knox Box for access on site.

A-9

- Compliance with all required sections of the fire code.

A-10

- Applicant shall provide product containment areas(s) for both product and water run-off in case of fire applications and retained for removal.

A-11

- A Hazardous Waste Material Plan shall be submitted to Certified Unified Program Agency (CUPA) for their review and approval.
- All hazardous material and wastes shall be handled, store, and disposed as per the approved Hazardous Waste Materials Plan. All spills shall be documented and reported to Imperial County Fire Department and CUPA as required by the Hazardous Waste Material Plan

A-12

The following mitigations were recognized because of the hazards that came about as apart of the Surprise, Arizona Battery Storage Fire Report, which is attached to this comment letter, and additional research done by the Fire Department. Below is a brief summary of the fire that took place in Surprise, Arizona

On April 19, 2019, one male career Fire Captain, one male career Fire Engineer, and two male career Firefighters received serious injuries because of a catastrophic failure within a 2.16 MWh lithium-ion battery energy storage system (ESS) that led to a deflagration event. In the same event, one male career Fire Captain and three male career. This project is a lot larger a creates a larger hazardous environment.

A-13

Due to the above mentioned hazards and independent research of the Fire Department, the Fire Department requests the following:

1. Fire Department uses Current 2019 California Fire Code, International Fire Code UL Firefighters Safety Report from Surprise Arizona battery storage fire and NFPA 2020 standards for battery storage. Mr. Kohan has included outdated fire codes in his response and research. 2016 does not a any Chapter or requirements regarding Battery Storage. Battery storage codes came about in the 2019 California Fire Code.

A-14

2. Westside Battery Storage reviews for plans and inspections will be done by a third-party consultant determined by the Fire Department at the applicant's expense as per California Fire Code Chapter 1 [A] 104.7.2 Technical Assistance

ADMINISTRATION / TRAINING

1078 Dogwood Road
Heber, CA 92249

Administration

Phone: (442) 265-6000
Fax: (760) 482-2427

Training

Phone: (442) 265-6011



OPERATIONS/PREVENTION

2514 La Brucherie Road
Imperial, CA 92251

Operations

Phone: (442) 265-3000
Fax: (760) 355-1482

Prevention

Phone: (442) 265-3020

- A-15 | 3. Project will purchase a Type 1 Fire Engine “As further described below”. The fire engine cost estimate will be at current market value for the approved Fire Engine. Final cost, conditions and equipment of the fire engine shall be determined prior to the issuance of the initial grading permit.
- A-16 | 4. All roads for this project will be Asphalt according to California Fire Code 503.2 Specifications. No deviation will be.
- A-17 | 5. Project will provide a Private Fire Line with Fire Hydrants every 300 feet or to the discretion of the Fire Department and will maintain Fire Flows that will be analyzed by our consultant for final gpm and duration.
- A-18 | 6. Project will purchase Fire and Hazardous Material response equipment (i.e., Thermite) which will be determined by Fire Department and Hazmat Operations annually, or as needed, for the project as new technology, tactics, and/or equipment are developed to protect the project.
- A-19 | 7. Project will fund and provide Training for 6 personnel regionally a year as response will be need from outside of our agency (Mutual Aid) for the life of the project or until all personnel regionally are trained at the Hazardous Material Technician Level. Developer will also provide courses specifically to battery storage yearly for Firefighters Regionally and host mandatory yearly refresher courses specific to Battery Storage Updates and Technology. All cost will be at the Developers expense.
- A-20 | 8. Basic Firefighter, Officer, and HAZMAT training should emphasize ESS safety; the potentially explosive nature of the gases and vapors released during lithium-ion battery thermal runaway, vapor cloud formation and dispersion; and the dynamics of deflagrations and blast wave propagation.
- A-21 | 9. Research certified expert in battery storage which the Fire Department provide that includes full-scale testing should be conducted to understand the most effective and safest tactics for the fire service in response to lithium-ion battery ESS incidents.
- A-22 | 10. Until definitive tactics and guidance can be established through full-scale experiments, fire service personnel will define a conservative potential blast radius and remain outside of it, while treating the lithium-ion ESS as if the gas mixture in the enclosure is above the LEL until proven otherwise.

ADMINISTRATION / TRAINING

1078 Dogwood Road
Heber, CA 92249

Administration

Phone: (442) 265-6000
Fax: (760) 482-2427

Training

Phone: (442) 265-6011



OPERATIONS/PREVENTION

2514 La Brucherie Road
Imperial, CA 92251

Operations

Phone: (442) 265-3000
Fax: (760) 355-1482

Prevention

Phone: (442) 265-3020

A-23 | 11. An online educational tool should be developed to proliferate the appropriate base knowledge about lithium-ion battery ESS hazards and fire service tactical considerations annually.

A-24 | 12. Laptops, tablets, and/or software may need to be purchased for the fire department for remote access to assist in remote access to gas monitors. The project will provide Lithium-ion battery ESSs should incorporate gas monitoring that can be accessed remotely

A-25 | 13. Research that includes multi-scale testing should be conducted to evaluate the effectiveness and limitations of stationary gas monitoring systems for lithium-ion battery ESSs.

A-26 | 14. Lithium-ion battery ESSs must incorporate robust communications systems to ensure remote access to data from the BMS, sensors throughout the ESS, and the fire alarm control panel remains uninterrupted.

A-27 | 15. Owners and operators of ESS must develop an Emergency Operation Plan in conjunction with local fire service personnel and the AHJ and hold a comprehensive understanding of the hazards associated with lithium-ion battery technology.

A-28 | 16. Signage that identifies the contents of an ESS is required on all ESS installations to alert first responders to the potential hazards associated with the installation.

A-29 | 17. Lithium-ion battery ESSs must incorporate adequate explosion prevention protection as required in NFPA 855 or International Fire Code Chapter 12, where applicable, in coordination with the emergency operations plan.

A-30 | 18. Research focused on emergency decommissioning best practices and the role of the fire service in an emergency should be conducted.

A-31 | Imperial County Fire Department is requiring the applicant to purchase hazardous Material equipment to respond emergencies within electrical energy storage systems. Air monitoring should be a priority for responders during and after any electrical energy storage system. 4-meter or other gas detection equipment to determine toxic gas levels, Thermitic equipment determined by Imperial County Fire Department and Imperial County Heat Team. Additional equipment may be required upon determining the energy storage technology that will be used for the project. The Imperial County Fire Department shall make the determination of what is

ADMINISTRATION / TRAINING

1078 Dogwood Road
Heber, CA 92249

Administration

Phone: (442) 265-6000
Fax: (760) 482-2427

Training

Phone: (442) 265-6011



OPERATIONS/PREVENTION

2514 La Brucherie Road
Imperial, CA 92251

Operations

Phone: (442) 265-3000
Fax: (760) 355-1482

Prevention

Phone: (442) 265-3020

A-31 (cont.) ↑ required to provide operational safety of emergency responders. This equipment will be maintain by Imperial County Fire Department and Imperial County Heat Team. This equipment shall be determined by and provided to Imperial County Fire Department before the issuance of the initial grading permit.

A-32 | Fiscal Impacts and requirements for solar installation within the project: For operation and maintenance, fees associated with Fire Department/OES.

A-33 | Other impacts from this project shall be evaluated by Imperial County Fire Department Fire Chief and Fire Code Official in determining any impacts of the project can or will cause a negative effect on Imperial County Fire Department and/or County of Imperial. Any impacts will be address between Imperial County Fire Department official, County of Imperial officials, applicants and/or developers which may include but not limited to:

- Capital purchases which may be required in providing services to this project
- Hazmat Operational Equipment
- Training
- Fiscal and operational costs

A-34 | As to Mr. Kohan’s Technical Memorandum (“Kohan’s Memo”) in Response to our Original Comment Letter, the Fire Department believes that Kohan’s Memo did not address our concerns and was inaccurate for numerous reasons, as stated below:

A-35 | 1. LTSI will need to be changed to PSUMI until an Explosions Analysis is completed by a certified expert. Mr. Kohan documented that it was only air toxic from a credible fire or thermal runaway event at the project site. Arizona incident was a thermal runaway which created an explosion.

A-36 | 2. Project purchased Engine will be housed in Imperial County Station #3 in Seeley and not in Heber as stated by Mr. Kohan.

3. California Fire Code 2016 referenced does not apply to project and does not address battery storage. The current 2019 California Fire Code, International Fire Code, UL Firefighters Safety Report from Surprise Arizona battery storage fire and NFPA 2020 standards for battery storage are being used.

ADMINISTRATION / TRAINING

1078 Dogwood Road
Heber, CA 92249

Administration

Phone: (442) 265-6000
Fax: (760) 482-2427

Training

Phone: (442) 265-6011



OPERATIONS/PREVENTION

2514 La Brucherie Road
Imperial, CA 92251

Operations

Phone: (442) 265-3000
Fax: (760) 355-1482

Prevention

Phone: (442) 265-3020

A-37

After review of Kohan’s Memo, the Fire Department requests that an Explosion Analysis is conducted for this Project so that we could understand what the blast radius distance would be and were Firefighters would need to initially stage to assess situation prior to entering the facility.

A-38

If you have any questions, please contact the Fire Department at 442-265-3020 or 442-265-3021.

Sincerely

Robert Malek
Deputy Chief Fire Marshal
Imperial County Fire Department
Fire Prevention Bureau

CC: Alfredo Estrada Jr. Fire Chief
Imperial County Fire Department

2.2.2.1 Response to Letter A – Imperial County Fire Department, May 27, 2021

Comment No. A-1

Imperial County Fire Department Fire Prevention Bureau (“Fire Department”) appreciates the opportunity to review and comment on GPA 19-0003, ZC 19-0004, and CUP 19-0015 for the proposed CED Westside Canal Battery Storage Facility (“Project”).

Response No. A-1

This comment is introductory in nature and does not pertain to an environmental issue in the Draft EIR. No further response is required.

Comment No. A-2

The Project is a utility-scale energy storage complex with the capacity of up to 2,000 Megawatts. The site is 163 acres of land with 148 owned by the applicant. The Project would be either lithium ion and/or flow battery energy storage systems. The project has not decided on how these energy storage systems will be structured or built. Given conversations with applicants and developers, the size and megawatt allowed for this Project, the Fire Department has based the following comments on utility-scale commercial/industrial size structures and components.

Response No. A-2

This comment includes the basic description of the Project, including background information and does not pertain to any issues concerning the Draft EIR and/or CEQA process. No further response is required.

Comment No. A-3

Energy storage facilities create extreme hazards for firefighters and emergency responders with the possibility of explosions, flammable gases, toxic fumes, water-reactive materials, electrical shock, corrosives, chemical burns. Utility-scale energy storage requires specialized and reliable equipment to perform firefighting operations safely and effectively to NFPA, OSHA and ICFD standards and requirements. They would use either lithium ion and/or flow battery energy storage systems.

Response No. A-3

This comment describes the Inyo County Fire Department (ICFD) opinion regarding the potential hazards associated with utility-scale energy storage facilities. This comment does not pertain to a specific concern or question regarding the adequacy of the analysis in the Draft EIR. No further response is required.

Comment No. A-4

Standards and requirements for energy storage system include, but are not limited to, the following:

NFPA:

1 Fire Code

68 Standard on Explosion Protection by Deflagration Venting

69 Standard on Explosion Prevention Systems.
70 National Electrical Code
855 Standard for the installation of Energy Storage System
111 Stored Electrical Energy Emergency and Standby Power System
1072: Standard for Hazardous Materials/Weapons of Mass Destruction Emergency Response Personnel Professional Qualifications.
1710 Standard for Organization and Deployment of Fire Suppression Operations, Emergency Medial Operations, and Special Operations to the Public by Career Fire Departments.

OSHA:

29 CFR 1910.134(g)(4)
29 C.F.R. 1910.1000. Limits for Air Contaminants. Regulation, Occupational Safety and Health Administration

CFC:

Chapter 1 section
Chapter 12 section 1206 Electrical Energy Storage System
Chapter 9 Fire Protection and Life Safety System

UL:

UL 9540 Standard for Energy Storage Systems and Equipment.
UL 9540A Test Method for Evaluating Thermal Runaway Fire Propagation in Battery Energy Storage Systems

NFPA 1710 Chapter 5 section 5.2.3.1.2.1 states: In first –due response zones with tactical hazards, high hazard occupancies, or dense urban areas, as identified by the AHJ, these fire companies shall be staffed with a minimum of six on duty members. OSHA 29 CFR 1910.134(g)(4) states: Procedures for interior structural firefighting. In addition to the requirements set forth under paragraphs (g)(3), in interior structural fires, the employer shall ensure that:

1910.134(g)(4)(i): At least two employees enter the IDLH atmosphere and always remain in visual or voice contact with one another.

1910.134(g)(4)(ii): At least two employees are located outside the IDHL atmosphere; and

1910.134(g)(4)(iii): All employees engage in interior structural firefighting use SCBAs.

Response No. A-4

The comment provides a description of the standards and requirements for energy storage systems. As described in the Draft EIR, the Project would be subject to and implemented in accordance with National Fire Protection Association (NFPA), Occupational Safety and Health Administration (OSHA), the California Fire Code (CFC), California Environmental Protection Agency requirements, and all other applicable regulations, including Underwriters Laboratory (UL) standards (pages 2-10 to 2-11, 3.7-1 to 3.7-3, 3.7-11). The Project would ensure compliance with OSHA through personnel training, personal protective equipment, and prepare personnel with the emergency action plan to effectively address all emergencies that may be reasonably expected to occur at the Project. The Project will work with Original Equipment Manufacturers (OEMs) to comply with applicable codes.

Comment No. A-5

Additional requirements to follow but not limited to:

- *An approved water supply capable of supplying the required fire flow determined by appendix B in the California Fire Code shall be installed and maintained. Private fire service mains and appurtenance shall be installed in accordance with NFPA 24.*

Response No. A-5

The Project will be supplied by water provided from the approved water supplier determined by Appendix B of the CFC. As described in Draft EIR Section 3.11.3.4 Impact B, a Water Supply Assessment was prepared which demonstrates that adequate water for fire service would be available to the Project (pages 3.11-1 and 3.11-9).

Comment No. A-6

- *An approved automatic fire suppression system shall be installed on all required structures as per the California Fire Code. All fire suppression systems will be installed and maintained to the current adapted fire code and regulations.*

Response No. A-6

The Project will include the installation of an automatic fire suppression system on all applicable structures, as required per the CFC. As discussed in Draft EIR Section 2.3.1.6 (pages 2-10 and 2-11), the Project would implement fire protection systems for battery systems designed in accordance with the CFC requirements and would take into consideration the recommendations of the NFPA. Depending on the battery storage technology used in each phase and OEM compliance design measures, fire suppression agents such as Novec 1230 or FM 2000 or water may be used as a suppressant but are not required depending upon system design and testing. The Project would include either Li-ion and/or flow batteries. Flow batteries are generally not flammable and would not require fire suppression systems. For the lithium-ion (Li-ion) battery storage, a system would be used that would contain the fire event and encourage suppression through cooling, isolation, and containment.

Comment No. A-7

- *An approved automatic fire detection system shall be installed on all required structures as per the California Fire Code. All fire detection systems will be installed and maintained to the current adapted fire code and regulations.*

Response No. A-7

The Project would include the installation of an automatic fire detection system which would be installed on all applicable structures, in accordance with CFC requirements. As discussed in the Draft EIR, and Response No. A-6 above, the Project includes on-site fire water for battery energy storage systems and would be maintained to in accordance with all applicable codes and regulations.

Comment No. A-8

- *Fire department access roads and gates will be in accordance with the current adopted fire code and the facility will maintain a Knox Box for access on site.*

Response No. A-8

The access roads and gates of the Project would be designed and maintained in accordance with CFC requirements. The applicant will coordinate with ICFD to ensure that appropriate emergency access will be maintained for the Project Site.

Comment No. A-9

- *Compliance with all required sections of the fire code.*

Response No. A-9

The Project would comply with all applicable sections of the CFC.

Comment No. A-10

- *Applicant shall provide product containment areas(s) for both product and water run-off in case of fire applications and retained for removal.*

Response No. A-10

As discussed in Draft EIR Section 3.7.3.4 (pages 3.7-7 to 3.7-12), secondary containment and similar measures will be implemented to ensure containment of accidental spills of products and water run-off during Project construction and operations. The use, storage, transport, and disposal of hazardous materials used in construction of the facility would be carried out in accordance with federal, state, and County regulations. Material Safety Data Sheets for all applicable materials present on-site would be made readily available to on-site personnel. Flow battery tanks for Project operation are not susceptible to fire but would be designed to have secondary containment in the event of a failure. Site drainage has been designed to be fully contained on-site.

Comment No. A-11

- *A Hazardous Waste Material Plan shall be submitted to Certified Unified Program Agency (CUPA) for their review and approval.*
- *All hazardous material and wastes shall be handled, store, and disposed as per the approved Hazardous Waste Materials Plan. All spills shall be documented and reported to Imperial County Fire Department and CUPA as required by the Hazardous Waste Material Plan*

Response No. A-11

As described in Draft EIR Section 2.7 (pages 2-14 to 2-18), a Hazardous Materials Business Plan (HMBP) will be submitted for approval from the CUPA. This HMBP would be used to provide information to the general public regarding hazardous materials at facilities and includes safe handling requirements,

storage requirements, and periodic training requirements. Additionally, the HMBP also requires a release reporting requirement, in the event that there is a reasonable belief that the release or threatened release poses a significant present or potential hazard to human health, safety, property, or the environment. All chemicals stored on-site for continued Project operation would be included in the HMBP.

Additionally, any spent or surplus hazardous chemicals collected from the decommissioning process would be transported off-site for disposal according to applicable state and County restrictions and laws governing the handling, storage, disposal of hazardous waste, similarly to Project operation. All demolition debris would be transported to an off-site disposal location identified at the time of decommissioning. The chemical components of flow batteries may either be disposed of as hazardous waste (i.e., neutralization of the liquid within the battery), or they may comprise valuable elements which could also be recycled or reused.

Comment No. A-12

The following mitigations were recognized because of the hazards that came about as a part of the Surprise, Arizona Battery Storage Fire Report, which is attached to this comment letter, and additional research done by the Fire Department. Below is a brief summary of the fire that took place in Surprise, Arizona

On April 19, 2019, one male career Fire Captain, one male career Fire Engineer, and two male career Firefighters received serious injuries because of a catastrophic failure within a 2.16 MWh lithium-ion battery energy storage system (ESS) that led to a deflagration event. In the same event, one male career Fire Captain and three male career. This project is a lot larger a creates a larger hazardous environment.

Response No. A-12

This comment describes a fire incident which occurred at a battery storage facility in Arizona, resulting in injuries to firefighters. ICFD states that the size of the Project is larger than the facility in Arizona and that it could create a larger hazardous environment. The Draft EIR incorporated the results of a hazard consequence analysis, included as Appendix J.1 of the Draft EIR, to evaluate potential hazards related to the release of air toxics from a credible fire or thermal runaway event at the Project Site. The results of this off-site consequence analysis showed that should an accidental event occur, the toxic endpoint distance would be approximately 33 feet from the toxic release point. The distance to the toxic endpoint is the distance a toxic vapor cloud, heat from a fire, or blast waves from an explosion will travel before dissipating to the point where serious injuries from short-term exposures would no longer occur (page 3.7-11). Therefore, the Draft EIR included an analysis of potential blast waves from an explosion, and the risk associated with this condition was found to be less than significant.

Comment No. A-13

Due to the above mentioned hazards and independent research of the Fire Department, the Fire Department requests the following:

- 1. Fire Department uses Current 2019 California Fire Code, International Fire Code UL Firefighters Safety Report from Surprise Arizona battery storage fire and NFPA 2020 standards for battery*

storage. Mr. Kohan has included outdated fire codes in his response and research. 2016 does not have any Chapter or requirements regarding Battery Storage. Battery storage codes came about in the 2019 California Fire Code.

Response No. A-13

The 2019 CFC includes standards for stationary battery storage systems, which includes battery technologies, emergency power, standby power, and fuel cell power, as well as required fire protection and safety features. The Project would be compliant with all 2019 CFC requirements. The Draft EIR will be revised to include 2019 CFC standards.

Comment No. A-14

- 2. Westside Battery Storage reviews for plans and inspections will be done by a third-party consultant determined by the Fire Department at the applicant's expense as per California Fire Code Chapter 1 [A] 104.7.2 Technical Assistance*

Response No. A-14

This comment does not pertain to a specific concern or question regarding the adequacy of the analysis in the Draft EIR. The Applicant is required to comply with all applicable regulations codified in the CFC. Requests regarding plan review and inspections conducted by a third-party consultant selected by ICFD may be considered as part of a Development Agreement between the County and the Applicant or as a Condition of Approval of the Project. This comment does not relate to the evaluation of an environmental issue presented in the Draft EIR. No further response is required.

Comment No. A-15

- 3. Project will purchase a Type 1 Fire Engine "As further described below". The fire engine cost estimate will be at current market value for the approved Fire Engine. Final cost, conditions and equipment of the fire engine shall be determined prior to the issuance of the initial grading permit.*

Response No. A-15

This comment does not pertain to a specific concern or question regarding the adequacy of the analysis in the Draft EIR. Requests regarding the purchase and housing location of the Type 1 Fire Engine may be considered as part of a Development Agreement between the County and the Applicant or as a Condition of Approval of the Project. As discussed in Draft EIR Section 2.3.1.6 (pages 2-10 to 2-11, 3.7-11), the Project would contribute its proportionate share to purchase, a Type 1 Fire Engine which shall meet all NFPA standards for structural firefighting for the ICFD. The precise off-site location of the Fire Engine housing will be determined by ICFD at a later time, and the Draft EIR has been revised to indicate this.

Comment No. A-16

- 4. All roads for this project will be Asphalt according to California Fire Code 503.2 Specifications. No deviation will be.*

Response No. A-16

This comment does not pertain to a specific concern or question regarding the adequacy of the analysis in the Draft EIR. Requests regarding road paving materials may be considered as part of a Development Agreement between the County and the Applicant or as a Condition of Approval of the Project. No further response is required.

Comment No. A-17

5. *Project will provide a Private Fire Line with Fire Hydrants every 300 feet or to the discretion of the Fire Department and will maintain Fire Flows that will be analyzed by our consultant for final gpm and duration.*

Response No. A-17

This comment does not pertain to a specific concern or question regarding the adequacy of the analysis in the Draft EIR. However, the Draft EIR describes that fire hydrants would be located throughout the Project Site for general fire suppression (page 2-11). Analysis of fire flows by ICFD's consultant may be considered as part of a Development Agreement between the County and the Applicant or as a Condition of Approval of the Project. No further response is required.

Comment No. A-18

6. *Project will purchase Fire and Hazardous Material response equipment (i.e., Thermite) which will be determined by Fire Department and Hazmat Operations annually, or as needed, for the project as new technology, tactics, and/or equipment are developed to protect the project.*

Response No. A-18

This comment does not pertain to a specific concern or question regarding the adequacy of the analysis in the Draft EIR. Requests regarding the purchase of fire and hazardous material response equipment may be considered as part of a Development Agreement between the County and the Applicant or as a Condition of Approval of the Project. The Project will employ new technology, tactics, and necessary equipment to prevent fires and respond appropriately. No further response is required.

Comment No. A-19

7. *Project will fund and provide Training for 6 personnel regionally a year as response will be need from outside of our agency (Mutual Aid) for the life of the project or until all personnel regionally are trained at the Hazardous Material Technician Level. Developer will also provide courses specifically to battery storage yearly for Firefighters Regionally and host mandatory yearly refresher courses specific to Battery Storage Updates and Technology. All cost will be at the Developers expense.*

Response No. A-19

This comment does not pertain to a specific concern or question regarding the adequacy of the analysis in the Draft EIR. Requests regarding annual personnel training and refresher courses may be considered as part of a Development Agreement between the County and the Applicant or as a Condition of Approval of the Project. No further response is required.

Comment No. A-20

8. *Basic Firefighter, Officer, and HAZMAT training should emphasize ESS safety; the potentially explosive nature of the gases and vapors released during lithium-ion battery thermal runaway, vapor cloud formation and dispersion; and the dynamics of deflagrations and blast wave propagation.*

Response No. A-20

This comment does not pertain to a specific concern or question regarding the adequacy of the analysis in the Draft EIR. Requests regarding the content of annual personnel training and refresher courses may be considered as part of a Development Agreement between the County and the Applicant or as a Condition of Approval of the Project. No further response is required.

Comment No. A-21

9. *Research certified expert in battery storage which the Fire Department provide that includes full-scale testing should be conducted to understand the most effective and safest tactics for the fire service in response to lithium-ion battery ESS incidents.*

Response No. A-21

This comment does not pertain to a specific concern or question regarding the adequacy of the analysis in the Draft EIR. Requests regarding additional research, testing and firefighting tactics may be considered as part of a Development Agreement between the County and the Applicant or as a Condition of Approval of the Project. No further response is required.

Comment No. A-22

10. *Until definitive tactics and guidance can be established through full-scale experiments, fire service personnel will define a conservative potential blast radius and remain outside of it, while treating the lithium-ion ESS as if the gas mixture in the enclosure is above the LEL until proven otherwise.*

Response No. A-22

This comment does not pertain to a specific concern or question regarding the adequacy of the analysis in the Draft EIR. Requests regarding additional research, testing and firefighting tactics may be considered as part of a Development Agreement between the County and the Applicant or as a Condition of Approval of the Project. No further response is required.

Comment No. A-23

11. An online educational tool should be developed to proliferate the appropriate base knowledge about lithium-ion battery ESS hazards and fire service tactical considerations annually.

Response No. A-23

This comment does not pertain to a specific concern or question regarding the adequacy of the analysis in the Draft EIR. Requests regarding appropriate educational tools may be considered as part of a Development Agreement between the County and the Applicant or as a Condition of Approval of the Project. No further response is required.

Comment No. A-24

12. Laptops, tablets, and/or software may need to be purchased for the fire department for remote access to assist in remote access to gas monitors. The project will provide Lithium-ion battery ESSs should incorporate gas monitoring that can be accessed remotely.

Response No. A-24

This comment does not pertain to a specific concern or question regarding the adequacy of the analysis in the Draft EIR. Requests regarding electronic tools to assist in remote monitoring and access may be considered as part of a Development Agreement between the County and the Applicant or as a Condition of Approval of the Project. No further response is required.

Comment No. A-25

13. Research that includes multi-scale testing should be conducted to evaluate the effectiveness and limitations of stationary gas monitoring systems for lithium-ion battery ESSs.

Response No. A-25

See Response to Comment No. A-22.

Comment No. A-26

14. Lithium-ion battery ESSs must incorporate robust communications systems to ensure remote access to data from the BMS, sensors throughout the ESS, and the fire alarm control panel remains uninterrupted.

Response No. A-26

This comment does not pertain to a specific concern or question regarding the adequacy of the analysis in the Draft EIR. Requests regarding specific communications systems may be considered as part of a Development Agreement between the County and the Applicant or as a Condition of Approval of the Project. However, the Draft EIR describes the automated communication and fire suppression systems that would be incorporated as part of the Project (page 2-11). No further response is required.

Comment No. A-27

15. Owners and operators of ESS must develop an Emergency Operation Plan in conjunction with local fire service personnel and the AHJ and hold a comprehensive understanding of the hazards associated with lithium-ion battery technology.

Response No. A-27

As discussed in Draft EIR Section 3.7.3.4 (page 3.7-8), personnel training and personal protective equipment would be provided to all employees. To ensure compliance with OSHA Emergency Action Plan Standard, 29 Code of Federal Regulations (CFR) 1910.38, and to prepare personnel for dealing with emergency situations, an emergency action plan would be developed as part of the Project. This emergency action plan would be developed to effectively address all emergencies that may be reasonably expected to occur at the Project. All personnel working on-site would receive instruction and training on the emergency action plan.

Comment No. A-28

16. Signage that identifies the contents of an ESS is required on all ESS installations to alert first responders to the potential hazards associated with the installation.

Response No. A-28

The Project will comply with applicable regulations and standards related to required signage.

Comment No. A-29

17. Lithium-ion battery ESSs must incorporate adequate explosion prevention protection as required in NFPA 855 or International Fire Code Chapter 12, where applicable, in coordination with the emergency operations plan.

Response No. A-29

As discussed in Draft EIR Sections 3.7.1.2 and 3.7.3.4 (pages 3.7-2 and 3.7-11), the Project's fire protection systems would take into consideration the recommendations of NFPA 855. The Project's design will incorporate NFPA 855 recommendations and IFC Chapter 12 requirements, where applicable.

Comment No. A-30

18. Research focused on emergency decommissioning best practices and the role of the fire service in an emergency should be conducted.

Response No. A-30

See Response to Comment No. A-22.

Comment No. A-31

Imperial County Fire Department is requiring the applicant to purchase hazardous Material equipment to respond emergencies within electrical energy storage systems. Air monitoring should be a priority for

responders during and after any electrical energy storage system. 4-meter or other gas detection equipment to determine toxic gas levels, Thermite equipment determined by Imperial County Fire Department and Imperial County Heat Team. Additional equipment may be required upon determining the energy storage technology that will be used for the project. The Imperial County Fire Department shall make the determination of what is required to provide operational safety of emergency responders. This equipment will be maintain by Imperial County Fire Department and Imperial County Heat Team. This equipment shall be determined by and provided to Imperial County Fire Department before the issuance of the initial grading permit.

Response No. A-31

This comment does not pertain to a specific concern or question regarding the adequacy of the analysis in the Draft EIR. Requests regarding the purchase of specific equipment may be considered as part of a Development Agreement between the County and the Applicant or as a Condition of Approval of the Project. However, As discussed in Draft EIR Section 3.7.3.4 (pages 3.7-7 and 3.7-10), the Applicant would be required to prepare and submit a HMBP and obtain hazardous materials permits from CUPA. No further response is required.

Comment No. A-32

Fiscal Impacts and requirements for solar installation within the project: For operation and maintenance, fees associated with Fire Department/OES.

Response No. A-32

This comment does not pertain to a specific concern or question regarding the adequacy of the analysis in the Draft EIR. Requests regarding operation and maintenance fees associated with the Project's proposed auxiliary on-site solar PV panels may be considered as part of a Development Agreement between the County and the Applicant or as a Condition of Approval of the Project. No further response is required.

Comment No. A-33

Other impacts from this project shall be evaluated by Imperial County Fire Department Fire Chief and Fire Code Official in determining any impacts of the project can or will cause a negative effect on Imperial County Fire Department and/or County of Imperial. Any impacts will be address between Imperial County Fire Department official, County of Imperial officials, applicants and/or developers which may include but not limited to:

- *Capital purchases which may be required in providing services to this project*
- *Hazmat Operational Equipment*
- *Training*
- *Fiscal and operational costs*

Response No. A-33

This comment does not pertain to a specific concern or question regarding the adequacy of the analysis in the Draft EIR. The listed requests may be considered as part of a Development Agreement between

the County and the Applicant or as a Condition of Approval of the Project. No further response is required.

Comment No. A-34

As to Mr. Kohan's Technical Memorandum ("Kohan's Memo") in Response to our Original Comment Letter, the Fire Department believes that Kohan's Memo did not address our concerns and was inaccurate for numerous reasons, as stated below:

1. *LTSI will need to be changed to PSUMI until an Explosions Analysis is completed by a certified expert. Mr. Kohan documented that it was only air toxic from a credible fire or thermal runaway event at the project site. Arizona incident was a thermal runaway which created an explosion.*

Response No. A-34

Draft EIR incorporated the results of a hazard consequence analysis, included as Appendix J.1 of the Draft EIR, to evaluate potential hazards related to the release of air toxics from a credible fire or thermal runaway event at the Project Site. The results of this off-site consequence analysis showed that should an accidental event occur, the toxic endpoint distance would be approximately 33 feet from the toxic release point. The distance to the toxic endpoint is the distance a toxic vapor cloud, heat from a fire, or blast waves from an explosion will travel before dissipating to the point where serious injuries from short-term exposures would no longer occur (page 3.7-11). Therefore, the Draft EIR included an analysis of potential blast waves from an explosion, and the risk associated with this condition was found to be less than significant. Changing this finding to a potentially significant impact unless mitigation is incorporated, as suggested by ICFD in the above comment, is not warranted, as no further mitigation measures to further reduce this impact would be applicable.

Comment No. A-35

2. *Project purchased Engine will be housed in Imperial County Station #3 in Seeley and not in Heber as stated by Mr. Kohan.*

Response No. A-35

See Response to Comment No. A-15.

Comment No. A-36

3. *California Fire Code 2016 referenced does not apply to project and does not address battery storage. The current 2019 California Fire Code, International Fire Code, UL Firefighters Safety Report from Surprise Arizona battery storage fire and NFPA 2020 standards for battery storage are being used.*

Response No. A-36

The Draft EIR will be updated to reflect the 2019 CFC. has been updated to include the current 2019 California Fire Code.

Comment No. A-37

After review of Kohan's Memo, the Fire Department requests that an Explosion Analysis is conducted for this Project so that we could understand what the blast radius distance would be and were Firefighters would need to initially stage to assess situation prior to entering the facility.

Response No. A-37

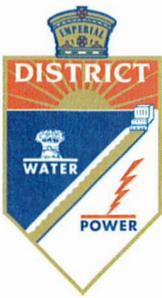
This comment does not pertain to the content of the Draft EIR, as the Draft EIR would not be the appropriate document to evaluate potential staging areas or specific firefighting techniques. Please also refer to Response No. A-34 concerning the explosion analysis presented in the Draft EIR. No further response is required.

Comment No. A-38

If you have any questions, please contact the Fire Department at 442-265-3020 or 442-265-3021.

Response No. A-38

This comment is a conclusion to the ICFD letter and does not pertain to the content of the Draft EIR. No further response is required.



IID

A century of service.

Letter B

www.iid.com

Since 1911

May 24, 2021

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

SUBJECT: NOA of a DEIR for the Westside Canal Energy Storage Project (Revised)

Dear Mr. Black:

B-1

On April 7, 2021, the Imperial County Planning & Development Services Department issued a Notice of Availability of a Draft Environmental Impact Report for the Westside Canal Battery Storage Project. The applicant, Consolidated Edison Development - Westside Canal Energy Storage, LLC; proposes to develop over a 10-year period, a 163-acre lithium ion battery and/or flow battery storage facility with up to 2,000MW of capacity in the Mount Signal area of unincorporated Imperial County, approximately 8 miles southwest of the city of El Centro, CA. The proposed project includes a 230kV loop-in switching station, a 34.5kV to 230kV project substation, underground electrical cables and permanent vehicular access over a proposed bridge spanning the West Side Main Canal. The proposed loop-in switching station would connect the project to the existing IID Campo Verde-Imperial Valley 230kV radial gen-tie line, which ultimately connects to Imperial Valley Substation.

B-2

The IID has reviewed the DEIR and in addition to the comments provided in the March 2, 2021 district letter (see attached letter), has the following observations:

1. In order to obtain a water supply from IID for a non-agricultural project, the applicant has to comply with all applicable IID policies and regulations and will be required to enter into a water supply agreement. Such policies and regulations require, among other things, that all potential environmental and water supply impacts of the project be adequately assessed, appropriate mitigation developed if warranted, including any necessary approval conditions adopted by the relevant land use and permitting agencies.

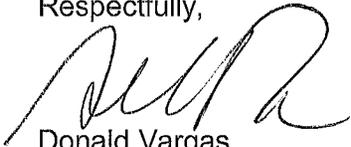
B-3

2. If IID implements a water allocation or apportionment program pursuant to the IID Equitable Distribution Plan, or any amending or superseding policy for the same or similar purposes, during all or any part of the term of said water supply agreement, IID shall have the right to apportion the project's water as an industrial water user. For more information on how to enter into a water supply agreement, please visit the district's website at <https://www.iid.com/water/municipal-industrial-and-commercial-customers> or contact Justina Gamboa-Arce, IID Water Resources Planner, at (760) 339-9085 or igamboaarce@IID.com.

David Black
May 24, 2021
Page 2

B-3 (cont.) ↑ Should you have any questions, please do not hesitate to contact me at 760-482-3609 or at 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.
Constance Bergmark – Mgr. of Planning & Eng./Chief Elect. Engineer, Energy Dept.
Enrique De Leon – Asst. Mgr., Energy Dept., Distr., Planning, Eng. & Customer Service
Jamie Asbury – Assoc. 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.



IID

A century of service.

www.iid.com

Since 1911

March 2, 2021

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

SUBJECT: Westside Canal Energy Storage Project ADEIR

Dear Mr. Black:

B-4

On February 17, 2021, the Imperial Irrigation District received from the Imperial County Planning & Development Services Dept., a request for agency comments on the Administrative Draft Environmental Impact Report for the Westside Canal Battery Storage Project. The applicant, Consolidated Edison Development Westside Canal Energy Storage, LLC; proposes to develop over a 10-year period, a battery storage facility with up to 2,000 MW of capacity in the Mount Signal area, approximately 8 miles southwest of the city of El Centro, California and approximately 5.3 miles north of the United States and Mexico border. The proposed project includes a 230kV loop-in switching station, a 34.5kV to 230kV project substation, underground electrical cables and permanent vehicular access over a proposed bridge spanning the West Side Main Canal. The proposed loop-in switching station would connect the project to the existing IID Campo Verde - Imperial Valley 230kV radial gen-tie line, which ultimately connects to Imperial Valley Substation. The 163-acre project site is composed of 148 acres owned by the applicant with the remainder owned by the BLM, IID and a private landowner.

B-5

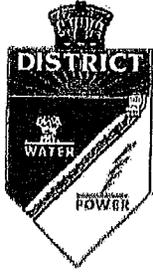
The IID has reviewed the ADEIR and found that the comments provided in the May 14, 2020 district letter related to the Notice of Preparation for the DEIR (see attached letter) continue to apply.

Should you have any questions, please do not hesitate to contact me at 760-482-3609 or at 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.
Enrique De Leon – Asst. Mgr., Energy Dept., Distr., Planning, Eng. & Customer Service
Jamie Asbury – Assoc. 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.



IID

A century of service.

www.iid.com

Since 1911

May 14, 2020

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

SUBJECT: CED Westside Canal Energy Storage Project; NOP of a Draft EIR,
GPA19-0003, ZC19-0004 and CUP19-0015

Dear Mr. Black:

B-6 On April 13, 2020, the Imperial Irrigation District received from the Imperial County Planning & Development Services Dept. a request for agency comments on the Notice of Preparation of a Draft Environmental Impact Report, General Plan Amendment no. 19-0003, Zone Change no. 19-0004 and Conditional Use Permit no. 19-0015 for the CED Westside Canal Energy Storage Project. The applicant, CED Westside Canal Energy Storage, LLC; proposes to develop in phases, over a 10-year period, a battery storage facility with up to 2,000 MW of capacity in the Mount Signal area in unincorporated Imperial County, approximately 8 miles southwest of the city of El Centro, CA and approximately 5.3 miles north of the United States and Mexico border. The proposed project includes a 230kV loop-in substation and permanent vehicular access over a proposed bridge spanning the West Side Main Canal. The proposed loop-in substation would connect the project to the existing IID Campo Verde-Imperial Valley 230kV radial gen-tie line, which ultimately connects to Imperial Valley Substation. The 168-acre project site is composed of 148 acres owned by the applicant with the remainder owned by the BLM, IID and a private landowner.

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

General Comments

- B-7
1. For temporary and/or permanent electrical distribution-rated service for the project, the applicant should be advised to contact Ernie Benitez, IID Customer Project Development Planner, at (760) 482-3405 or e-mail Mr. Benitez at elbenitez@iid.com to initiate the customer service application process. In addition to submitting a formal application (available for download at the IID website <http://www.iid.com/home/showdocument?id=12923>), the applicant will be required

- B-7
(cont.)
- to submit a complete set of approved plans (including CAD files), project construction schedule, estimated in-service date, electrical one-line diagram of facility, electrical loads, panel sizes and locations, and all the applicable fees, permits, easements and environmental compliance documentation pertaining to the provision of electrical service to the project. The applicant shall be responsible for all costs and mitigation measures related to providing electrical service to the project.
- B-8
2. Please note that electrical capacity is limited in the project area. A distribution-rated circuit study will be required. Any improvements identified in the circuit study to serve the project's electrical loads shall be the financial responsibility of the applicant. Project may require a transmission backfeed agreement.
- B-9
3. IID water facilities that may be impacted include Westside Main Canal, Fern Side Main Canal, Fern Canal, Dixie Drain No. 3, Dixie Drain No. 3A, and the Fig Drain.
- B-10
4. IID drains will be impacted with project and site runoff flows and proposed storm water detention facilities drainage. To mitigate impacts, the project will require a comprehensive IID hydraulic drainage system analysis. IID's hydraulic drainage system analysis includes an associated drain impact fee.
- B-11
5. IID's canal or drain banks may not be used to access the project site. Any abandonment of easements or facilities shall be approved by IID based on systems (irrigation, drainage, power, etc.) needs.
- B-12
6. To insure there are no impacts to IID water facilities, the applicant should submit the project's plans (including but not limited to grading and drainage and fencing plans as well as the project's Storm Water Pollution Prevention Plan) to IID Water Department Engineering Services Section prior to final design. The IID WDES Section can be contacted at (760) 339-9265 for additional information.
- B-13
7. To obtain water for construction, applicant should contact IID South End Division at (760) 482-9800.
- B-14
8. New long-term non-agricultural water supply requests are processed under the district's Temporary Land Conversion Fallowing Policy (available at the IID website www.iid.com/TLGFP). For additional information regarding water supply policies, contact Ms. Justina Gamboa-Arce at (760) 339-9085.
- B-15
9. Per State of California Water Resources Control Board Division of Drinking Water, the battery storage project will need to have a contract with an approved provider to deliver the drinking water to the site.

- B-16 10. 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 the IID website <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.
- B-17 11. An IID encroachment permit is required to utilize existing surface-water drainpipe connections to drains, and receive drainage service from IID. Surface-water drainpipe connections are to be modified in accordance with IID Standards. A construction storm-water permit from the California Regional Water Quality Control Board is required before commencing construction. IID will require copies of this permit and of the project's Storm Water Pollution Prevention Plan.
- B-18 12. In addition to IID's recorded easements, IID claims, at a minimum, a prescriptive right of way to the toe of slope of all existing canals and drains. Where space is limited and depending upon the specifics of adjacent modifications, the IID may claim additional secondary easements/prescriptive rights of ways to ensure operation and maintenance of IID's facilities can be maintained and are not impacted and if impacted mitigated. Thus, IID should be consulted prior to the installation of any facilities adjacent to IID's facilities. Certain conditions may be placed on adjacent facilities to mitigate or avoid impacts to IID's facilities
- B-19 13. 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.**
- B-20 14. Dividing a project into two or more pieces and evaluating each piece in a separate environmental document (Piecemealing or Segmenting), rather than evaluating the whole of the project in one environmental document, is explicitly forbidden by CEQA, because dividing a project into a number of pieces would allow a Lead Agency to minimize the apparent environmental impacts of a project by evaluating individual pieces separately, each of which may have a less-than-significant impact on the environment, but which together may result in a significant impact. Segmenting a project may also hinder developing comprehensive mitigation

B-20
(cont.)

↑

strategies. In general, if an activity or facility is necessary for the operation of a project, or necessary to achieve the project objectives, or a reasonably foreseeable consequence of approving the project, then it should be considered an integral project component that should be analyzed within the environmental analysis. The project description should include all project components, including those that will have to be approved by responsible agencies. The State CEQA Guidelines define a project under CEQA as "the whole of the action" that may result either directly or indirectly in physical changes to the environment. This broad definition is intended to provide the maximum protection of the environment. CEQA case law has established general principles on project segmentation for different project types. For a project requiring construction of offsite infrastructure, the offsite infrastructure must be included in the project description. *San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App. 4th 713.

Specific Comments

B-21

15. Figure 2 of the NOP and Figure 3 of the Initial Study show a conceptual site plan that is identified as subject to change. IID therefore clarifies that any proposed improvements and facilities in IID rights of way are also subject to IID review, permitting and approvals. Additionally, any proposed improvements outside IID right of way will be further reviewed for the purpose of safeguarding that any improvements such as roads, drainage basins, fencing, driveways, etc., do not pose an impact to IID's ability to operate and maintain district facilities.

B-22

16. Figure 2 of the IS depicts a project site aerial photo as being the project boundary. However, elsewhere in the document, reference is made to potential temporary site access using Westside Main Canal bank from State Hwy. 98 to the north, along the south canal bank. Shouldn't this potential temporary site access proposal need to be included in the environmental analysis?

B-23

17. Table 2, titled *Agency Permits and Environmental Review Requirements*, lists IID for a Generator Interconnection Agreement. Please be advised that the IID will also need to review the proposed detailed construction-level plans to determine impacts and will include review of electrical service, water service, drainage, and any encroachments within IID right of way. Encroachment permits and likely a formal Encroachment Agreement will be required. The agreement typically will document the permit items, any required project mitigations and associated fees. The table needs to add at a minimum, "Various Encroachment Permits".

B-24

↓

18. Section 2.3 of the IS, titled *Project Components*, indicate 3 to 5 phases for full buildout. Construction of Phase 1 is mentioned to begin in 2021 and would include roads, a bridge and other facilities. IID is concerned with the roads, bridge and onsite development as well as any temporary access that could impact the Westside Main Canal. Between now and January 2021 is a very short period and

B-24 (cont.) ↑ IID, as of yet, has not been provided any construction-level plans for review. Applicant should be advised of this predicament as well as the quandary that district staff will be in when any substantial submittals are received for review and IID is expected to complete a review in a short amount of time.

B-25 19. Section 2.3.2 of the IS, titled *Common Components*, references both retention and detention basins as being provided. Detention basins presume there is a location to meter out the storm water. Is the project entertaining both types of basins? Please advise where the basins will outlet to, and if an IID drain is intended to be the recipient of any storm water discharge. Any basins should be located and constructed so that they do not impact the integrity of the Westside Main Canal and its bank.

B-26 20. Section 2.3.2.1 of the IS, titled *Operations and Maintenance Facilities*, indicate a septic leach field will be located near the O&M building. IID would look to Imperial County Environmental Health Department to ensure the buffer distance from the Westside Main Canal is adequate to minimize any potential of effluent transmission to the Westside Main Canal.

B-27 21. Section 2.3.2.2 of the IS, titled *Water Connections*, indicate that both temporary construction water and permanent water will be needed from the IID's Westside Main Canal. Westside Main Canal Delivery 6 has historically serviced the southern project parcel. However, if this service gate is not adequate, then the project will need to apply for a new service. This section also indicates that a connection to the Westside Main Canal would be constructed by a horizontal directional drilled underground boring, which isn't the case. IID will not allow applicant's contractor to perform this work in IID right of way. The CED Westside Canal Energy Storage Project is considered by IID a customer service project, where CED Westside Canal Energy Storage, LLC, as customer, would need to complete an application and pay the cost of the design and construction of the new water service, if the existing Westside Main Canal Delivery 6 is not adequate.

Additional Clarification:

- B-28
- Temporary construction water can be obtained with a pump set up, an IID encroachment permit and an application to IID South End Division.
 - Permanent water will also require IID encroachment permit and application to IID South End Division. However, it will also require an IID water supply agreement, a formal request for a new water delivery and payment for a new water delivery. IID will then design and construct the delivery in the Westside Main Canal along with pipe to the Westside Main Canal right of way line. At that point, the applicant can connect to the underground pipe.

B-29 | • Any connection to IID's facility for water can only be performed by IID as the system is live 24/7 and the connection can only be scheduled with a low water level in the Westside Main Canal. It is suggested that the applicant start the process sooner than later.

B-30 | • For both temporary and permanent water delivery/service, metering is required by IID.

B-31 | 22. Section 2.3.2.3 of the IS, titled *Stormwater Retention*, mentions that storm water retention basins will be constructed. Are these retention basins or detention basins as described in Section 2.3.2, titled *Common Components*?

Additional Clarification:

B-32 | • If the project is entertaining a detention basin, then the basin would need to discharge to an existing drain. New drains crossing the Westside Main Canal will not be considered by IID.

B-33 | • It is stated that at least 3 inches of rainfall across the entire site would be retained. IID is concerned that the basins will retain and not have an outlet. IID is requesting that the basins be designed for 5 inches (for a storm track) and not the 3 inches of precipitation over the site (for an individual storm). The concept of the 5-inch storm track was promoted for many years by the County of Imperial as a result of the late 1970s tropical storms Kathleen and Doreen that inundated Imperial County. Additionally, the hydrology study for the site should consider any other contributing area such as desert washes that may impinge on the project to assure there is no offsite drainage being routed onto the project site; otherwise, the site may need to consider additional retention volumes.

B-34 | 23. Section 2.3.2.4 of the IS, titled *Permanent Vehicle Access – Public Access Roads*, mentions that the applicant is proposing to construct public access roads on both the north and south side of the Westside Main Canal along with a clear-span bridge off the Westside Main Canal. Reference is made to Figures 4 and 5 of the IS, which show layout of access roads, bridge and an elevation profile of the bridge.

Additional Clarification:

B-35 | • The depictions in both Figure 4 and 5 and the actual layout and elevation profiles have not been approved or reviewed by IID.

B-35 | • More detail and clarity needs to be provided relative to the temporary access options. It is not clear if these include both south and north side of the Westside Main Canal banks, or rights of way.

B-36 | • IID requires a cross section of the proposed public road access improvements in relation to the Westside Main Canal banks, with elevations

- B-36 (cont.) ↑ and dimensions, to carefully review and ensure there are no conflicts with the district's O&M operations. IID typically claims a minimum of either prescriptive or deeded right of way, whichever is greater to assure its ability to clean the canal as regular maintenance.
- B-37 • IID suggests that the County of Imperial and the applicant review the need for a public road versus a private one for landowner access and public emergency access as opposed to full public use. This would also include the bridge crossing.
- B-38 • Applicant will need to apply for encroachments for the bridge, construction access and for the public access road. Applicant should be advised that IID requires an encroachment permit and/or agreement for any encroachment across, over, under and/or parallel to district facilities.
- B-39 • The bridge is clearly one of the major impacts to IID facilities. It is of the utmost importance for the applicant to start the formal plan submittal and permitting process with IID as soon as possible. Potential impacts to IID facilities requires a formal review by the district, otherwise, it will cause delays to the project's proposed schedule.
- B-40 • IID typically claims prescriptive or deeded right of way, whichever covers more distance. Additionally, per the California Water Code, IID also claims additional right of way beyond the prescriptive/deeded, in order to conduct adequate maintenance of district facilities. This must be considered in the project's construction plan development.
- B-41 • Due to the importance of the Westside Main Canal and concerns outlined herein, IID would look at a sufficient area between the Westside Main Canal and the access road so that the maintenance operations of one does not impact the other. Whether the access road is public or private, these O&M impacts to each other must be considered in the design process.

24. Section 2.3.2.7 of the IS titled *Fire Protection/Fire Suppression*.

Additional Clarification:

- B-42 • Project site grading should address fire suppression flows and insure the integrity of the Westside Main Canal. The observation that water for fire suppression will be obtained by tapping into the Westside Main Canal shows a lack of understanding of how water can be obtained from IID. No "tapping" of the Westside Main Canal shall be permitted. Nevertheless, water can be obtained in accordance with IID policies. See item no. 21 for additional clarification.
- B-43 • An explanation is needed on whether open storage basins for fire suppression water will be used or if all water storage is proposed with enclosed storage tanks. If open basins are used, such basin capacity shall include maximum amount of water for fire suppression plus a contingency ↓

- B-43 (cont.) ↑ (20% suggested) for freeboard. Because of the regional importance of the Westside Main Canal and as a worst-case scenario, this is in addition to calculated storm water flows. These additional amounts are considered necessary in the event that the basin is full but the water is not easily accessible and/or sufficient to use for fire suppression.
- B-44 25. Section 2.6 of the IS, titled *Existing and Proposed Utility Easements*. It bears repeating that applicant should be advised that any new facilities placed over/under and/or parallel to IID facilities will need to be reviewed and approved as part of the IID planning review and encroachment permitting process. For example, typically, there are minimum height clearances over the canal banks to any overhead power/cable lines. This is to ensure no impact to IID's ability to maintain its water and/or drain infrastructure.
- Additional Clarification:
- If applicant is entertaining the upgrade of existing IID electrical facilities (S Line & Circuit L76) for interconnection purposes or to provide service to the project, then the electrical upgrade drawings need to be forwarded to IID's Water Department as well as the district's Energy Department to review for compliance with the departments' standards/requirements.
- B-45 26. Section 2.10 of the IS, titled *Discretionary Actions*, calls for an IID Water Supply Assessment. However, there is no mention of an IID encroachment permit, and likely an encroachment agreement for any work to be placed in, over or under IID Water Department facilities, including any impact mitigations. Mitigations may not be environmental, but due to impacts determined after a detailed review of the construction-level plans to be provided for the IID's planning review, when such plans are available from the Applicant.
- B-46 27. Section 3.8.2 of the IS, titled *Geology and Soils - Environmental Impact Analysis*. The project site's high potential for expansive soils, unsuitable for backfill for structure foundations, retaining walls or pipe bedding along with reference to IS figures 4 & 5 (retaining wall), is of concern to IID. Work on the Westside Main Canal bank is restricted and typically not allowed to outside entities. A water outage is not possible. Any work on the Westside Main Canal bank would imply strict requirements, conditions and supervision. The structural integrity of the Westside Main Canal is of utmost concern to IID.
- B-47 ↓ 28. Section 3.11 of the IS, titled *Hydrology and Water Quality*, indicates that subsections a) and c) are both "Potentially Significant Impact". It is requested that the comments provided herein related to storm drainage and retention basins be considered in the EIR document when it is prepared. The key issues of concern are whether the onsite storm water basins are retaining or detaining, if and where

B-47 (cont.) ↑ they discharge to, capacity sufficient to meet a 5-inch storm track as opposed to a 3-inch precipitation event and location of basins to not impact the integrity of the Westside Main Canal or canal bank. Furthermore, section should indicate that project grading shall be sloped away from the Westside Main Canal.

B-48 | 29. Section 3.18 of the IS, titled *Transportation*, indicates all four categories as either "Less than Significant" or "No Impact". The IID takes no exception to this if the transportation being discussed and reviewed in the document is for public traffic using existing public roads. The issue that IID does take exception to is if the document is also referencing traffic on the Westside Main Canal bank as a means of temporary access for construction. If this is the case, then IID would suggest the finding under "c) Would the project substantially increase hazards to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?" and d) "Would the project result in inadequate emergency access?" both be marked as "Less than Significant Impact with Mitigation Incorporation". The mitigation could be that the applicant will apply for an IID encroachment permit and comply with the conditions of the permit. The concerns by IID of construction and public traffic include the conditions of the canal bank soils, structural strength, nearness to the water, traffic speed, traffic safety, traffic control, coexistence with IID O&M activities and potential conflicts, adequate bank width and all weather surfacing (or lack thereof), dust and erosion control. If there are several alternatives for temporary access, they should all be clearly indicated in the IS, not only in this section, but also in the project description.

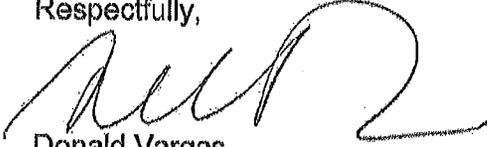
B-49 | 30. Section 3.20 of the IS, titled *Utilities and Service Systems*, indicates the following: "Potable water service to the project site would be provided by the IID". This is not correct. IID only provides raw canal water, not potable water. Please also see IID comments under item no. 21. In addition, water provided from IID facilities for project construction is restricted to metered pump(s). On the matter of stormwater drainage, please see IID comments under item no. 22.

B-50 | As with any other development project, IID will need to perform a comprehensive planning review of the project to determine detailed impacts as soon as construction-level plans are available. The above comments however should clarify IID's concerns. It is important that County of Imperial, prior to approving any grading plans or improvement plans for construction, communicate and collaborate with IID in the plan checking process to ensure that the applicant/developer understands that both agencies have a responsibility and accountability in the final approval of the construction documents and before construction begins so that any unnecessary delays can be prevented.

B-51 | Should you have any questions, please do not hesitate to contact me at 760-482-3609 or at dvargas@iid.com. Thank you for the opportunity to comment on this matter.

David Black
May 14, 2020
Page 10

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., Project Management & Customer Project Development
Enrique De Leon -- Asst. Mgr., Energy Dept., Distr., Planning, Eng. & Customer Service
Vance Taylor -- Asst. General Counsel
Jamie Ashbury -- Asst. General Counsel
Robert Laurie -- Outside General Counsel
Michael P. Kemp -- Superintendent, Regulatory & Environmental Compliance
Laura Cervantes -- Supervisor, Real Estate
Jessica Humés -- Environmental Project Mgr. Sr., Water Dept.

2.2.2.2 Response to Letter B – Imperial Irrigation District, May 24, 2021

Comment No. B-1

On April 7, 2021, the Imperial County Planning & Development Services Department issued a Notice of Availability of a Draft Environmental Impact Report for the Westside Canal Battery Storage Project. The applicant, Consolidated Edison Development – Westside Canal Energy Storage, LLC; proposes to develop over a 10-year period, a 163-acre lithium ion battery and/or flow battery storage facility with up to 2,000 MW of capacity in the Mount Signal area of unincorporated Imperial County, approximately 8 miles southwest of the city of El Centro, CA. The proposed project includes a 230kV loop-in switching station, a 34.5kV to 230kV project substation, underground electrical cables and permanent vehicular access over a proposed bridge spanning the West Side Main Canal. The proposed loop-in switching station would connect the project to the existing IID Campo Verde-Imperial Valley 230kV radial gen-tie line, which ultimately connects to Imperial Valley Substation.

Response No. B-1

This comment provides basic background information regarding the Project. No further response is required.

Comment No. B-2

The IID has reviewed the DEIR in addition to the comments provided in the March 2, 2021 district letter (see attached letter), has the following observations:

- 1. In order to obtain a water supply from IID for a non-agricultural project, the applicant has to comply with all applicable IID policies and regulations and will be required to enter into a water supply agreement. Such policies and regulations require, among other things, that all potential environmental and water supply impacts of the project be adequately assessed, appropriate mitigation developed if warranted, including any necessary approval conditions adopted by the relevant land use and permitting agencies.*

Response No. B-2

As described in Draft Section 3.11.3.4 (pages 3.11-8 to 3.11-9), Consolidated Edison Development (CED; Project Application) would comply with all applicable Imperial Irrigation District (IID) policies and regulations in order to enter into a water supply agreement.

Comment No. B-3

- 2. If IID implements a water allocation or apportionment program pursuant to the IID Equitable Distribution Plan, or any amending or superseding policy for the same or similar purposes, during all or any part of the term of said water supply agreement, IID shall have the right to apportion the project's water as an industrial water user. For more information on how to enter into a water supply agreement, please visit the district's website at <http://www.iid.com/water/municipal-industrial-and-commercial-customers> or contact Justina Gamboa-Arce, IID Water Resources Planner, at (760) 339-9085 or jgamboarce@IID.com.*

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

Response No. B-3

This comment does not pertain to a specific concern or question regarding the adequacy of the analysis in the Draft EIR. No further response is required.

Comment No. B-4

On February 17, 2021, the Imperial Irrigation District received from the Imperial County Planning & Development Services Dept., a request for agency comments on the Administrative Draft Environmental Impact Report for the Westside Canal Battery Storage Project. The applicant, Consolidated Edison Development Westside Canal Energy Storage, LLC; proposed to develop over a 10-year period, a battery storage facility with up to 2,000 MW of capacity in the Mount Signal area, approximately 8 miles southwest of the city of El Centro, California and approximately 5.3 miles north of the United States and Mexico border. The proposed project includes a 230 kV loop-in switching station, a 34.5 kV to 230 kV project substation, underground electrical cables and permanent vehicular access over a proposed bridge spanning the West Side Main Canal. The proposed loop-in switching station would connect the project to the existing IID Campo Verde – Imperial Valley 230 kV radial gen-tie line, which ultimately connects to Imperial Valley Substation. The 163-acre project site is composed of 148 acres owned by the applicant with the remainder owned by the BLM, IID and a private landowner.

Response No. B-4

This comment provides basic background information regarding the Project. No further response is required.

Comment No. B-5

The IID has reviewed the ADEIR and found that the comments provided in the May 14, 2020 district letter related to the Notice of Preparation for the DEIR (see attached letter) continue to apply.

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

Response No. B-5

This comment does not pertain to a specific concern or question regarding the adequacy of the analysis in the Draft EIR. No further response is required.

Comment No. B-6

On April 13, 2020, the Imperial Irrigation District received from the Imperial County Planning & Development Services Dept. a request for agency comments on the Notice of Preparation of a Draft Environmental Impact Report, General Plan Amendment no.19-0003, Zone Change no.19-0004 and Conditional Use Permit no. 19-0015 for the CED Westside Canal Energy Storage Project. The applicant, CED Westside Canal Energy Storage, LLC; proposes to develop in phases, over a 10-year period, a

battery storage facility with up to 2,000 MW of capacity in the Mount Signal area in unincorporated Imperial County, approximately 8 miles southwest of the city of El Centro, CA and approximately 5.3 miles north of the United States and Mexico border. The proposed project includes a 230 kV loop-in substation and permanent vehicular access over a proposed bridge spanning the West Side Main Canal. The proposed loop-in substation would connect the project to the existing IID Campo Verde-Imperial Valley 230 kV radial gen-tie line, which ultimately connects to Imperial Valley Substation. The 168-acre project site is composed of 148 acres owned by the applicant with the remainder owned by the BLM, IID and a private landowner.

Response No. B-6

This comment provides basic background information regarding the Project. No further response is required.

Comment No. B-7

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

General Comments

- 1. For temporary and/or permanent electrical distribution-rated service for the project, the applicant should be advised to contact Ernie Benitez, IID Customer Project Development Planner, at (760)482-3405 or email Mr. Benitez at elbenitez@IID.com to initiate the customer service application process. In addition to submitting a formal application (available for download at the IID website <http://www.IID.com/home/showdocument?id=12923>), the applicant will be required to submit a complete set of approved plans (including CAD files), project construction schedule, estimated in-service date, electrical on-line diagram of facility, electrical loads, panel sizes and locations, and all the applicable fees, permits, easements and environmental compliance documentation pertaining to the provision of electrical service to the project. The applicant shall be responsible for all costs and mitigation measures related to providing electrical service to the project.*

Response No. B-7

This comment does not pertain to a specific concern or question regarding the adequacy of the analysis in the Draft EIR. However, the Project Applicant will comply with all IID requirements regarding the provision of electrical service. No further response is required

Comment No. B-8

- 2. Please note that electrical capacity is limited in the project area. A distribution-rated circuit study will be required. Any improvements identified in the circuit study to serve the project's electrical loads shall be the financial responsibility of the applicant. Project may require a transmission backfeed agreement.*

Response No. B-8

See Response to Comment No. B-7.

Comment No. B-9

3. *IID water facilities that may be impacted include Westside Main Canal, Fern Side Main Canal, Fern Canal, Dixie Drain No. 3, Dixie Drain No. 3A, and the Fig Drain.*

Response No. B-9

This comment does not pertain to a specific concern or question regarding the adequacy of the analysis in the Draft EIR, nor does this comment state how the listed water facilities would be impacted. The Applicant is required to obtain permits from IID for any planned encroachments that may involve the listed IID water facilities. No further comment is required.

Comment No. B-10

4. *IID drains will be impacted with project and site runoff flows and proposed storm water detention facilities drainage. To mitigate impacts, the project will require a comprehensive IID hydraulic drainage system analysis. IID's hydraulic drainage system analysis includes an associated drain impact fee.*

Response No. B-10

As discussed in Draft EIR Section 3.8.3.4 (pages 3.8-8 to 3.8-12), includes mitigation measures to minimize impacts related to potential stormwater runoff and compliance with IID drainage planning requirements. MM HYD-1 (Prepare Stormwater Pollution Prevention Plan and Implement Best Management Practices) includes the requirement to prepare a Project-specific Stormwater Pollution Prevention Plan measures and best management practices (BMPs) to control the discharge of sediment and pollutants and to secure coverage under the State Water Resources Control Board's National Pollutant Discharge Elimination System (NPDES) stormwater permit for general construction activities. MM HYD-2 (Final Project Drainage Plan) includes requirements to comply with the County's Engineering Guidelines Manual, IID's hydrology manual or other approved/recognized sources to the satisfaction of the County Engineer. While impervious surfaces would be increased on the Project Site, all stormwater flows would be directed to the on-site retention basins which would capture and percolate flows during rain events. MM HYD-2 would ensure that the retention basins would be sized to store run-off from the Project Site and would not result in spillover into the Westside Main Canal or other IID facilities.

Comment No. B-11

5. *IID's canal or drain banks may not be used to access the project site. Any abandonment of easements or facilities shall be approved by IID based on systems (irrigation, drainage, power, etc.) needs.*

Response No. B-11

This comment does not pertain to a specific concern or question regarding the adequacy of the analysis in the Draft EIR. The Project does not propose to use IID's canal or drain banks to access the Project Site. No further response is required.

Comment No. B-12

6. *To insure there are no impacts to IID water facilities, the applicant should submit the project's plans (including but not limited to grading and drainage and fencing plans as well as the project's Storm Water Pollution Prevention Plan) to IID WDES Section can be contacted at (760) 339-9265 for additional information.*

Response No. B-12

This comment does not pertain to a specific concern or question regarding the adequacy of the analysis in the Draft EIR; however, the Project Applicant will comply with IID's requirements. No further response is required.

Comment No. B-13

7. *To obtain water for construction, applicant should contact IID South End Division at (760) 482-9800.*

Response No. B-13

See Response to Comment No. B-12.

Comment No. B-14

8. *New long-term non-agricultural water supply requests are processed under the district's Temporary Land Conversion Fallowing Policy (available at the IID website www.iid.com/TLCFP). For additional information regarding water supply policies, contact Ms. Justina Gamboa-Arce at (760) 339-9085.*

Response No. B-14

See Response to Comment No. B-12.

Comment No. B-15

9. *Per State of California Water Resources Control Board Division of Drinking Water, the battery storage project will need to have a contract with an approved provider to deliver the drinking water to the site.*

Response No. B-15

This comment does not pertain to a specific concern or question regarding the adequacy of the analysis in the Draft EIR; however, the Project Applicant will enter into the appropriate agreements for the delivery of drinking water to the Project Site. No further response is required.

Comment No. B-16

10. *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 the IID website <http://www.iid.com/departments/real-estate>. That IID Real Estate Section should be contacted at (760) 339-9239 for additional information regarding encroachment permits or agreements.

Response No. B-16

This comment does not pertain to a specific concern or question regarding the adequacy of the analysis in the Draft EIR; however, the Project Applicant will obtain the necessary permits for construction and operation on IID property or within its existing and proposed right of way easements, as required. No further response is required.

Comment No. B-17

11. An IID encroachment permit is required to utilize existing surface-water drainpipe connections to drains and receive drainage service from IID. Surface-water drainpipe connections are to be modified in accordance with IID Standards. A construction stormwater permit from the California Regional Water Quality Control Board is required before commencing construction. IID will require copies of this permit and of the project's Storm Water Pollution Prevention Plan.

Response No. B-17

See Response to Comment Nos. B-10 and B-16.

Comment No. B-18

12. In addition to IID's recorded easements, IID claims, at a minimum, a prescriptive right of way to the toe of slope of all existing canals and drains. Where space is limited and depending upon the specifics of adjacent modifications, the IID may claim additional secondary easements/prescriptive rights of ways to ensure operation and maintenance of IID's facilities can be maintained and are not impacted and if impacted mitigated. Thus, IID should be consulted prior to the installation of any facilities adjacent to IID's facilities. Certain conditions may be placed on adjacent facilities to mitigate or avoid impacts to IID's facilities.

Response No. B-18

This comment does not pertain to a specific concern or question regarding the adequacy of the analysis in the Draft EIR; however, the Project Applicant will comply with requirements related to easements and prescriptive rights regarding to the Project Site. No further response is required.

Comment No. B-19

13. 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.

Response No. B-19

Where applicable, Project components which could modify existing IID facilities have been fully described and evaluated in the Draft EIR. As described in Draft EIR Section 2.0 (pages 2-4 to 2-9), new permanent vehicular access would be provided by a portion of Liebert Road south of Wixom Road. This segment would be paved or graveled during construction during Phase I of the Project. In addition, the Project would dedicate up to 60 feet of frontage along the north Project fence line and south of the IID maintenance road to be used for employee site access. Lastly, a new clear-span County/IID-specified bridge would be constructed over the Westside Main Canal to connect the new access roads on the north side of the Westside Main Canal.

Comment No. B-20

14. Dividing a project into two or more pieces and evaluating each piece in a separate environmental document (Piecemealing or Segmenting), rather than evaluating the whole of the project in one environmental document, is explicitly forbidden by CEQA, because dividing a project into a number of pieces would allow a Lead Agency to minimize the apparent environmental impacts of a project by evaluating individual pieces separately, each of which may have a less-than-significant impact on the environment, but which together may result in a significant impact. Segmenting a project may also hinder developing comprehensive mitigation strategies. In general, if activity or facility is necessary for the operation of a project, or necessary to achieve the project objectives, or a reasonably foreseeable consequence of approve the project, then it should be considered an integral project component that should be analyzed within the environmental analysis. The project description should include all project components, include those that will have to be approved by responsible agencies. The State CEQA Guidelines define a project under CEQA as “the whole of the action” that may result either directly or indirectly in physical changes to the environment. This broad definition is intended to provide the maximum protection of the environment. CEQA case law has established general principles on project segmentation for different project types. For a project requiring construction of offsite infrastructure, the offsite infrastructure must be included in the project description. San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus (1994) 27 Cal.App. 4th 713.

Response No. B-20

The Draft EIR and its Project Description, included in Chapter 2.0, provide a complete description and evaluation of the environmental impacts of the entirety of the Project, in accordance with CEQA requirements. No further response is required.

Comment No. B-21

15. *Figure 2 of the NOP and Figure 3 of the Initial Study show a conceptual site plan that is identified as subject to change. IID therefore clarifies that any proposed improvements and facilities in IID rights of way are also subject to IID review, permitting and approvals. Additionally, any proposed improvements outside IID right of way will be further reviewed for the purpose of safeguarding that any improvements such as roads, drainage basins, fencing, driveways, etc., do not pose an impact on IID's ability to operate and maintain district facilities.*

Response No. B-21

The Draft EIR includes Figure 2.3-1 (page 2-5), which is an updated version of the conceptual site plan. The Project Applicant will comply with IID requirements, as applicable.

Comment No. B-22

16. *Figure 2 of the IS depicts a project site aerial photo as being the project boundary. However, elsewhere in the document, reference is made to potential temporary site access using Westside Main Canal bank from State Hwy. 98 to the north, along the south canal bank. Shouldn't this potential temporary site access proposal need to be included in the environmental analysis?*

Response No. B-22

Draft EIR Chapter 2 includes updated figures for the Project Site, including clarification regarding Project Site access. As the Project Site has no current legal direct vehicular access routes, the Applicant is proposing to construct access roads on both the north and south side of the Westside Main Canal on private land. In addition, the Project would dedicate up to 60 feet of frontage, along the north Project fence line and south of the IID maintenance road, to be used as a buffer from the Westside Main Canal. As shown in Draft EIR Figure 2.3-1, two options are currently contemplated as part of the private internal access road system. The design configuration would allow all areas of the Project Site to be readily accessed. The proposed new access roads would be designed and constructed in accordance with County/IID standards for roadway design.

Comment No. B-23

17. *Table 2, titled Agency Permits and Environmental Review Requirements, lists IID for a Generator Interconnection Agreement. Please be advised that the IID will also need to review the proposed detailed construction-level plans to determine impacts and will include review of electrical service, water service, drainage, and any encroachments within IID right of way. Encroachment permits and likely a formal Encroachment Agreement will be required. The agreement typically will document the permit items, any required project mitigations and associated fees. The table needs to add at a minimum, "Various Encroachment Permits".*

Response No. B-23

The Draft EIR Section 2.10 (pages 2-16 to 2-17) includes updated list of discretionary actions, including various improvements and permits required for the Project, including various encroachment permits.

Comment No. B-24

18. *Section 2.3 of the IS, titled Project Components, indicate 3 to 5 phases for full buildout. Construction of Phase 1 is mentioned to begin in 2021 and would include roads, a bridge and other facilities. IID is concerned with the roads, bridge and onsite development as well as any temporary access that could impact the Westside Main Canal. Between now and January 2021 is a very short period and IID, as of yet, has not been provided any construction-level plans for review. Applicant should be advised of this predicament as well as the quandary that district staff will be in when any substantial submittals are received for review and IID is expected to complete a review in a short amount of time.*

Response No. B-24

This comment does not pertain to the content of the Draft EIR; however, as the timeline provided in the above comment is no longer applicable, the Project Applicant will coordinate with IID regarding submittal of construction plans. No further response is required.

Comment No. B-25

19. *Section 2.3.2 of the IS, titled Common Components, references both retention and detention basins are being provided. Detention basins presume there is a location to meter out the storm water. Is the project entertaining both types of basins? Please advise where the basins will outlet to, and if an IID drain is intended to be recipient of any storm water discharge. Any basins should be located and constructed so that they do not impact the integrity of the Westside Main Canal and its bank.*

Response No. B-25

As discussed in Draft EIR Section 2.3.1.3 (page 2-6), stormwater retention basins would be constructed at designated locations throughout the Project Site, based upon the hydrology analysis, to channel and manage stormwater flows in accordance with the County's Design Guidelines.

Comment No. B-26

20. *Section 2.3.2.1 if the IS, titled Operations and Maintenance Facilities, indicate a septic leach field will be located near the O&M building. IID would look to Imperial County Environmental Health Department to ensure the buffer distance from the Westside Main Canal is adequate to minimize any potential of effluent transmission to the Westside Main Canal.*

Response No. B-26

As discussed in Draft EIR Section 3.8.1 (page 3.8-5), the Project would comply with the County's customized management program for On-Site Wastewater Treatment Systems, which includes standards

for both existing and new septic systems, including siting locations, setbacks from an irrigation supply canal, soil conditions, percolation rates, project flows and leach field design. The Project would comply with applicable requirements related to the appropriate location of the leach fields.

Comment No. B-27

21. Section 2.3.2.2 of the IS, titled Water Connections, indicate that both temporary construction water and permanent water will be needed from the IID's Westside Main Canal. Westside Main Canal Delivery 6 has historically serviced the southern project parcel. However, if this service gate is not adequate, then the project will need to apply for a new service. This section also indicates that a connection to the Westside Main Canal would be constructed by a horizontal directional drilled underground boring, which isn't the case. IID will not allow applicant's contractor to perform this work in IID right of way. The CED Westside Canal Energy Storage Project is considered by IID a customer service project, where CED Westside Canal Energy Storage, LLC, as customer, would need to complete an application and pay the cost of the design and construction of the new water service, if the existing Westside Main Canal Delivery 6 is not adequate.

Response No. B-27

Horizontal directional drilling is not proposed as part of the Project. The Project Applicant will comply with applicable requirements related to the provision of new water service.

Comment No. B-28

- *Temporary construction water can be obtained with a pump set up, an IID encroachment permit and an application to IID South End Division.*
- *Permanent water will also require IID encroachment permit and application to IID South End Division. However, it will also require an IID water supply agreement, a formal request for a new water delivery and payment for a new water delivery. IID will then design and construct the delivery in the Westside Main Canal along with pipe to the Westside Main Canal right of way line. At that point, the applicant can connect to the underground pip.*

Response No. B-28

This comment does not pertain to the content of the Draft EIR; however, the Project Applicant would obtain approval of Project components prior to construction, including a water supply agreement. No further response is required.

Comment No. B-29

- *Any connection to IID's facility for water can only be performed by IID as the system is live 24/7 and the connection can only be scheduled with a low water level in the Westside Main Canal. It is suggested that the applicant start the process sooner than later.*

Response No. B-29

This comment does not pertain to the content of the Draft EIR; however, the Project Applicant would comply with IID connection requirements prior to the construction of the Project. No further response is required.

Comment No. B-30

- *For both temporary and permanent water delivery/service, metering is required by IID.*

Response No. B-30

This comment is not related to the content of the Draft EIR. No further response is required.

Comment No. B-31

22. *Section 2.3.2.3 of the IS, titled Stormwater Retention, mentions that storm water retention basins will be constructed. Are these retention basins or detention basins as described in Section 2.3.2, titled Common Components?*

Response No. B-31

No detention basins are proposed as part of the Project. See Response to Comment No. B-25.

Comment No. B-32

- *If the project is entertaining a detention basin, then the basin would need to discharge to an existing drain. New drains crossing the Westside Main Canal will not be considered by IID.*

Response No. B-32

See Response to Comment No. B-31.

Comment No. B-33

- *It is stated that at least 3 inches of rainfall across the entire site would be retained. IID is concerned that the basins will retain and not have an outlet. IID is requesting that the basins be designed for 5 inches (for a storm track) and not the 3 inches of precipitation over the site (for an individual storm). The concept of the 5-inch storm track was promoted for many years by the County of Imperial as a result of the late 1970s tropical storms Kathleen and Doreen that inundated Imperial County. Additionally, the hydrology study for the site should consider any other contributing area such as desert washes that may impinge on the project to assure there is not offsite drainage being routed onto the project site; otherwise, the site may need to consider additional retention volumes.*

Response No. B-33

As discussed in Draft EIR Section 3.8.3.3 (page 3.8-7), the drainage design would be conducted in accordance with the County's design criteria, which establishes that 100 percent of the 100-year storm (3 inches of rain) will be stored for percolation.

Comment No. B-34

23. Section 2.3.2.4 of the IS, titled *Permanent Vehicle Access – Public Access Roads*, mentions that the applicant is proposing to construct public access roads on both the north and south side of the Westside Main Canal along with a clear-span bridge off the Westside Main Canal. Reference is made to Figures 4 and 5 of the IS, which show layout of access roads, bridge and an elevation profile of the bridge.

Additional Clarification:

- *The depictions in both Figure 4 and 5 and the actual layout and elevation profiles have not been approved or reviewed by IID.*

Response No. B-34

Draft EIR Figure 2.3-2 provides an updated Main Canal Bridge site plan, and Figure 2.3-3 provides an updated elevation of the Main Canal Bridge (pages 2-8 and 2-9). The Project Applicant would obtain approval of Project components prior to construction.

Comment No. B-35

- More detail and clarity needs to be provided relative to the temporary access options. It is not clear if these include both south and north side of the Westside Main Canal banks, or rights of way.

Response No. B-35

Draft EIR Section 2.3.1.4 (page 2-7) provides a current description of Project's access roads, including temporary access roads. The Project Applicant is evaluating various options for temporary construction access, including accessing the Project Site from the south side of the Canal off SR 98, as well as options involving access from the north side of the Canal from I-8. The preferred temporary access option would be used until construction of the permanent clear-span bridge is completed.

Comment No. B-36

- *IID requires a cross section of the proposed public road access improvements in relation to the Westside Main Canal banks, with elevations and dimensions, to carefully review and ensure there are no conflicts with the districts O&M operations. IID typically claims a minimum of either prescriptive or deeded right of way, whichever is greater to assure its ability to clean the canal as regular maintenance.*

Response No. B-36

As discussed in Draft EIR Section 2.3.1.4 (page 2-7), there are no improved roadways in the immediate vicinity of the Project Site that are able to provide legal access to the Project Site. All roadways that would be used to access the Project Site from I-8 are currently paved, except for the portion of Liebert Road south of Wixom Road. However, this segment would be paved during Phase 1 of Project construction. The Project Applicant will obtain approval of Project components prior to construction.

Comment No. B-37

- *IID suggests that the County of Imperial and the applicant review the need for a public road versus a private one for landowner access and public emergency access as opposed to full public use. This would also include the bridge crossing.*

Response No. B-37

This comment does not pertain to the content of the Draft EIR; however, Draft EIR Section 2.3.1.4 (page 2-7) provides a description of the Project's access roads. No further response is required.

Comment No. B-38

- *Applicant will need to apply for encroachments for the bridge, construction access and for the public access road. Applicant should be advised that IID requires an encroachment permit and/or agreement for any encroachment across, over, under and/or parallel to district facilities.*

Response No. B-38

See Response to Comment No. B-23.

Comment No. B-39

- *The bridge is clearly one of the major impacts to IID facilities. It is of the utmost importance for the applicant to start the formal plan submittal and permitting process with IID as soon as possible. Potential impacts to IID facilities requires a formal review by the district, otherwise, it will cause delays to the project's proposed schedule.*

Response No. B-39

This comment does not pertain to the content of the Draft EIR; however, the Project Applicant would obtain approval of Project components prior to construction. No further response is required.

Comment No. B-40

- *IID typically claims prescriptive or deeded right of way, whichever covers more distance. Additionally, per the California Water Code, IID also claims additional right of way beyond the prescriptive/deeded, in order to conduct adequate maintenance of district facilities. This must be considered in the project's construction plan development.*

Response No. B-40

This comment does not pertain to the content of the Draft EIR; however, the Project Applicant would obtain approval of Project components prior to construction. No further response is required.

Comment No. B-41

- *Due to the importance of the Westside Main Canal and concerns outlined herein, IID would look at a sufficient area between the Westside Main Canal and the access road so that the*

maintenance operations of one does not impact the other. Whether the access road is public or private, these O&M impacts to each other must be considered in the design process.

Response No. B-41

This comment does not pertain to the content of the Draft EIR; however, the Project Applicant would obtain approval of Project components prior to construction. No further response is required.

Comment No. B-42

24. Section 2.3.27 of the IS titled *Fire Protection/Fire Suppression*.

Additional Clarification:

- *Project site grading should address fire suppression flows and ensure the integrity of the Westside Main Canal. The observation that water for fire suppression will be obtained by tapping into the Westside Main Canal shows a lack of understanding of how water can be obtained from IID. No “tapping” of the Westside Main Canal shall be permitted. Nevertheless, water can be obtained in accordance with IID policies. See Item no. 21 for additional clarification.*

Response No. B-42

See Response to Comment No. B-27.

Comment No. B-43

- *An explanation is needed on whether open storage basins for fire suppression water will be used or if all water storage is proposed with enclosed storage tanks. If open basins are used, such basin capacity shall include maximum amount of water for fire suppression plus a contingency (20% suggested) for freeboard. Because of the regional importance of the Westside Main Canal and as a worst-case scenario, this is in addition to calculated storm water flows. These additional amounts are considered necessary in the event that the basin is full but the water is not easily accessible and/or sufficient to use for fire suppression.*

Response No. B-43

This comment does not pertain to the content of the Draft EIR; however, Draft EIR Section 2.3.1.6 (page 2-11) describes that fire water would be stored in on-site tanks adjacent to the Canal. Multiple tanks would be required to provide the needed fire flow volume, and the tanks would be installed in phases as the Project Site is developed and eventually built out.

Comment No. B-44

25. Section 2.6 of the IS, titled *Existing and Proposed Utility Easements*. It bears repeating that applicant should be advised that any new facilities placed over/under and or/parallel to IID facilities will need to be reviewed and approved as part of the IID planning review and

encroachment permitting process. For example, typically, there are minimum height clearances over the canal banks to any overhead power/cable lines. This is to ensure no impact to IID's ability to maintain its water and/or drain infrastructure.

Additional Clarification:

- *If applicant is entertaining the upgrade of existing IID electrical facilities (S Line & Circuit L76) for interconnection purposes or to provide service to the project, then the electrical upgrade drawings need to be forward to IID's Water Department as well as the district's Energy Department to review for compliance with the departments' standards/requirements.*

Response No. B-44

This comment does not pertain to the content of the Draft EIR; however, the Project Applicant would obtain approval of Project components prior to construction. No further response is required.

Comment No. B-45

26. Section 2.10 of the IS, titled Discretionary Actions, calls for an IID Water Supply Assessment. However, there is no mention of an IID encroachment permit, and likely an encroachment agreement for any work to be place in, over or under IID Water Department facilities, including any impact mitigations. Mitigations may not be environmental, but due to impacts determined after a detailed review of the construction-level plans to be provided for the IID's planning review, when such plans are available from the Applicant.

Response No. B-45

This comment does not pertain to the content of the Draft EIR; however, the Project Applicant would obtain approval of Project components prior to construction. No further response is required.

Comment No. B-46

27. Section 3.8.2 of the IS, titled Geology and Soils – Environmental Impact Analysis. The project site's high potential for expansive soils, unsuitable for backfill for structure foundations, retaining walls or pipe bedding along with reference to IS figures 4 & 5 (retaining wall), is of concern to IID. Work on the Westside Main Canal bank is restricted and typically not allowed to outside entities. A water outage is not possible. Any work on the Westside Main Canal bank would imply strict requirements, conditions and supervision. The structural integrity of the Westside Main Canal is of utmost concern to IID.

Response No. B-46

See Response to Comment No. B-23.

Comment No. B-47

28. Section 3.11 of the IS, titled *Hydrology and Water Quality*, indicates that subsections a) and c) are both “Potentially Significant Impact”. It is requested that the comments provided herein related to storm drainage and retention basins be considered in the EIR document when it is prepared. The key issues of concern are whether the onsite storm water basins are retaining or detaining, if and where they discharge to, capacity sufficient to meet a 5-inch storm track as opposed to a 3-inch precipitation event and location of basins to not impact the integrity of the Westside Main Canal or canal bank. Furthermore, section should indicate that project grading shall be sloped away from the Westside Main Canal.

Response No. B-47

See Response to Comment No. B-23.

Comment No. B-48

29. Section 3.18 of the IS, titled *Transportation*, indicates all four categories as either “Less than Significant” or “No Impact”. The IID takes no exception to this if the transportation being discussed and reviewed in the document is for public traffic using existing public roads. The issue that IID does take exception to is if the document is also referencing traffic on the Westside Main Canal bank as a means of temporary access for construction. If this is the case, then IID would suggest the finding under “c) Would the project substantially increase hazards to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?” and d) *Would the project result in inadequate emergency access?* both be marked as “Less than Significant Impact with Mitigation Incorporation”. The mitigation could be that the applicant will apply for an IID encroachment permit and comply with the conditions of the permit. The concerns by IID of construction and public traffic include the conditions of the canal bank soils, structural strength, nearness to the water, traffic speed, traffic safety, traffic control, coexistence with IID O&M activities and potential conflicts, adequate bank width and all weather surfacing (or lack thereof), dust and erosion control. If there are several alternatives for temporary access, they should all be clearly indicated in the IS, not only in this section, but also in the project description.

Response No. B-48

See Response to Comment No. B-35. Based on evaluations of transportation included in the Project Initial Study, all Project-related impacts were determined to be less than significant without the incorporation of mitigation. In addition, the Project Applicant would obtain approval of Project components prior to construction.

Comment No. B-49

30. Section 3.20 of the IS, titled *Utilities and Service Systems*, indicates the following: “Potable water service to the project site would be provided by the IID”. This is not correct. IID only provides raw canal water, not potable water. Please also see IID comments under item

no.21. In addition, water provided from IID facilities for project construction is restricted in metered pump(s). On the matter of stormwater drainage, please see IID comments under item no.22.

Response No. B-49

See Response to Comment Nos. B-27, B-31, B-32 and B-33.

Comment No. B-50

As with any other development project, IID will need to perform a comprehensive planning review of the project to determine detailed impacts as soon as construction-level plans are available. The above comment however should clarify IID's concerns. It is important that County of Imperial, prior to approving any grading plans or improvement plans for construction, communicate and collaborate with IID in the plan checking process to ensure that the applicant/developer understands that both agencies have responsibility and accountability in the final approval of the construction documents and before construction begins so that any unnecessary delays can be prevented.

Response No. B-50

This comment does not pertain to the content of the Draft EIR; however, the Project Applicant would obtain approval of Project components prior to construction. No further response is required.

Comment No. B-51

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

Response No. B-51

This comment is a conclusion to the IID letter and does not pertain to the content of the Draft EIR. No further response is required.

Letter C



State of California – Natural Resources Agency

DEPARTMENT OF FISH AND WILDLIFE

Inland Deserts Region

3602 Inland Empire Boulevard, Suite C-220

Ontario, CA 91764

www.wildlife.ca.gov

GAVIN NEWSOM, Governor
CHARLTON H. BONHAM, Director



May 27, 2021

Mr. David Black
County of Imperial
801 Main Street
El Centro, CA 92243
davidblack@co.imperial.ca.us

Subject: Draft Environmental Impact Report (DEIR)
Westside Canal Battery Energy Storage Project
State Clearinghouse No. 2020040122

Dear Mr. Black:

C-1

The California Department of Fish and Wildlife (CDFW) received a Draft Environmental Impact Report (DEIR) from the County of Imperial (Lead Agency) for Westside Canal Battery Energy Storage Project (Project) pursuant to California Environmental Quality Act (CEQA) and CEQA Guidelines¹.

Thank you for the opportunity to provide comments and recommendations regarding the activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

ROLE OF CDFW

C-2

CDFW is California's Trustee Agency for fish and wildlife resources and holds those resources in trust by statute for all the people of the State. (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a).) CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. (Id., § 1802.) Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on Projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW is also submitting comments as a Responsible Agency under CEQA (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As

¹ CEQA is codified in the California Public Resources Code in section 21000 et seq. The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

C-2
(cont.)

proposed, for example, the Project may be subject to CDFW's lake and streambed alteration regulatory authority. (Fish & G. Code, § 1600 et seq.) Likewise, to the extent implementation of the Project as proposed may result in "take" as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), the Project proponent may seek related take authorization as provided by the Fish and Game Code.

PROJECT LOCATION AND DESCRIPTION

CEQA Lead: County of Imperial

Applicant: Consolidated Edison Development Inc. (CED)

The Westside Canal Battery Energy Storage Project Site is located on about 163 acres of land in the unincorporated Mount Signal area of the Imperial County, around 8 miles southwest of the City of El Centro and 5 miles north of the U.S.-Mexico border. The Project Site comprises two parcels, Assessor Parcel Number APN 051-350-010 and APN 051-350-011. The Project will utilize portions of two additional parcels located north of the Westside Main Canal (APN 051-350-019 owned by Imperial Irrigation District (IID) and APN 051-350-018 owned by a private landowner) for Site access and as a temporary construction staging area. The Project will also access a small portion of APN 051-350-009 that is within the IID easement for connection to the existing IID Campo Verde-Imperial Valley 230 kilovolt (kV) radial gen-tie line during the construction of a substation on the Project Site. The Project Site is located on approximately 163 acres of land, 148 of which are owned by the Applicant, and the remaining land is owned by the Bureau of Land Management (BLM), IID, and a private landowner.

C-3

The Project Site is generally flat with elevation ranging from sea level in the far southwestern corner to 24 feet above mean sea level in the northeastern corner. The Project Site currently consists of vacant fallow agricultural land. There are two irrigation water pumping stations at the Project Site, one at the central northern area of the Project Site and one at the central southern area. These pumping stations were used to pump irrigation water from the westside main canal into a concrete lined ditch that runs north-south across the center of the southern portion of the Project Site. The pumping stations and concrete lined ditch appear to be abandoned. Man-made berms exist along the boundaries of the inactive agricultural areas, and small dunes and sandy hummocks occur west and south of the Project Site. The General Plan land use designation for the Project Site and parcels immediately to the north and east is agriculture. The parcels to the west and south are designated as recreation and open space.

The Applicant is proposing to construct, operate, and decommission a battery energy storage facility, a utility-scale complex with 2,000 megawatts (MW) capacity at full build-out. The Project components include lithium-ion and/or flow battery energy storage system facilities, a behind-the-meter solar energy facility, a new on-site 230 kilovolt (kV) loop-in switching station, a 34.5 kV to 230 kV Project substation, underground electrical cables, and permanent vehicular access to and from the Project Site over a proposed

C-3
(cont.)

clear-span bridge spanning IID's Westside Main Canal. The proposed loop-in switching station would connect the Project to the existing IID Campo Verde-Imperial Valley 230 kV radial gen-tie line, which connects to the Imperial Valley (IV) Substation and the California Independent System Operator, approximately one-third mile south of the Project Site. CED has submitted the necessary Interconnection Request Applications to the California Independent System Operator and IID. The Project would be constructed in multiple phases over a 10-year development period, with each phase ranging from approximately 25 MW to 400 MW. The expected end date of the Project life cycle would be 30 years from the construction of the final phase, or no more than 40 years after the effective date of the Conditional Use Permit. The Project would store energy generated from the electrical grid, and discharge that energy back into the grid as firm, reliable generation and/or grid services.

COMMENTS AND RECOMMENDATIONS

C-4

CDFW has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and the habitat necessary for biologically sustainable populations of those species (biological resources). CDFW offers these comments to assist the Lead Agency for adequately identifying and mitigating the Project's significant, or potentially significant, impacts on biological resources. CDFW recommends that the DEIR addresses the ensuing comments.

Assessment of Biological Resources

C-5

Section 15125(c) of the CEQA Guidelines states that knowledge of the regional setting of a Project is critical to the assessment of environmental impacts and that special emphasis should be placed on environmental resources that are rare or unique to the region. CDFW recommends that floristic, alliance- and/or association-based mapping and assessment be completed following 2009 or current version of The Manual of California Vegetation. Adjoining habitat areas should also be included in this assessment where Site activities could lead to direct or indirect impacts offsite. Habitat mapping at the alliance level will help establish baseline vegetation conditions. CDFW's

C-6

California Natural Diversity Database (CNDDDB) in Sacramento should be contacted to obtain current information on any previously reported sensitive species and habitat, including Significant Natural Areas identified under Chapter 12 of the Fish and Game Code, in the vicinity of the proposed Project. CDFW recommends that CNDDDB Field Survey Forms be completed and submitted to CNDDDB to document survey results.

C-7

Please note that CNDDDB is not exhaustive in terms of the data it houses, nor is it an absence database. The assessment should include a comprehensive, recent inventory of rare, threatened, endangered, and other sensitive species located within the Project footprint and within offsite areas with the potential to be affected, including California Species of Special Concern (SSC) and California Fully Protected Species (Fish and Game Code § 3511). Species to be addressed should include all those which meet the CEQA definition (CEQA Guidelines § 15380). The inventory should address seasonal variations in use of the Project area and should not be limited to resident species.

Focused species-specific surveys, completed by a qualified biologist and conducted at

C-7 (cont.) ↑ the appropriate time of year and time of day when the sensitive species are active or otherwise identifiable, are required. Acceptable species-specific survey procedures should be developed in consultation with CDFW and the U.S. Fish and Wildlife Service, where necessary.

C-8 CDFW generally considers biological field assessments for wildlife to be valid for a one-year period, and assessments for rare plants may be considered valid for a period of up to three years. Some aspects of the proposed Project may warrant periodic updated surveys for certain sensitive taxa, particularly if the Project is proposed to occur over a protracted time frame, or in phases, or if surveys are completed during periods of drought. CDFW recommends species-specific surveys for the desert tortoise. CDFW-approved desert tortoise pre-construction surveys cover 100 percent of the Project area and adjacent habitat using the methods described in the most recent United States Fish and Wildlife Service (USFWS) Desert Tortoise Field Manual. CDFW recommends survey for burrowing owl, a Species of Special Concern. Survey recommendations and guidelines are provided in the Staff Report on Burrowing Owl Mitigation (Department of Fish and Game, March 2012). Development of a desert kit fox and American badger mitigation and monitoring plan is recommended. Desert kit fox is a protected species, and American badger is a Species of Special Concern. CDFW also recommends a thorough, recent, floristic-based assessment of special status plants and natural communities, following CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities.

Analysis of Direct, Indirect, and Cumulative Impacts to Biological Resources

C-9 The vegetation communities and land cover types that were mapped within the Project Site and the surrounding 100-foot radius included upland mustards (*Brassica* spp. and Other Mustards Semi-Natural Herbaceous Stands), fourwing saltbush scrub (*Atriplex canescens* Shrubland Alliance), creosote bush scrub (*Larrea tridentata* Shrubland Alliance), quailbush scrub (*Atriplex lentiformis* Shrubland Alliance), arrow weed thickets (*Pluchea sericea* Shrubland Alliance), tamarisk thickets (*Tamarix* spp. Semi-Natural Shrubland Stands), common reed marshes (*Phragmites australis* Herbaceous Alliance and Semi-Natural Stands), eucalyptus groves (*Eucalyptus* spp. Semi-Natural Woodland Stands), cattail marshes (*Typha* sp. Herbaceous Alliance), disturbed habitat, fallow agriculture, open water, and developed land. A total of 127 animal species were detected within the Project Site and surrounding areas within 500-foot radius during the 2018 and 2019 biological surveys. These species comprised 25 invertebrates, one amphibian, seven reptiles, 84 birds, and 10 mammals. Occurrence of various species as described in the DEIR is summarized below.

C-10 Flat-tailed Horned Lizard (*Phrynosoma mcallii*) is a CDFW species of special concern and BLM sensitive species. Flat-tailed horned lizard is found in the low deserts of southwestern Arizona, southeastern California, and adjacent portions of northwestern Sonora and northern Baja California, Mexico. In California, flat-tailed horned lizard is restricted to desert washes and desert flats in central Riverside, eastern San Diego, and Imperial counties. The majority of habitat for the species is in Imperial County. This

C-10 (cont.) species is known to inhabit sand dunes, sheets, and hummocks, as well as gravelly washes. It is thought to be most abundant in creosote bush scrub. However, this species may be found in a variety of desert scrub. Many occurrences of flat-tailed horned lizard have been reported in the undeveloped desert areas immediately west and south of the Project Site, and horned lizard tracks were observed during 2018 surveys in the western portion of the Project Site, south of the westside main canal. This species occurs in the creosote bush scrub and saltbush scrub within and adjacent to the Project Site. Within the Project Site, these communities provide high-quality habitat for this species, with sandy hummocks having re-established in the old agricultural fields, a good diversity of native plant species, and harvester ants present, and flat-tailed horned lizard has a high potential to occur due to the adjacency of high-quality habitat.

C-11 Burrowing Owl (*Athene cunicularia*) is a CDFW species of special concern and BLM sensitive species. This species occurs as a year-round resident and winter visitor in the County. Habitat for the burrowing owl includes dry, open, short-grass areas with level to gentle topography and well-drained soils, as well as agricultural areas. These areas are also often associated with burrowing mammals. The burrowing owl is diurnal and perches during daylight at the entrance to its burrow or on low posts. Four burrowing owl observations were recorded within the Project Site during the 2018-2019 non-breeding season surveys. These observations indicate that at least two, but likely three, individuals, appear to use the Project Site and surrounding areas as a wintering site or for migration and dispersal, but is not currently using the Site as breeding habitat. The creosote bush scrub, saltbush scrub, upland mustards, fallow agriculture, and disturbed habitat within and adjacent to the Project Site provide suitable habitat for this species for breeding and wintering due to the open structure of the vegetation, presence of prey items, and abundance of potentially suitable burrows.

C-12 Loggerhead Shrike (*Lanius ludovicianus*) is a CDFW species of special concern. This species inhabits most of the continental U.S. and Mexico and is an uncommon year-round resident of southern California. It prefers washes with scattered trees or shrubs, or valley floors with scattered thickets of mesquite (*Prosopis* spp.) or saltbush (*Atriplex* spp.). Outside the desert this species inhabits grasslands, agricultural fields, open sage scrub, and chaparral. The loggerhead shrike requires open habitat with tall shrubs or trees to use as perches for hunting and fairly dense shrubs for nesting. It may also use fences or power lines for hunting perches. Loggerhead shrikes are highly territorial and usually lives in pairs in permanent territories. This species feeds on small reptiles, mammals, smaller birds, amphibians, and insects that they often impale on sticks or thorns before eating. This bird may also be associated with freshly plowed or mowed fields, as these activities create foraging opportunities for this species. Loggerhead shrike populations are declining, likely due to urbanization and loss of habitat and, to a lesser degree, pesticide use. Loggerhead shrike was observed in tamarisk thickets on the Project Site and in common reed marsh and creosote bush scrub immediately adjacent to the Project Site on multiple survey visits in 2018, and 2019. With the combination of dense patches of shrubs or trees and adjacent open areas, the Project Site and surrounding areas provide suitable breeding and foraging

C-12 ↑ habitat for this species. Therefore, this species is likely a resident and has a high
(cont.) ↓ potential to nest within the Project Site.

C-13 | LeConte's Thrasher (*Toxostoma lecontei*) is a CDFW species of special concern. It is a permanent resident in the San Joaquin Valley, Mojave and Colorado Deserts of California, the Sonoran Desert in Arizona, as well as Utah, Nevada, and Baja California, Mexico. This sensitive bird requires undisturbed substrate for foraging under desert shrubs. Ideal habitat throughout this species' range consists of sparsely vegetated desert flats, dunes, sandy alluvial fans below desert mountains, alkaline dry lakes, or gently rolling hills. Dominant shrub species are saltbush (*Atriplex* spp.) not exceeding eight feet high and cholla (*Opuntia* spp.) ranging three to six feet high. Creosote (*Larrea* sp.) may also be present, but the thrasher does not typically utilize this shrub species for shelter or nesting. LeConte's thrasher was observed during the 2018 survey visits in arrow weed thickets and saltbush scrub on the Project Site.

C-14 | American Badger (*Taxidea taxus*) is a CDFW species of special concern. American badgers are widespread, ranging from the Great Lakes to the Pacific Coast, and from the Canadian Prairie provinces to the Mexican Plateau. This species can be found in a variety of habitats, which include shrub steppes, agricultural fields, open woodland forests, and large grass and sagebrush meadows and valleys. Its breeding season occurs from mid- to late summer, after which egg implantation is delayed until December to February. Declines in American badger populations and distribution have resulted from habitat fragmentation from urbanization and development of roads. One American badger was observed immediately south of the Project Site in 2019. American badger tracks were observed in the southwestern corner and western edge of the Project Site, south of the Westside Main Canal, during the same visit. At least one burrow, just outside the southwestern corner of the Project Site was of appropriate size to support this species. The Project Site and surrounding areas south of the Westside Main Canal provide suitable habitat for this species.

C-15 | Colorado Desert Fringe-toed Lizard (*Uma notata*) is a CDFW species of special concern and a BLM sensitive species. This species occurs from below sea level to 590 feet above sea level from the Salton Sea east into southwestern Arizona, and south into Baja California and Sonora, Mexico. Fringe-toed lizards usually seek refuge from enemies by burrowing in the sand 2 to 2.4 inches deep. They also use rodent burrows and the bases of shrubs for cover and thermoregulation. Lizards usually hibernate in sand 12 inches deep, but juveniles and subadults may be found closer to the surface. This species has been reported within two miles of the Project Site and has a suitable potential to occur within the Project Site south of the Westside Main Canal. The creosote bush scrub and saltbush scrub adjacent to and in the western and southwestern portions of the Project Site, south of the Westside Main Canal, provide suitable habitat for this species due to the presence of dunes and sandy hummocks.

C-16 | Southwestern Willow Flycatcher (*Empidonax trailii extimus*) is a federally and state listed endangered species. This migratory bird breeds in southern California, southern Nevada, southern Utah, Arizona, New Mexico, western Texas, southwestern Colorado,

C-16
(cont.)

and extreme northwestern Mexico. The southwestern willow flycatcher's breeding season is from mid-May to mid-July. For breeding and nesting activities this species requires mature, multi-tiered riparian woodland habitat with a high percentage of canopy cover where surface water is present, or soil moisture is high enough to support suitable tree species. Nests are typically placed in trees where plant growth is most dense, where trees and shrubs have vegetation near ground level, and where there is a low-density native canopy. Although there are exceptions, generally flycatchers are found nesting in areas with willows, tamarisk, or both. Southwestern willow flycatchers are extremely sensitive to human activity in riparian areas. Threats to this species include loss of riparian habitat due to urbanization, flood control, water diversion, grazing, and invasion of non-native species. The arrow weed and tamarisk thickets within and adjacent to the Project Site are suitable as foraging habitat, so the Site has suitable potential to support foraging flycatchers during migration.

C-17

The DEIR should provide a thorough discussion of the direct, indirect, and cumulative impacts expected to adversely affect biological resources as a result of the Project. To ensure that Project impacts to biological resources are fully analyzed, the following information should also be included in the DEIR.

1. A discussion of potential impacts from lighting, noise, human activity, and wildlife-human interactions created by zoning of development Projects or other Project activities adjacent to natural areas, exotic and/or invasive species, and drainage. The latter subject should address Project-related changes on drainage patterns and water quality within, upstream, and downstream of the Project Site, including: volume, velocity, and frequency of existing and post-Project surface flows; polluted runoff; soil erosion and/or sedimentation in streams and water bodies; and post-Project fate of runoff from the Project Site.

C-18

2. A discussion of potential indirect Project impacts on biological resources, including resources in areas adjacent to the Project footprint, such as nearby public lands (e.g. National Forests, State Parks, etc.), open space, adjacent natural habitats, riparian ecosystems, wildlife corridors, and any designated and/or proposed reserve or mitigation lands (e.g., preserved lands associated with a Natural Community Conservation Plan, or other conserved lands).

C-19

3. An evaluation of impacts to adjacent open space lands from both the construction of the Project and long-term operational and maintenance needs.

C-20

4. A cumulative effects analysis developed as described under CEQA Guidelines § 15130. Please include all potential direct and indirect Project related impacts to riparian areas, wetlands, vernal pools, alluvial fan habitats, wildlife corridors or wildlife movement areas, aquatic habitats, sensitive species and other sensitive habitats, open lands, open space, and adjacent natural habitats in the cumulative effects analysis. General and specific plans, as well as past, present, and anticipated future Projects, should be analyzed relative to their impacts on similar plant communities and wildlife habitats.

- C-21 5. The Project has decades long life-span and potential loss in habitat expansion and population density changes with time needs be accounted for considering fully mitigated standards. For adequacy of mitigation analysis, there is a need to consider both spatial and temporal effects on habitat as well as cumulative impacts of the activities on habitat biodiversity under microclimate variability.

Mitigation Measures for Project Impacts to Biological Resources

- C-22 The DEIR should include appropriate and adequate avoidance, minimization, and/or mitigation measures for all direct, indirect, and cumulative impacts that are expected to occur as a result of the construction and long-term operation and maintenance of the Project. CDFW recommends consideration of the following comments.

Fully Protected Species

- C-23 Several Fully Protected Species (Fish and Game Code § 3511) have the potential to occur within or adjacent to the Project area. Fully protected species may not be taken or possessed at any time. Project activities described in the DEIR should be designed to completely avoid any fully protected species that have the potential to be present within or adjacent to the Project area. CDFW also recommends that the DEIR fully analyze potential adverse impacts to fully protected species due to habitat modification, loss of foraging habitat, and/or interruption of migratory and breeding behaviors. CDFW recommends more robust analysis of appropriate avoidance, minimization and mitigation measures to reduce any possible indirect impacts to fully protected species.

Sensitive Plant Communities

- C-24 CDFW considers sensitive plant communities to be imperiled habitats having both local and regional significance. Plant communities, alliances, and associations with a statewide ranking of S-1, S-2, S-3, and S-4 should be considered sensitive and declining at the local and regional level. These ranks can be obtained by querying the CNDDDB and are included in the 2009 or current version of The Manual of California Vegetation. The DEIR should include measures to fully avoid and otherwise protect sensitive plant communities from Project-related direct and indirect impacts. Minimization measures may include transplanting perennial species, seed collection and dispersal from annual species, and other conservation strategies that will protect the viability of the local population. If minimization measures are implemented, monitoring of plant populations will be conducted annually for 5 years to assess the mitigation's effectiveness. The performance standard for mitigation will be no net reduction in the size or viability of the local population.

Mitigation

- C-25 CDFW considers adverse Project-related impacts to sensitive species and habitats to be significant to both local and regional ecosystems, and the DEIR should include

C-25
(cont.)

mitigation measures for adverse Project-related impacts to these resources. Mitigation measures should emphasize avoidance and reduction of Project impacts. For unavoidable impacts, onsite habitat restoration and/or enhancement should be evaluated and discussed in detail. If onsite mitigation is not feasible or would not be biologically viable and therefore not adequately mitigate the loss of biological functions and values, offsite mitigation through habitat creation and/or acquisition and preservation in perpetuity should be addressed. The DEIR should include measures to perpetually protect the targeted habitat values within mitigation areas from direct and indirect adverse impacts in order to meet mitigation objectives to offset Project-induced qualitative and quantitative losses of biological values. Specific issues that should be addressed include restrictions on access, land dedications, long-term monitoring and management, control of illegal dumping, water pollution, and human intrusion.

C-26

Moving out of Harm's Way

The proposed Project is anticipated to result in the clearing of natural habitats that support native species. To avoid direct mortality, CDFW recommends that the lead agency condition the DEIR to require that a CDFW-approved qualified biologist be retained to be onsite prior to and during all ground- and habitat-disturbing activities to move out of harm's way special status species or other wildlife of low or limited mobility that would otherwise be injured or killed from Project-related activities. Movement of wildlife out of harm's way should be limited to only those individuals that would otherwise be injured or killed, and individuals should be moved only as far as necessary to ensure their safety. Furthermore, it should be noted that the temporary relocation of onsite wildlife does not constitute effective mitigation for the purposes of offsetting Project impacts associated with habitat loss.

C-27

California Endangered Species Act

CDFW is responsible for ensuring appropriate conservation of fish and wildlife resources including threatened, endangered, and/or candidate plant and animal species, pursuant to the California Endangered Species Act (CESA). A CESA Incidental Take Permit (ITP) is issued to conserve, protect, enhance, and restore State-listed CESA species and their habitats. CDFW recommends that a CESA ITP be obtained if the Project has the potential to result in "take" (California Fish and Game Code Section 86 defines "take" as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill") of CESA-listed species. Take of any CESA-listed species is prohibited except as authorized by state law (Fish and Game Code, §§ 2080 & 2085). If the Project, including the Project construction or any Project-related activity during the life of the Project, results in take of CESA-listed species, CDFW recommends that the Project proponent seek appropriate authorization prior to Project implementation through an ITP. Desert tortoise and Mohave ground squirrel are two CESA-listed threatened species that have potential to occur within the Project Area, presence needs to be determined by protocol surveys required by the Lead Agency. CDFW encourages early consultation, as significant modification to the proposed Project and avoidance, minimization, and mitigation measures may be necessary to obtain a CESA ITP. Please

C-27
(cont.)

↑ note that the proposed avoidance, minimization, and mitigation measures must be sufficient for CDFW to conclude that the Project's impacts are fully mitigated and the measures, when taken in aggregate, must meet the full mitigation standard.

Desert Tortoise

C-28

CDFW recommends inclusion of mitigation measures to avoid potentially significant impacts to desert tortoise, a CESA-listed species as threatened and a candidate for endangered species. The measures need to include specificity on who will perform the survey, what type of survey will be performed, and what actions will be taken should desert tortoise presence be confirmed during the survey. The measures need to address avoidance, minimization, or mitigation measures should desert tortoise enter the Project Site during the life of the Project. Take (hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill) is prohibited unless authorized by state law (Fish and Game Code, §§ 2080 & 2085). Project activities have the potential to take desert tortoise. The measure as written does not ensure a qualified biologist, experienced in locating desert tortoise individuals in all life stages and their sign, will complete the survey following CDFW approved protocols. Additionally, should desert tortoise presence be confirmed, the measure needs to include avoidance, minimization and mitigation to avoid take. If the Project, including the Project construction or any Project-related activity during the life of the Project, may result in take of CESA-listed species, CDFW recommends that the Project proponent seeks appropriate authorization prior to Project implementation through an incidental take permit (ITP). CDFW recommends inclusion of a protocol level survey and a measure for a qualified biologist in the environmental document. A qualified biologist shall conduct a protocol level presence or absence survey no more than 14 days prior to initiating Project activities in accordance with the survey methodology described in U.S. Fish and Wildlife Service Desert Tortoise (Mojave Population) Field Manual. In addition, the survey shall utilize perpendicular survey routes and 100-percent visual coverage of the Project area and 50-foot buffer zone for desert tortoise and their sign. If the survey confirms absence, a qualified biological monitor shall remain on-site during all Project activities to confirm desert tortoise do not enter the Project Site. If the survey confirms presence, the Project Proponent shall obtain an ITP for desert tortoise prior to the start of Project activities. If the biological monitor during the life of the Project encounters a desert tortoise, work shall be suspended, and the Project Proponent shall obtain an ITP for the species prior to the restarting Project activities. All clearance surveys need to be conducted during the active season for desert tortoise.

Burrowing Owl

C-29

Burrowing owl is a CDFW Species of Special, and potential construction-related direct impacts to burrowing owl could result from destruction of burrowing owl dens, destruction of nests, eggs, and young; and entombment of adults. CDFW recommends inclusion of mitigation measures to avoid potentially significant impacts to burrowing owls, a Species of Special Concern. The measures need to include specificity on who will perform the burrowing owl survey, what type of survey will be performed, and what

C-29
(cont.)

actions will be taken should burrowing owl presence be confirmed during the survey. It is necessary to address avoidance, minimization, or mitigation measures. Project-related activities have potential to take burrowing owl individuals and their nests and may result in loss of burrowing owl habitat. Take of individual burrowing owls and their nests is defined by Fish and Game Code section 86, and prohibited by sections 3503, 3503.5 and 3513. Take is defined in Fish and Game Code Section 86 as "hunt, pursue, catch, capture or kill, or attempt to hunt, pursue, catch, capture or kill." Burrowing owls are dependent on burrows at all times of the year for survival and/or reproduction, evicting them from nesting, roosting, and satellite burrows may lead to indirect impacts or take. Loss of access to burrows will likely result in varying levels of increased stress on burrowing owls and could depress reproduction, increase predation, increase energetic costs, and introduce risks posed by having to find and compete for available burrows. Eviction of burrowing owls is a potentially significant impact under CEQA. CDFW recommends inclusion a measure for a qualified biologist in the environmental document. Burrowing owl surveys shall be conducted by a qualified biologist at least 14 days prior to any Project activities, at any time of year. Surveys shall be completed following the recommendations and guidelines provided within the Staff Report on Burrowing Owl Mitigation (CDFG, March 2012) or most recent version by a qualified biologist. If an active burrowing owl burrow is detected within any Project disturbance area, or within a 500-foot buffer of the disturbance area, a 300- foot radius buffer zone surrounding the burrow shall be flagged, and no impacts to soils or vegetation or noise levels above 65 dBA shall be permitted while the burrow remains active or occupied. Disturbance-free buffers may be modified based on site-specific conditions in consultation with CDFW. The qualified biologist shall monitor active burrows daily and will increase buffer sizes as needed if owls show signs of disturbance. If active burrowing owl burrows are located within any work area and impact cannot be avoided, a qualified biologist shall submit a burrowing owl exclusion plan to CDFW for review and approval. The burrowing owl exclusion plan shall include permanent compensatory mitigation consistent with the recommendations in the Staff Report on Burrowing Owl Mitigation such that the habitat acreage, number of burrows and burrowing owls impacted are replaced. Passive relocation shall take place outside the nesting season (1 February to 31 August).

LeConte's Thrasher

C-30

LeConte's thrasher is a CDFW Species of Special Concern. During the nesting season, January 15 through June 15, prior to the start of construction activities, a Qualified Biologist will conduct surveys within the Whitewater Floodplain Conservation Area, within 500 feet of the impact area, or to the property boundary if less than 500 feet. If nesting Le Conte's thrashers are found, an exclusion buffer will be established around the nest site in any location where work may occur within 500 feet of the active nest. The exclusion buffer will be staked and flagged. No construction will be permitted within the buffer during the breeding season of January 15 through June 15 or until the young have fledged.

Nesting Birds and Migratory Birds

C-31

It is the Project proponent's responsibility to comply with all applicable laws related to nesting birds and birds of prey. Migratory non-game native bird species are protected by international treaty under the federal Migratory Bird Treaty Act (MBTA) of 1918, as amended (16 U.S.C. 703 *et seq.*). In addition, sections 3503, 3503.5, and 3513 of the Fish and Game Code (FGC) also afford protective measures as follows: Section 3503 states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by FGC or any regulation made pursuant thereto; Section 3503.5 states that it is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by FGC or any regulation adopted pursuant thereto; and Section 3513 states that it is unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA. CDFW recommends that the analysis includes the results of avian surveys, as well as specific avoidance and minimization measures to ensure that impacts to nesting birds do not occur. Project-specific avoidance and minimization measures may include, but not be limited to: Project phasing and timing, monitoring of Project-related noise (where applicable), sound walls, and buffers, where appropriate. The measures should also include specific avoidance and minimization measures that will be implemented should a nest be located within the Project site. For pre-construction surveys, CDFW recommends that the surveys be required no more than three days prior to vegetation clearing or ground disturbance activities, as instances of nesting could be missed if surveys are conducted sooner.

Special Status Plant Species

C-32

The Biological Resources Assessment needs to include explanation of methodology and results of the survey of special status plants. CDFW recommends California Natural Diversity Database be used as a starting point in gathering information about the potential presence of species within the general area of the Project Site, and surveys should not be restricted or limited to generated lists. It is unclear if a botanical field survey to identify all plants to the taxonomic level necessary to determine rarity and listing status was performed. Botanical field surveys should be conducted during times of year when plants are evident and identifiable (i.e. flowering or fruiting), which may warrant multiple surveys during the season to capture floristic diversity. Habitats, such as desert plant communities that have annual and short-lived perennial plants as major floristic components may require yearly surveys to accurately document baseline conditions for purposes of impact assessment. Sensitive plant species are listed under the CESA as threatened, or endangered, or proposed or candidates for listing; designated as rare under the Native Plant Protection Act; or plants that otherwise meet the definition of rare, threatened, or endangered species under CEQA. Plants constituting California Rare Plant Ranks 1A, 1B, 2A, and 2B generally meet the criteria of a CESA-listed species and should be considered as an endangered, rare or threatened species for the purposes of CEQA analysis. Take of any CESA-listed

C-32
(cont.)

↑ species is prohibited except as authorized by state law (Fish and Game Code, §§ 2080 & 2085). Fish and Game Code Sections 1900–1913 includes provisions that prohibit the take of endangered and rare plants from the wild and a salvage requirement for landowners. To ensure that Project impacts to biological resources are fully analyzed, CDFW recommends a thorough floristic-based assessment of special status plants and natural communities. Note that CDFW generally considers biological field assessments for rare plants valid for a period of up to three years. Pre-construction botanical surveys shall be conducted at the appropriate time of year by a qualified biologist following CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (CDFW, March 2018) or most recent version. Should special status plants or natural communities be present in the Project area, a qualified biologist shall develop species specific avoidance, minimization, and mitigation measures to ensure there is no net reduction in the size or viability of the local population. CDFW also recommends that the Lead Agency reviews the listing status of Western Joshua Tree (*Yucca brevifolia*) prior to finalizing the DEIR and implements appropriate measures. If the Project, including the Project construction or any Project-related activity during the life of the Project, may result in take of CESA-listed species, CDFW recommends that the Project proponent seeks appropriate authorization prior to Project implementation through an incidental take permit (ITP). Should any CESA-listed plant species be present at the Project Site, the Project Proponent shall obtain an incidental take permit for those species prior to the start of Project activities.

American Badger and Desert Kit Fox

C-33

American badger is a Species of Special Concern. Desert kit fox is a protected species and may not be taken at any time pursuant to Title 14 of the California Code of Regulations Section 460. Project activities may have the potential to take American badger and desert kit fox individuals, and development may result in loss of habitat and/or foraging habitat. CDFW recommends inclusion of pre-construction American Badger and Desert Kit Fox survey and suggests the following measure be included in the environmental document. No more than 30 days prior to the beginning of ground disturbance and/or Project activities, a qualified biologist shall conduct a survey to determine if potential desert kit fox or American badger burrows are present in the Project Area. If potential burrows are located, they shall be monitored by the qualified biologist. If the burrow is determined to be active, the qualified biologist shall verify there are suitable burrows outside of the Project Area prior to undertaking passive relocation actions. If no suitable burrows are located, artificial burrows shall be created at least 14 days prior to passive relocation. The qualified biologist shall block the entrance of the active burrow with soil, sticks, and debris for 3-5 days to discourage the use of the burrow prior to Project activities. The entrance shall be blocked to an incrementally greater degree over the 3-5-day period. After the qualified biologist has determined there are no active burrows the burrows shall be hand-excavated to prevent re-use. No disturbance of active dens shall take place when juvenile desert kit fox and juvenile American badgers may be present and dependent on parental care. A qualified biologist shall determine appropriate buffers and maintain connectivity to adjacent habitat should natal burrows be present.

Wildlife in Pipes and Construction Materials

C-34

Biological Monitor(s) shall visually check all sections of pipe/construction materials for the presence of wildlife sheltering within them prior to the pipe sections being placed in the trench and attached together, or shall have the ends capped while stored on Site so as to prevent wildlife from entering. After attachment of the pipe sections to one another, whether in the trench or not, the exposed end(s) of the pipeline shall be capped at the end of each day during construction to prevent wildlife from entering and being trapped within the pipeline.

Escape Ramp in Trench

C-35

At the end of each work day, the Biological Monitor(s) shall place an escape ramp at each end of the open trench to allow any animals that may have become entrapped in the trench to climb out overnight. The ramp may be constructed of either dirt fill or wood planking or other suitable material that is placed at an angle no greater than 30 degree.

Lake and Streambed Alteration Program

C-36

Fish and Game Code section 1602 requires an entity to notify CDFW prior to commencing any activity that may do one or more of the following: Substantially divert or obstruct the natural flow of any river, stream or lake; Substantially change or use any material from the bed, channel or bank of any river, stream, or lake; or Deposit debris, waste or other materials that could pass into any river, stream or lake. Please note that "any river, stream or lake" includes those that are episodic (i.e., those that are dry for periods of time) as well as those that are perennial (i.e., those that flow year-round). This includes ephemeral streams, desert washes, and watercourses with a subsurface flow. It may also apply to work undertaken within the flood plain of a body of water. Upon receipt of a complete notification, CDFW determines if the proposed Project activities may substantially adversely affect existing fish and wildlife resources and whether a Lake and Streambed Alteration (LSA) Agreement is required. An LSA Agreement includes measures necessary to protect existing fish and wildlife resources. CDFW may suggest ways to modify your Project that would eliminate or reduce harmful impacts to fish and wildlife resources. CDFW's issuance of an LSA Agreement is a "Project" subject to CEQA (see Pub. Resources Code 21065). To facilitate issuance of an LSA Agreement, if necessary, the DEIR should fully identify the potential impacts to the lake, stream, or riparian resources, and provide adequate avoidance, mitigation, and monitoring and reporting commitments. Early consultation with CDFW is recommended, since modification of the proposed Project may be required to avoid or reduce impacts to fish and wildlife resources.

Environmental Data

C-37

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make

C-37 (cont.) ↑ subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e).) Accordingly, please report any special status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDDB).

Filing Fees

C-38 Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying Project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.)

C-39 CDFW appreciates the opportunity to comment on the DEIR. Questions regarding this letter should be directed to Dr. Shankar Sharma, Senior Environmental Scientist Specialist and Renewable Energy Lead at Shankar.Sharma@wildlife.ca.gov or (909) 228-3692.

Sincerely,

DocuSigned by:
Alisa Ellsworth
84FBB8273E4C480...

Alisa Ellsworth
Environmental Program Manager

ec: Dr. Shankar Sharma, Senior Environmental Scientist Specialist, CDFW
Shankar.Sharma@wildlife.ca.gov

Office of Planning and Research, State Clearinghouse, Sacramento
state.clearinghouse@opr.ca.gov

HCPB CEQA Program, Habitat Conservation Planning Branch
CEQAcommentletters@wildlife.ca.gov

2.2.2.3 Response to Letter C – California Department of Fish and Game, May 27, 2021

Comment No. C-1

The California Department of Fish and Wildlife (CDFW) received a Draft Environmental Impact Report (DEIR) from the County of Imperial (Lead Agency) for Westside Canal Battery Energy Storage Project (Project) pursuant to California Environmental Quality Act (CEQA) and CEQA Guidelines.

Thank you for the opportunity to provide comments and recommendations regarding the activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

Response No. C-1

This comment is introductory in nature and does not pertain to the content of the Draft EIR. No further response is required.

Comment No. C-2

CDFW is California’s Trustee Agency for fish and wildlife resources and holds those resources in trust by statute for all the people of the State. (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a).) CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. (Id., § 1802.) Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on Projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW is also submitting comments as a Responsible Agency under CEQA (Pub. Resources Code, § 21069; CEQA Guidelines, § 15381). CDFW expects that it may need to exercise regulatory authority as provided by the Fish and Game Code. As proposed, for example, the Project may be subject to CDFW’s lake and streambed alteration regulatory authority. (Fish & G. Code, § 1600 et seq.) Likewise, to the extent implementation of the Project as proposed may result in “take” as defined by State law of any species protected under the California Endangered Species Act (CESA) (Fish & G. Code, § 2050 et seq.), the Project proponent may seek related take authorization as provided by the Fish and Game Code.

Response No. C-2

The comment provides a description of the legal requirement of California Department of Fish and Wildlife (CDFW) under CEQA, to consider potential impacts to biological resources. No further response is required.

Comment No. C-3

PROJECT LOCATION AND DESCRIPTION

CEQA Lead: County of Imperial

Applicant: Consolidated Edison Development Inc. (CED)

The Westside Canal Battery Energy Storage Project Site is located on about 163 acres of land in the unincorporated Mount Signal area of the Imperial County, around 8 miles southwest of the City of El Centro and 5 miles north of the U.S.-Mexico border. The Project Site comprises two parcels, Assessor Parcel Number APN 051-350-010 and APN 051-350-011. The Project will utilize portions of two additional parcels located north of the Westside Main Canal (APN 051-350-019 owned by Imperial Irrigation District (IID) and APN 051-350-018 owned by a private landowner) for Site access and as a temporary construction staging area. The Project will also access a small portion of APN 051-350-009 that is within the IID easement for connection to the existing IID Campo Verde-Imperial Valley 230 kilovolt (kV) radial gen-tie line during the construction of a substation on the Project Site. The Project Site is located on approximately 163 acres of land, 148 of which are owned by the Applicant, and the remaining land is owned by the Bureau of Land Management (BLM), IID, and a private landowner.

The Project Site is generally flat with elevation ranging from sea level in the far southwestern corner to 24 feet above mean sea level in the northeastern corner. The Project Site currently consists of vacant fallow agricultural land. There are two irrigation water pumping stations at the Project Site, one at the central northern area of the Project Site and one at the central southern area. These pumping stations were used to pump irrigation water from the westside main canal into a concrete lined ditch that runs north-south across the center of the southern portion of the Project Site. The pumping stations and concrete lined ditch appear to be abandoned. Man-made berms exist along the boundaries of the inactive agricultural areas, and small dunes and sandy hummocks occur west and south of the Project Site. The General Plan land use designation for the Project Site and parcels immediately to the north and east is agriculture. The parcels to the west and south are designated as recreation and open space.

The Applicant is proposing to construct, operate, and decommission a battery energy storage facility, a utility-scale complex with 2,000 megawatts (MW) capacity at full build-out. The Project components include lithium-ion and/or flow battery energy storage system facilities, a behind-the-meter solar energy facility, a new on-site 230 kilovolt (kV) loop-in switching station, a 34.5 kV to 230 kV Project substation, underground electrical cables, and permanent vehicular access to and from the Project Site over a proposed clear-span bridge spanning IID's Westside Main Canal. The proposed loop-in switching station would connect the Project to the existing IID Campo Verde-Imperial Valley 230 kV radial gen-tie line, which connects to the Imperial Valley (IV) Substation and the California Independent System Operator, approximately one-third mile south of the Project Site. CED has submitted the necessary Interconnection Request Applications to the California Independent System Operator and IID. The Project would be constructed in multiple phases over a 10-year development period, with each phase ranging from approximately 25 MW to 400 MW. The expected end date of the Project life cycle would be 30 years from the construction of the final phase, or no more than 40 years after the effective date of the Conditional Use Permit. The Project would store energy generated from the electrical grid, and discharge that energy back into the grid as firm, reliable generation and/or grid services.

Response No. C-3

This comment is a restatement of the summarized Project Description is not related to an environmental issue in the Draft EIR. As this comment provides background information and a description of the Project, no further response is required.

Comment No. C-4

CDFW has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and the habitat necessary for biologically sustainable populations of those species (biological resources). CDFW offers these comments to assist the Lead Agency for adequately identifying and mitigating the Project's significant, or potentially significant, impacts on biological resources. CDFW recommends that the DEIR addresses the ensuing comments.

Response No. C-4

The comment is introductory in nature and is not related to an environmental issue in the Draft EIR. No further response is required.

Comment No. C-5

Section 15125(c) of the CEQA Guidelines states that knowledge of the regional setting of a Project is critical to the assessment of environmental impacts and that special emphasis should be placed on environmental resources that are rare or unique to the region. CDFW recommends that floristic, alliance- and/or association-based mapping and assessment be completed following 2009 or current version of The Manual of California Vegetation. Adjoining habitat areas should also be included in this assessment where Site activities could lead to direct or indirect impacts offsite. Habitat mapping at the alliance level will help establish baseline vegetation conditions.

Response No. C-5

This comment provides guidelines for which CDFW recommends surveys are conducted. Vegetation classification, as part of the general Biological Survey, followed the 2009 version of The Manual of California Vegetation. Refer to Section 2.2 of Appendix E.1 Biological Resources Report. No further response is required.

Comment No. C-6

CDFW's California Natural Diversity Database (CNDDDB) in Sacramento should be contacted to obtain current information on any previously reported sensitive species and habitat, including Significant Natural Areas identified under Chapter 12 of the Fish and Game Code, in the vicinity of the proposed Project. CDFW recommends that CNDDDB Field Survey Forms be completed and submitted to CNDDDB to document survey results. Please note that CNDDDB is not exhaustive in terms of the data it houses, nor is it an absence database. The assessment should include a comprehensive, recent inventory of rare, threatened, endangered, and other sensitive species located within the Project footprint and within offsite areas with the potential to be affected, including California Species of Special Concern (SSC) and California Fully Protected Species (Fish and Game Code § 3511).

Response No. C-6

In Attachment 4 of Appendix E.1, Biological Resources Report, prepared by RECON Environmental Inc. (RECON) dated January 18, 2021, it was indicated and referenced that the California Natural Diversity

Database (CNDDDB) (Sacramento) database was used to obtain current information on any previously reported sensitive species and habitat, including Significant Natural Areas, in the vicinity of the proposed Project. Additionally, the California Native Plant Society and California Rare Plant Ranks were assessed to evaluate previously reported sensitive species and habitat in the vicinity of the proposed Project.

RECON submitted data to CNDDDB on April 2, 2019. The submitted data consisted of a GIS shapefile of sensitive wildlife observed during surveys: 6 avian and 2 mammal species. The attributes included in the dataset included all information requested on CNDDDB Field Survey Forms.

Comment No. C-7

Species to be addressed should include all those which meet the CEQA definition (CEQA Guidelines § 15380). The inventory should address seasonal variations in use of the Project area and should not be limited to resident species. Focused species-specific surveys, completed by a qualified biologist and conducted at the appropriate time of year and time of day when the sensitive species are active or otherwise identifiable, are required. Acceptable species-specific survey procedures should be developed in consultation with CDFW and the U.S. Fish and Wildlife Service, where necessary.

Response No. C-7

This comment provides standards for which the species inventory and surveys should be conducted according to CEQA. For this Project, focused species-specific surveys were conducted for the Burrowing Owl during breeding and non-breeding seasons between April 2018 and January 2019 according to the CDFW 2012 guidelines. For results collected during these surveys, refer to Appendix E.1, page 16.

Comment No. C-8

CDFW generally considers biological field assessments for wildlife to be valid for a one-year period, and assessments for rare plants may be considered valid for a period of up to three years. Some aspects of the proposed Project may warrant periodic updated surveys for certain sensitive taxa, particularly if the Project is proposed to occur over a protracted time frame, or in phases, or if surveys are completed during periods of drought. CDFW recommends species-specific surveys for the desert tortoise. CDFW-approved desert tortoise pre-construction surveys cover 100 percent of the Project area and adjacent habitat using the methods described in the most recent United States Fish and Wildlife Service (USFWS) Desert Tortoise Field Manual. CDFW recommends survey for burrowing owl, a Species of Special Concern. Survey recommendations and guidelines are provided in the Staff Report on Burrowing Owl Mitigation (Department of Fish and Game, March 2012). Development of a desert kit fox and American badger mitigation and monitoring plan is recommended. Desert kit fox is a protected species, and American badger is a Species of Special Concern. CDFW also recommends a thorough, recent, floristic-based assessment of special status plants and natural communities, following CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities.

Response No. C-8

Surveys for both wildlife and rare plants were conducted in 2018 and 2019. A detailed list of survey dates and information are presented in Appendix E.1, Section 2. The burrowing owl surveys listed in the Appendix E.1 were conducted during breeding and non-breeding seasons, between April 2018 and

January 2019, according to the CDFW 2012 guidelines. For results collected during these surveys, refer to Appendix E.1 Biological Resources Report page 16.

A total of 19 site visits were made by RECON biologists between 2018 and 2019 with an additional survey conducted in the spring of 2020. Several sensitive wildlife species were identified, and several others were determined to have a potential to occur. Given that no new sensitive species were observed during the addendum survey conducted on March 26, 2020, and by all reports the Project Site conditions remain the same, it is concluded that the survey results from previous surveys are representative current conditions. In addition, a number of avoidance and mitigation measures in the form of pre-activity clearance surveys are included in the mitigation and monitoring program, which will further serve to protect any sensitive species known in the Project area or that could occur within potentially suitable habitat areas (Appendix E.1, RECON 2021).

As described in Appendix E.1 (Attachment 5), the Project Site is outside of the desert tortoise's known range. Additionally, no tortoise burrows or other signs were observed during surveys within and adjacent to the Project Site. As such, desert tortoise species-specific, pre-construction surveys are not proposed for the Project.

Refer to Section 5.3.5 of Appendix E.1, for the Mitigation and Monitoring Recommendations for American badger provided by RECON. Additionally, the Draft EIR includes MM BR-13 (Complete Focused Pre-Construction Surveys for American Badger and Desert Kit Fox Surveys and Implementation of Avoidance Measures) in the Executive Summary (page ES-40) and in Section 3.4.4.4 (page 3.4-47) of the Draft EIR. MM BR-13 will be updated to indicate that this measure would apply to both the American badger and desert kit fox. Refer to Response to Comment No. C-33 for more information.

RECON botanists conducted focused rare plant surveys during the initial general biological survey conducted on February 5, 2019, and the subsequent rare plant focused survey conducted on April 23, 2019. These two surveys were conducted at times selected specifically to maximize detection of rare plants based on site conditions and individual plant species life histories. A follow-up survey was conducted on March 26, 2020. No sensitive plants were detected during these surveys and all potential species were designated as not expected or with a low potential to occur. As indicated in the CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities, surveys followed the following protocols: CNDDDB was consulted prior to conducting the surveys, an evaluation was made as to which sensitive species have a geographic range, elevation, and habitat characteristics that overlap with the project site, and survey dates were selected to maximize detection. Based on this approach and the completion of biological surveys within the previous 3 years, the survey results remain relevant to current Project evaluation.

In addition, MM BR-9 through MM BR-11 include provisions for conducting pre-activity botanical surveys for sensitive plants and MM BR-10 and MM BR-12 include provisions for authorization of impacts and compensation if sensitive plant species are detected during clearing of the Project Site. Refer to Response to Comment No. C-32 for more information.

Comment No. C-9

Analysis of Direct, Indirect, and Cumulative Impacts to Biological Resources

The vegetation communities and land cover types that were mapped within the Project Site and the surrounding 100-foot radius included upland mustards (Brassica spp. and Other Mustards Semi-Natural Herbaceous Stands), fourwing saltbush scrub (Atriplex canescens Shrubland Alliance), creosote bush scrub (Larrea tridentata Shrubland Alliance), quailbush scrub (Atriplex lentiformis Shrubland Alliance), arrow weed thickets (Pluchea sericea Shrubland Alliance), tamarisk thickets (Tamarix spp. Semi-Natural Shrubland Stands), common reed marshes (Phragmites australis Herbaceous Alliance and Semi-Natural Stands), eucalyptus groves (Eucalyptus spp. Semi-Natural Woodland Stands), cattail marshes (Typha sp. Herbaceous Alliance), disturbed habitat, fallow agriculture, open water, and developed land. A total of 127 animal species were detected within the Project Site and surrounding areas within 500-foot radius during the 2018 and 2019 biological surveys. These species comprised 25 invertebrates, one amphibian, seven reptiles, 84 birds, and 10 mammals. Occurrence of various species as described in the DEIR is summarized below.

Response No. C-9

The comment provides a summary of information related to vegetation communities, land cover types, and animal species detected within the Project Site and surrounding areas, within a 500-foot radius. No further comment is required.

Comment No. C-10

Flat-tailed Horned Lizard (Phrynosoma mcallii) is a CDFW species of special concern and BLM sensitive species. Flat-tailed horned lizard is found in the low deserts of southwestern Arizona, southeastern California, and adjacent portions of northwestern Sonora and northern Baja California, Mexico. In California, flat-tailed horned lizard is restricted to desert washes and desert flats in central Riverside, eastern San Diego, and Imperial counties. The majority of habitat for the species is in Imperial County. This species is known to inhabit sand dunes, sheets, and hummocks, as well as gravelly washes. It is thought to be most abundant in creosote bush scrub. However, this species may be found in a variety of desert scrub. Many occurrences of flat-tailed horned lizard have been reported in the undeveloped desert areas immediately west and south of the Project Site, and horned lizard tracks were observed during 2018 surveys in the western portion of the Project Site, south of the westside main canal. This species occurs in the creosote bush scrub and saltbush scrub within and adjacent to the Project Site. Within the Project Site, these communities provide high-quality habitat for this species, with sandy hummocks having re-established in the old agricultural fields, a good diversity of native plant species, and harvester ants present, and flat-tailed horned lizard has a high potential to occur due to the adjacency of high-quality habitat.

Response No. C-10

The comment provides background information on the flat-tailed horned lizard (*Phrynosoma mcallii*). No further comment is required.

Comment No. C-11

Burrowing Owl (Athene cunicularia) is a CDFW species of special concern and BLM sensitive species. This species occurs as a year-round resident and winter visitor in the County. Habitat for the burrowing owl includes dry, open, short-grass areas with level to gentle topography and well-drained soils, as well as agricultural areas. These areas are also often associated with burrowing mammals. The burrowing owl is diurnal and perches during daylight at the entrance to its burrow or on low posts. Four burrowing owl observations were recorded within the Project Site during the 2018-2019 non-breeding season surveys. These observations indicate that at least two, but likely three, individuals, appear to use the Project Site and surrounding areas as a wintering site or for migration and dispersal, but is not currently using the Site as breeding habitat. The creosote bush scrub, saltbush scrub, upland mustards, fallow agriculture, and disturbed habitat within and adjacent to the Project Site provide suitable habitat for this species for breeding and wintering due to the open structure of the vegetation, presence of prey items, and abundance of potentially suitable burrows.

Response No. C-11

The comment provides background information on the burrowing owl (*Athene cunicularia*). No further comment is required.

Comment No. C-12

*Loggerhead Shrike (Lanius ludovicianus) is a CDFW species of special concern. This species inhabits most of the continental U.S. and Mexico and is an uncommon year-round resident of southern California. It prefers washes with scattered trees or shrubs, or valley floors with scattered thickets of mesquite (*Prosopis* spp.) or saltbush (*Atriplex* spp.). Outside the desert this species inhabits grasslands, agricultural fields, open sage scrub, and chaparral. The loggerhead shrike requires open habitat with tall shrubs or trees to use as perches for hunting and fairly dense shrubs for nesting. It may also use fences or power lines for hunting perches. Loggerhead shrikes are highly territorial and usually lives in pairs in permanent territories. This species feeds on small reptiles, mammals, smaller birds, amphibians, and insects that they often impale on sticks or thorns before eating. This bird may also be associated with freshly plowed or mowed fields, as these activities create foraging opportunities for this species. Loggerhead shrike populations are declining, likely due to urbanization and loss of habitat and, to a lesser degree, pesticide use. Loggerhead shrike was observed in tamarisk thickets on the Project Site and in common reed marsh and creosote bush scrub immediately adjacent to the Project Site on multiple survey visits in 2018, and 2019. With the combination of dense patches of shrubs or trees and adjacent open areas, the Project Site and surrounding areas provide suitable breeding and foraging habitat for this species. Therefore, this species is likely a resident and has a high potential to nest within the Project Site.*

Response No. C-12

The comment provides background information on the Loggerhead shrike (*Lanius ludovicianus*). No further comment is required.

Comment No. C-13

LeConte's Thrasher (Toxostoma lecontei) is a CDFW species of special concern. It is a permanent resident in the San Joaquin Valley, Mojave and Colorado Deserts of California, the Sonoran Desert in Arizona, as well as Utah, Nevada, and Baja California, Mexico. This sensitive bird requires undisturbed substrate for foraging under desert shrubs. Ideal habitat throughout this species' range consists of sparsely vegetated desert flats, dunes, sandy alluvial fans below desert mountains, alkaline dry lakes, or gently rolling hills. Dominant shrub species are saltbush (Atriplex spp.) not exceeding eight feet high and cholla (Opuntia spp.) ranging three to six feet high. Creosote (Larrea sp.) may also be present, but the thrasher does not typically utilize this shrub species for shelter or nesting. LeConte's thrasher was observed during the 2018 survey visits in arrow weed thickets and saltbush scrub on the Project Site.

Response No. C-13

The comment provides background information on the LeConte's thrasher (*Toxostoma lecontei*). No further comment is required.

Comment No. C-14

American Badger (Taxidea taxus) is a CDFW species of special concern. American badgers are widespread, ranging from the Great Lakes to the Pacific Coast, and from the Canadian Prairie provinces to the Mexican Plateau. This species can be found in a variety of habitats, which include shrub steppes, agricultural fields, open woodland forests, and large grass and sagebrush meadows and valleys. Its breeding season occurs from mid- to late summer, after which egg implantation is delayed until December to February. Declines in American badger populations and distribution have resulted from habitat fragmentation from urbanization and development of roads. One American badger was observed immediately south of the Project Site in 2019. American badger tracks were observed in the southwestern corner and western edge of the Project Site, south of the Westside Main Canal, during the same visit. At least one burrow, just outside the southwestern corner of the Project Site was of appropriate size to support this species. The Project Site and surrounding areas south of the Westside Main Canal provide suitable habitat for this species.

Response No. C-14

The comment provides background information on the American badger (*Taxidea taxus*). No further comment is required.

Comment No. C-15

Colorado Desert Fringe-toed Lizard (Uma notata) is a CDFW species of special concern and a BLM sensitive species. This species occurs from below sea level to 590 feet above sea level from the Salton Sea east into southwestern Arizona, and south into Baja California and Sonora, Mexico. Fringe-toed lizards usually seek refuge from enemies by burrowing in the sand 2 to 2.4 inches deep. They also use rodent burrows and the bases of shrubs for cover and thermoregulation. Lizards usually hibernate in sand 12 inches deep, but juveniles and subadults may be found closer to the surface. This species has been reported within two miles of the Project Site and has a suitable potential to occur within the Project Site south of the Westside Main Canal. The creosote bush scrub and saltbush scrub adjacent to and in the

western and southwestern portions of the Project Site, south of the Westside Main Canal, provide suitable habitat for this species due to the presence of dunes and sandy hummocks.

Response No. C-15

The comment provides background information on the Colorado Desert fringe-toed lizard (*Uma notata*). No further comment is required.

Comment No. C-16

Southwestern Willow Flycatcher (Empidonax traillii extimus) is a federally and state listed endangered species. This migratory bird breeds in southern California, southern Nevada, southern Utah, Arizona, New Mexico, western Texas, southwestern Colorado, and extreme northwestern Mexico. The southwestern willow flycatcher's breeding season is from mid-May to mid-July. For breeding and nesting activities this species requires mature, multi-tiered riparian woodland habitat with a high percentage of canopy cover where surface water is present, or soil moisture is high enough to support suitable tree species. Nests are typically placed in trees where plant growth is most dense, where trees and shrubs have vegetation near ground level, and where there is a low-density native canopy. Although there are exceptions, generally flycatchers are found nesting in areas with willows, tamarisk, or both. Southwestern willow flycatchers are extremely sensitive to human activity in riparian areas. Threats to this species include loss of riparian habitat due to urbanization, flood control, water diversion, grazing, and invasion of non-native species. The arrow weed and tamarisk thickets within and adjacent to the Project Site are suitable as foraging habitat, so the Site has suitable potential to support foraging flycatchers during migration.

Response No. C-16

The comment provides background information on the Southwestern willow flycatcher (*Empidonax traillii extimus*). No further comment is required.

Comment No. C-17

The DEIR should provide a thorough discussion of the direct, indirect, and cumulative impacts expected to adversely affect biological resources as a result of the Project. To ensure that Project impacts to biological resources are fully analyzed, the following information should also be included in the DEIR.

- 1. A discussion of potential impacts from lighting, noise, human activity, and wildlife-human interactions created by zoning of development Projects or other Project activities adjacent to natural areas, exotic and/or invasive species, and drainage. The latter subject should address Project-related changes on drainage patterns and water quality within, upstream, and downstream of the Project Site, including: volume, velocity, and frequency of existing and post-Project surface flows; polluted runoff; soil erosion and/or sedimentation in streams and water bodies; and post-Project fate of runoff from the Project Site.*

Response No. C-17

A discussion of potential impacts from lighting, noise, human activity, and wildlife-human interactions is discussed in Draft EIR Section 3.4.4.4, Impact a) (pages 3.4-25 to 3.4-26). With the incorporation of MM

BR-1 (Compensation for Permanent and Temporary Impacts to Vegetative Communities) and MM BR-2 (Develop a Habitat Restoration Plan), potential impacts on foraging habitat would be reduced to less-than-significant level.

Comment No. C-18

2. *A discussion of potential indirect Project impacts on biological resources, including resources in areas adjacent to the Project footprint, such as nearby public lands (e.g. National Forests, State Parks, etc.), open space, adjacent natural habitats, riparian ecosystems, wildlife corridors, and any designated and/or proposed reserve or mitigation lands (e.g., preserved lands associated with a Natural Community Conservation Plan, or other conserved lands).*

Response No. C-18

As discussed in Draft EIR Section 3.4.4.4, Impact f) (page 3.4-58), the Project is not located in a Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Implementation of the Project would result in no impact associated with the potential to conflict with local conservation plan or public lands. No further response is required.

Comment No. C-19

3. *An evaluation of impacts to adjacent open space lands from both the construction of the Project and long-term operational and maintenance needs.*

Response No. C-19

See Response No. C-18 above.

Comment No. C-20

4. *A cumulative effects analysis developed as described under CEQA Guidelines § 15130. Please include all potential direct and indirect Project related impacts to riparian areas, wetlands, vernal pools, alluvial fan habitats, wildlife corridors or wildlife movement areas, aquatic habitats, sensitive species and other sensitive habitats, open lands, open space, and adjacent natural habitats in the cumulative effects analysis. General and specific plans, as well as past, present, and anticipated future Projects, should be analyzed relative to their impacts on similar plant communities and wildlife habitats.*

Response No. C-20

As discussed in Draft EIR Section 3.4.4.4 Impact b) (pages 3.4-54 to 3.4-56), the Project would result in direct and indirect impacts to native and non-native vegetation communities. Draft EIR Table 3.4-5 outlines all land cover types (native and non-native vegetation communities) that would be impacted by the Project. Implementation of MMs BR-2, B-3, BR-4, BR-5, BR-6, and BR-16 would reduce impacts to riparian and other impacted habitats to less-than-significant levels.

Comment No. C-21

- The Project has decades long life-span and potential loss in habitat expansion and population density changes with time needs be accounted for considering fully mitigated standards. For adequacy of mitigation analysis, there is a need to consider both spatial and temporal effects on habitat as well as cumulative impacts of the activities on habitat biodiversity under microclimate variability.*

Response No. C-21

Both spatial and temporal effects on habitats, as well as cumulative impacts of the activities on habitat biodiversity, were evaluated in the Draft EIR. Implementation of MMs BR-1 to BR-19 would minimize the Project's contribution to cumulatively considerable impacts during construction, operation, and decommissioning. These measures include worker education programs, describing the sensitive biological resources that occur on the Project Site, implementation of BMPs to minimize and avoid impacts, pre-construction surveys, nesting bird buffer protocols, and conducting biological monitoring during ground-disturbing and other construction-related activities. Implementation of these mitigation measures would reduce the Project's contribution to cumulative impacts. Therefore, with implementation of mitigation measures, the Project, considered together with the Related Projects, would have a less than significant cumulatively considerable contribution to cumulative biological resources impacts.

Comment No. C-22

Mitigation Measures for Project Impacts to Biological Resources

The DEIR should include appropriate and adequate avoidance, minimization, and/or mitigation measures for all direct, indirect, and cumulative impacts that are expected to occur as a result of the construction and long-term operation and maintenance of the Project. CDFW recommends consideration of the following comments.

Response No. C-22

All construction, operation and maintenance, and decommissioning impacts to biological resources were evaluated in the Draft EIR. All avoidance and mitigation measures, and their corresponding impacts to biological resources impacts, are included in the Executive Summary (pages ES-22 to ES-46) and in Section 3.4 of the Draft EIR.

Comment No. C-23

Fully Protected Species

Several Fully Protected Species (Fish and Game Code § 3511) have the potential to occur within or adjacent to the Project area. Fully protected species may not be taken or possessed at any time. Project activities described in the DEIR should be designed to completely avoid any fully protected species that have the potential to be present within or adjacent to the Project area. CDFW also recommends that the DEIR fully analyze potential adverse impacts to fully protected species due to habitat modification, loss of foraging habitat, and/or interruption of migratory and breeding behaviors. CDFW recommends more

robust analysis of appropriate avoidance, minimization and mitigation measures to reduce any possible indirect impacts to fully protected species.

Response No. C-23

Potential adverse direct and indirect impacts to protect species due to habitat modification, loss of foraging habitat, and/or interruption of migratory breeding behaviors have been evaluated in Impacts a) and d) of the Draft EIR. Impact a) evaluates potential adverse impacts to protected species due to habitat modification and loss of foraging habitat, as well as proposed mitigation measures to reduce potentially significant impacts. This analysis can be found on pages 3.4-25 to 3.4-54 of the Draft EIR. Impact d) evaluates potential adverse impacts to protected species due to interruption of migratory breeding behaviors and can be found on pages 3.4-57 to 3.4-58 of the Draft EIR.

Comment No. C-24

Sensitive Plant Communities

CDFW considers sensitive plant communities to be imperiled habitats having both local and regional significance. Plant communities, alliances, and associations with a statewide ranking of S-1, S-2, S-3, and S-4 should be considered sensitive and declining at the local and regional level. These ranks can be obtained by querying the CNDDDB and are included in the 2009 or current version of The Manual of California Vegetation. The DEIR should include measures to fully avoid and otherwise protect sensitive plant communities from Project-related direct and indirect impacts. Minimization measures may include transplanting perennial species, seed collection and dispersal from annual species, and other conservation strategies that will protect the viability of the local population. If minimization measures are implemented, monitoring of plant populations will be conducted annually for 5 years to assess the mitigation's effectiveness. The performance standard for mitigation will be no net reduction in the size or viability of the local population.

Response No. C-24

Special-status natural communities are defined by CDFW (2009) as, "...communities that are of limited distribution statewide or within a county or region and are often vulnerable to environmental effects of projects." All vegetation within the state is ranked with an "S" rank; however, only those that are of special concern (S1-S3 rank) are generally evaluated under CEQA. Based on this ranking, one sensitive natural community, arrow weed thickets (S3), occurs within the proposed Project Site. MM BR-1 will require compensation for impacts to this community at a 3:1 ratio. There are also mitigation requirements for restoration plans, specific to both temporary and permanent impacts that will detail specific monitoring requirements.

Comment No. C-25

Mitigation

CDFW considers adverse Project-related impacts to sensitive species and habitats to be significant to both local and regional ecosystems, and the DEIR should include mitigation measures for adverse Project-related impacts to these resources. Mitigation measures should emphasize avoidance and reduction of Project impacts. For unavoidable impacts, onsite habitat restoration and/or enhancement

should be evaluated and discussed in detail. If onsite mitigation is not feasible or would not be biologically viable and therefore not adequately mitigate the loss of biological functions and values, offsite mitigation through habitat creation and/or acquisition and preservation in perpetuity should be addressed. The DEIR should include measures to perpetually protect the targeted habitat values within mitigation areas from direct and indirect adverse impacts in order to meet mitigation objectives to offset Project-induced qualitative and quantitative losses of biological values. Specific issues that should be addressed include restrictions on access, land dedications, long-term monitoring and management, control of illegal dumping, water pollution, and human intrusion.

Response No. C-25

All potential direct, indirect, and cumulative impacts to biological resources were evaluated in the Draft EIR. Any potentially significant impacts to biological resources would be reduced to a less-than-significant level with the incorporation of mitigation measures included in the Draft EIR.

Comment No. C-26

Moving out of Harm's Way

The proposed Project is anticipated to result in the clearing of natural habitats that support native species. To avoid direct mortality, CDFW recommends that the lead agency condition the DEIR to require that a CDFW-approved qualified biologist be retained to be onsite prior to and during all ground- and habitat-disturbing activities to move out of harm's way special status species or other wildlife of low or limited mobility that would otherwise be injured or killed from Project-related activities. Movement of wildlife out of harm's way should be limited to only those individuals that would otherwise be injured or killed, and individuals should be moved only as far as necessary to ensure their safety. Furthermore, it should be noted that the temporary relocation of onsite wildlife does not constitute effective mitigation for the purposes of offsetting Project impacts associated with habitat loss.

Response No. C-26

As outlined in MM BR-6 (Implement Biological Construction Monitoring), a qualified biologist will be present at all times during construction activities, including ground disturbing activities. For the full text of MM BR-6, refer to pages ES-30 to ES-31.

Comment No. C-27

California Endangered Species Act

CDFW is responsible for ensuring appropriate conservation of fish and wildlife resources including threatened, endangered, and/or candidate plant and animal species, pursuant to the California Endangered Species Act (CESA). A CESA Incidental Take Permit (ITP) is issued to conserve, protect, enhance, and restore State-listed CESA species and their habitats. CDFW recommends that a CESA ITP be obtained if the Project has the potential to result in "take" (California Fish and Game Code Section 86 defines "take" as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill") of CESA-listed species. Take of any CESA-listed species is prohibited except as authorized by state law (Fish and Game Code, §§ 2080 & 2085). If the Project, including the Project construction or any Project-related activity during the life of the Project, results in take of CESA-listed species, CDFW recommends

that the Project proponent seek appropriate authorization prior to Project implementation through an ITP. Desert tortoise and Mohave ground squirrel are two CESA-listed threatened species that have potential to occur within the Project Area, presence needs to be determined by protocol surveys required by the Lead Agency. CDFW encourages early consultation, as significant modification to the proposed Project and avoidance, minimization, and mitigation measures may be necessary to obtain a CESA ITP. Please note that the proposed avoidance, minimization, and mitigation measures must be sufficient for CDFW to conclude that the Project's impacts are fully mitigated and the measures, when taken in aggregate, must meet the full mitigation standard.

Response No. C-27

The comment provides background information CDFW's responsibility for ensuring appropriate conservation of biological resources through a California Endangered Species Act (CESA) Incidental Take Permit (ITP). As addressed in Draft EIR Section 1.5.2.2 (page 1-8), CDFW would be consulted for issuance of Section 2081 ITP for state-only listed species and a Section 2081.1 consistency determination for the effects on species that are both state and federally listed.

Comment No. C-28

Desert Tortoise

CDFW recommends inclusion of mitigation measures to avoid potentially significant impacts to desert tortoise, a CESA-listed species as threatened and a candidate for endangered species. The measures need to include specificity on who will perform the survey, what type of survey will be performed, and what actions will be taken should desert tortoise presence be confirmed during the survey. The measures need to address avoidance, minimization, or mitigation measures should desert tortoise enter the Project Site during the life of the Project. Take (hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill) is prohibited unless authorized by state law (Fish and Game Code, §§ 2080 & 2085). Project activities have the potential to take desert tortoise. The measure as written does not ensure a qualified biologist, experienced in locating desert tortoise individuals in all life stages and their sign, will complete the survey following CDFW approved protocols. Additionally, should desert tortoise presence be confirmed, the measure needs to include avoidance, minimization and mitigation to avoid take. If the Project, including the Project construction or any Project-related activity during the life of the Project, may result in take of CESA-listed species, CDFW recommends that the Project proponent seeks appropriate authorization prior to Project implementation through an incidental take permit (ITP). CDFW recommends inclusion of a protocol level survey and a measure for a qualified biologist in the environmental document. A qualified biologist shall conduct a protocol level presence or absence survey no more than 14 days prior to initiating Project activities in accordance with the survey methodology described in U.S. Fish and Wildlife Service Desert Tortoise (Mojave Population) Field Manual. In addition, the survey shall utilize perpendicular survey routes and 100-percent visual coverage of the Project area and 50-foot buffer zone for desert tortoise and their sign. If the survey confirms absence, a qualified biological monitor shall remain on-site during all Project activities to confirm desert tortoise do not enter the Project Site. If the survey confirms presence, the Project Proponent shall obtain an ITP for desert tortoise prior to the start of Project activities. If the biological monitor during the life of the Project encounters a desert tortoise, work shall be suspended, and the Project Proponent shall obtain an ITP for

the species prior to the restarting Project activities. All clearance surveys need to be conducted during the active season for desert tortoise.

Response No. C-28

As indicated in Appendix E.1, the Project Site is outside of the Desert Tortoise's known range and it is not expected to occur. Additionally, no tortoise burrows or other signs were observed during surveys. As such, desert tortoise species-specific, pre-construction surveys and mitigation measures are not proposed for the Project.

Comment No. C-29

Burrowing Owl

Burrowing owl is a CDFW Species of Special, and potential construction-related direct impacts to burrowing owl could result from destruction of burrowing owl dens, destruction of nests, eggs, and young; and entombment of adults. CDFW recommends inclusion of mitigation measures to avoid potentially significant impacts to burrowing owls, a Species of Special Concern. The measures need to include specificity on who will perform the burrowing owl survey, what type of survey will be performed, and what actions will be taken should burrowing owl presence be confirmed during the survey. It is necessary to address avoidance, minimization, or mitigation measures. Project-related activities have potential to take burrowing owl individuals and their nests and may result in loss of burrowing owl habitat. Take of individual burrowing owls and their nests is defined by Fish and Game Code section 86, and prohibited by sections 3503, 3503.5 and 3513. Take is defined in Fish and Game Code Section 86 as "hunt, pursue, catch, capture or kill, or attempt to hunt, pursue, catch, capture or kill." Burrowing owls are dependent on burrows at all times of the year for survival and/or reproduction, evicting them from nesting, roosting, and satellite burrows may lead to indirect impacts or take. Loss of access to burrows will likely result in varying levels of increased stress on burrowing owls and could depress reproduction, increase predation, increase energetic costs, and introduce risks posed by having to find and compete for available burrows. Eviction of burrowing owls is a potentially significant impact under CEQA. CDFW recommends inclusion a measure for a qualified biologist in the environmental document. Burrowing owl surveys shall be conducted by a qualified biologist at least 14 days prior to any Project activities, at any time of year. Surveys shall be completed following the recommendations and guidelines provided within the Staff Report on Burrowing Owl Mitigation (CDFG, March 2012) or most recent version by a qualified biologist. If an active burrowing owl burrow is detected within any Project disturbance area, or within a 500-foot buffer of the disturbance area, a 300-foot radius buffer zone surrounding the burrow shall be flagged, and no impacts to soils or vegetation or noise levels above 65 dBA shall be permitted while the burrow remains active or occupied. Disturbance-free buffers may be modified based on site-specific conditions in consultation with CDFW. The qualified biologist shall monitor active burrows daily and will increase buffer sizes as needed if owls show signs of disturbance. If active burrowing owl burrows are located within any work area and impact cannot be avoided, a qualified biologist shall submit a burrowing owl exclusion plan to CDFW for review and approval. The burrowing owl exclusion plan shall include permanent compensatory mitigation consistent with the recommendations in the Staff Report on Burrowing Owl Mitigation such that the habitat acreage, number of burrows and burrowing owls impacted are replaced. Passive relocation shall take place outside the nesting season (1 February to 31 August).

Response No. C-29

Burrowing owl species-specific surveys were conducted by RECON during the breeding and non-breeding seasons, between April 2018 and January 2019. Methods used for the habitat assessment, breeding season surveys, and non-breeding season surveys followed the guidelines set forth by CDFW (2012). Complete survey methods and results are provided in Appendix E.1, E.2, and E.3 of the Draft EIR. Additionally, the Draft EIR includes MM BR-17 (Burrowing Owl Protection Measures) (pages ES-44 to ES-45), which includes the required CDFW- and CESA-specific actions, if burrowing owls are found on the Project Site.

Comment No. C-30

LeConte's Thrasher

LeConte's thrasher is a CDFW Species of Special Concern. During the nesting season, January 15 through June 15, prior to the start of construction activities, a Qualified Biologist will conduct surveys within the Whitewater Floodplain Conservation Area, within 500 feet of the impact area, or to the property boundary if less than 500 feet. If nesting Le Conte's thrashers are found, an exclusion buffer will be established around the nest site in any location where work may occur within 500 feet of the active nest. The exclusion buffer will be staked and flagged. No construction will be permitted within the buffer during the breeding season of January 15 through June 15 or until the young have fledged.

Response No. C-30

LeConte's thrasher was observed during the November and December 2018 survey visits in arrow weed thickets and fourwing saltbrush scrub on the Project Site. Although this species is likely resident in the native desert scrub communities within and adjacent to the Project Site, it is unlikely to nest on the Project Site due to the lack of cactus and low number of thorny shrubs. Appendix E.1 and Draft EIR Section 3.4.3.5 include a complete analysis of LeConte's thrasher observations made during the biological survey. As it was concluded unlikely for this species to nest on the Project Site, species-specific surveys were not conducted for this Project.

Comment No. C-31

Nesting Birds and Migratory Birds

It is the Project proponent's responsibility to comply with all applicable laws related to nesting birds and birds of prey. Migratory non-game native bird species are protected by international treaty under the federal Migratory Bird Treaty Act (MBTA) of 1918, as amended (16 U.S.C. 703 et seq.). In addition, sections 3503, 3503.5, and 3513 of the Fish and Game Code (FGC) also afford protective measures as follows: Section 3503 states that it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by FGC or any regulation made pursuant thereto; Section 3503.5 states that it is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds-of-prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by FGC or any regulation adopted pursuant thereto; and Section 3513 states that it is unlawful to take or possess any migratory nongame bird as designated in the MBTA or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under

provisions of the MBTA. CDFW recommends that the analysis includes the results of avian surveys, as well as specific avoidance and minimization measures to ensure that impacts to nesting birds do not occur. Project-specific avoidance and minimization measures may include, but not be limited to: Project phasing and timing, monitoring of Project-related noise (where applicable), sound walls, and buffers, where appropriate. The measures should also include specific avoidance and minimization measures that will be implemented should a nest be located within the Project site. For pre-construction surveys, CDFW recommends that the surveys be required no more than three days prior to vegetation clearing or ground disturbance activities, as instances of nesting could be missed if surveys are conducted sooner.

Response No. C-31

As described in MM BR-7 (Conduct Pre-construction Surveys for Nesting and Breeding Birds and Implementation of Avoidance Measures), pre-construction surveys for nesting birds will be conducted during the recognized breeding season. Also detailed in MM BR-7 are buffer requirements, nest removal requirements, and other guidelines. MM BR-7 will be updated to indicate that the initial survey event must be completed no more than three days prior to vegetation removal or ground disturbing activities. MM BR-5 (Wildlife Pre-Construction Surveys and Biological Monitoring) already requires the completion of surveys within no more than 72-hours prior to ground-disturbing activities.

Comment No. C-32

Special Status Plant Species

The Biological Resources Assessment needs to include explanation of methodology and results of the survey of special status plants. CDFW recommends California Natural Diversity Database be used as a starting point in gathering information about the potential presence of species within the general area of the Project Site, and surveys should not be restricted or limited to generated lists. It is unclear if a botanical field survey to identify all plants to the taxonomic level necessary to determine rarity and listing status was performed. Botanical field surveys should be conducted during times of year when plants are evident and identifiable (i.e. flowering or fruiting), which may warrant multiple surveys during the season to capture floristic diversity. Habitats, such as desert plant communities that have annual and short-lived perennial plants as major floristic components may require yearly surveys to accurately document baseline conditions for purposes of impact assessment. Sensitive plant species are listed under the CESA as threatened, or endangered, or proposed or candidates for listing; designated as rare under the Native Plant Protection Act; or plants that otherwise meet the definition of rare, threatened, or endangered species under CEQA. Plants constituting California Rare Plant Ranks 1A, 1B, 2A, and 2B generally meet the criteria of a CESA-listed species and should be considered as an endangered, rare or threatened species for the purposes of CEQA analysis. Take of any CESA-listed species is prohibited except as authorized by state law (Fish and Game Code, §§ 2080 & 2085). Fish and Game Code Sections 1900–1913 includes provisions that prohibit the take of endangered and rare plants from the wild and a salvage requirement for landowners. To ensure that Project impacts to biological resources are fully analyzed, CDFW recommends a thorough floristic-based assessment of special status plants and natural communities. Note that CDFW generally considers biological field assessments for rare plants valid for a period of up to three years. Pre-construction botanical surveys shall be conducted at the appropriate time of year by a qualified biologist following CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (CDFW, March 2018) or

*most recent version. Should special status plants or natural communities be present in the Project area, a qualified biologist shall develop species specific avoidance, minimization, and mitigation measures to ensure there is no net reduction in the size or viability of the local population. CDFW also recommends that the Lead Agency reviews the listing status of Western Joshua Tree (*Yucca brevifolia*) prior to finalizing the DEIR and implements appropriate measures. If the Project, including the Project construction or any Project-related activity during the life of the Project, may result in take of CESA-listed species, CDFW recommends that the Project proponent seeks appropriate authorization prior to Project implementation through an incidental take permit (ITP). Should any CESA-listed plant species be present at the Project Site, the Project Proponent shall obtain an incidental take permit for those species prior to the start of Project activities.*

Response No. C-32

RECON botanists conducted focused rare plant surveys during the initial general biological survey on February 5, 2019, and the rare plant focused survey on April 23, 2019. These two surveys were conducted at times to maximize detection of rare plants based on Project Site conditions and individual plant species' life histories. A follow-up survey was conducted on March 26, 2020. No sensitive plants were detected during these surveys, and all potential species were evaluated as not expected or with a low potential to occur. As indicated in the CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities, CNDDDB was consulted prior to conducting the surveys. An evaluation of which sensitive species have a geographic range, elevation, and habitat characteristics that overlap with the Project Site was conducted, and survey dates were selected to maximize detection. Based on this approach and the completion of surveys within the previous 3 years, the survey results remain relevant to current Project evaluation.

However, MM BR-9 and MM BR-11 include provisions for conducting pre-activity botanical surveys for sensitive plants and indicated that the surveys shall be conducted during the appropriate blooming period(s) by a qualified plant ecologist/biologist according to protocols established by the USFWS, CDFW, and CNPS. These measures will be updated to specifically reference CDFW's Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (CDFW, March 2018) or most recent version. MM BR-10 and MM BR-12 provide compensation for impacts to sensitive plants, in the event they are detected during the pre-activity botanical survey.

The Western Joshua tree (*Yucca brevifolia*) was not observed during any of the surveys conducted on-site, nor is there any potential for this species to be present. The Project Site is located outside of the known range of this species, of which the southernmost mapped portion of the range is north of the Salton Sea. In addition, the Project Site being located at and below mean sea level is located below the known elevation requirements for the species of 600 to 2,200 meters above mean sea level. No additional measures regarding this species are recommended.

MM BR-9 includes reference to consultation being required with CDFW should state listed plants be detected during the pre-activity botanical survey. MM BR-9 will be updated to make specific reference to the need to obtain an incidental take permit should any CESA-listed plant species be detected.

Comment No. C-33

American Badger and Desert Kit Fox

American badger is a Species of Special Concern. Desert kit fox is a protected species and may not be taken at any time pursuant to Title 14 of the California Code of Regulations Section 460. Project activities may have the potential to take American badger and desert kit fox individuals, and development may result in loss of habitat and/or foraging habitat. CDFW recommends inclusion of pre-construction American Badger and Desert Kit Fox survey and suggests the following measure be included in the environmental document. No more than 30 days prior to the beginning of ground disturbance and/or Project activities, a qualified biologist shall conduct a survey to determine if potential desert kit fox or American badger burrows are present in the Project Area. If potential burrows are located, they shall be monitored by the qualified biologist. If the burrow is determined to be active, the qualified biologist shall verify there are suitable burrows outside of the Project Area prior to undertaking passive relocation actions. If no suitable burrows are located, artificial burrows shall be created at least 14 days prior to passive relocation. The qualified biologist shall block the entrance of the active burrow with soil, sticks, and debris for 3-5 days to discourage the use of the burrow prior to Project activities. The entrance shall be blocked to an incrementally greater degree over the 3-5-day period. After the qualified biologist has determined there are no active burrows the burrows shall be hand-excavated to prevent re-use. No disturbance of active dens shall take place when juvenile desert kit fox and juvenile American badgers may be present and dependent on parental care. A qualified biologist shall determine appropriate buffers and maintain connectivity to adjacent habitat should natal burrows be present.

Response No. C-33

As first described in the Executive Summary, MM BR-13 (Complete Focused Pre-Construction Surveys for American badger and Implementation of Avoidance Measures) follows CDFW recommendations and standards for American badger pre-construction surveys. This measure will be updated to indicate that it also pertains to desert kit fox. With this measure in place, no management plan is proposed for the species.

Comment No. C-34

Wildlife in Pipes and Construction Materials

Biological Monitor(s) shall visually check all sections of pipe/construction materials for the presence of wildlife sheltering within them prior to the pipe sections being placed in the trench and attached together, or shall have the ends capped while stored on Site so as to prevent wildlife from entering. After attachment of the pipe sections to one another, whether in the trench or not, the exposed end(s) of the pipeline shall be capped at the end of each day during construction to prevent wildlife from entering and being trapped within the pipeline.

Response No. C-34

As indicated in item g) of MM BR-4 (Implementation of Best Management Practices) (page 3.4-32), all pipes, openings, and culverts with a diameter greater than four inches shall be capped or taped closed and inspected for the presence of wildlife.

Comment No. C-35

Escape Ramp in Trench

At the end of each work day, the Biological Monitor(s) shall place an escape ramp at each end of the open trench to allow any animals that may have become entrapped in the trench to climb out overnight. The ramp may be constructed of either dirt fill or wood planking or other suitable material that is placed at an angle no greater than 30 degree.

Response No. C-35

As indicated in item o) of MM BR-4 (Implementation of Best Management Practices) (page 3.4-33), escape ramps will be constructed and placed in any open excavation or trench areas.

Comment No. C-36

Lake and Streambed Alteration Program

Fish and Game Code section 1602 requires an entity to notify CDFW prior to commencing any activity that may do one or more of the following: Substantially divert or obstruct the natural flow of any river, stream or lake; Substantially change or use any material from the bed, channel or bank of any river, stream, or lake; or Deposit debris, waste or other materials that could pass into any river, stream or lake. Please note that "any river, stream or lake" includes those that are episodic (i.e., those that are dry for periods of time) as well as those that are perennial (i.e., those that flow year-round). This includes ephemeral streams, desert washes, and watercourses with a subsurface flow. It may also apply to work undertaken within the flood plain of a body of water. Upon receipt of a complete notification, CDFW determines if the proposed Project activities may substantially adversely affect existing fish and wildlife resources and whether a Lake and Streambed Alteration (LSA) Agreement is required. An LSA Agreement includes measures necessary to protect existing fish and wildlife resources. CDFW may suggest ways to modify your Project that would eliminate or reduce harmful impacts to fish and wildlife resources. CDFW's issuance of an LSA Agreement is a

"Project" subject to CEQA (see Pub. Resources Code 21065). To facilitate issuance of an LSA Agreement, if necessary, the DEIR should fully identify the potential impacts to the lake, stream, or riparian resources, and provide adequate avoidance, mitigation, and monitoring and reporting commitments. Early consultation with CDFW is recommended, since modification of the proposed Project may be required to avoid or reduce impacts to fish and wildlife resources.

Response No. C-36

The comment does not pertain to the content of the Draft EIR. No further response is required.

Comment No. C-37

Environmental Data

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e).) Accordingly, please report any special status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDDB).

Response No. C-37

The comment does not pertain to the content of the Draft EIR. No further response is required.

Comment No. C-38

Filing Fees

Fees are payable upon filing of the Notice of Determination by the Lead Agency and serve to help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying Project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.)

Response No. C-38

The comment is informational in nature and does not pertain to the content of the Draft EIR. No further response is required.

Comment No. C-39

CDFW appreciates the opportunity to comment on the DEIR. Questions regarding this letter should be directed to Dr. Shankar Sharma, Senior Environmental Scientist Specialist and Renewable Energy Lead at Shankar.Sharma@wildlife.ca.gov or (909) 228-3692.

Response No. C-39

This comment is a conclusion to the CDFW Comments and Recommendations letter and does not pertain to the content of the Draft EIR. No further response is required.

3.0 MINOR REVISIONS TO THE DRAFT EIR

3.1 INTRODUCTION

This section includes an errata listing of refinements and clarifications to the Draft EIR, primarily related to minor revisions to text, mitigation measures and the discussion of the Water Supply Assessment, which was updated to provide clarification on the Project's operational water usage.

Revisions herein do not result in new significant environmental impacts, do not constitute significant new information, and do not alter the conclusions of the environmental analysis. Changes are provided in revision marks (underline for new text and ~~strikeout~~ for deleted text).

3.2 MINOR CHANGES AND EDITS TO THE DRAFT EIR

3.2.1 Executive Summary

Table ES-2, page ES-31, MM BR-7: "...solar arrays, and access road locations). The initial survey event must be completed no more than three days prior to vegetation removal or ground disturbing activities."

Table ES-2, pages ES-33 to ES-34, MM BR-9: "Where impacts to listed plants are determined to be unavoidable, the USFWS and/or CDFW shall be consulted for authorization. Should any CESA-listed plant species be detected, an incidental take permit would need to be obtained. Additional mitigation measures to protect or restore listed plant species or their habitat, including but not limited to a salvage plan including seed collection and replanting, may be required by the USFWS or CDFW before impacts are authorized, whichever is appropriate."

Table ES-2, page ES-39, MM BR-13: "MM BR-13: Complete Focused Pre-Construction Surveys for American Badger and Desert Kit Fox Surveys and Implementation of Avoidance Measures.

No more than 30 days prior to the commencement of construction activities, the Applicant shall retain a qualified biologist to conduct pre-construction surveys for American badger and desert kit fox within suitable habitat on the Project Site. If present, occupied ~~badger~~ dens shall be flagged and ground-disturbing activities avoided within 50 feet of the occupied den."

Table ES-2, page ES-39, MM BR-13: "If avoidance of a non-maternity den (impacts to maternity dens is not allowed) is not feasible, badgers or foxes shall be relocated by slowly excavating the burrow (either by hand or mechanized equipment under the direct supervision of the biologist, removing no more than 4 inches at a time) before or after the rearing season (15 February through 1 July). Any passive relocation of badgers or foxes shall occur only after consultation with the CDFW and the biological monitor."

3.2.2 Project Description

Page 2-11, paragraph 4: "The Type 1 Fire Engine would be housed off-site, at a location to be determined in coordination with the County Fire Department within Fire Station #2, located approximately 12 miles from the Project Site."

3.2.3 Biological Resources

Page 3.4-34, top of the page, MM BR-7: “...solar arrays, and access road locations). The initial survey event must be completed no more than three days prior to vegetation removal or ground disturbing activities.”

Page 3.4-38, paragraph 4, MM BR-9: “Where impacts to listed plants are determined to be unavoidable, the USFWS and/or CDFW shall be consulted for authorization. Should any CESA-listed plant species be detected, an incidental take permit would need to be obtained. Additional mitigation measures to protect or restore listed plant species or their habitat, including but not limited to a salvage plan including seed collection and replanting, may be required by the USFWS or CDFW before impacts are authorized, whichever is appropriate.”

Page 3.4-47, paragraph 1, MM BR-13:

“MM BR-13: Complete Focused Pre-Construction Surveys for American Badger and Desert Kit Fox Surveys and Implementation of Avoidance Measures.”

No more than 30 days prior to the commencement of construction activities, the Applicant shall retain a qualified biologist to conduct pre-construction surveys for American badger and desert kit fox within suitable habitat on the Project Site. If present, occupied ~~badger~~ dens shall be flagged and ground-disturbing activities avoided within 50 feet of the occupied den.”

Page 3.4-47, paragraph 2, MM BR-13:

“If avoidance of a non-maternity den (impacts to maternity dens is not allowed) is not feasible, badgers or foxes shall be relocated by slowly excavating the burrow (either by hand or mechanized equipment under the direct supervision of the biologist, removing no more than 4 inches at a time) before or after the rearing season (15 February through 1 July). Any passive relocation of badgers or foxes shall occur only after consultation with the CDFW and the biological monitor.”

3.2.4 Hazards and Hazardous Materials, Section 3.7

Page 3.7-2, paragraph 4: “The Project would use both flow and Li-ion battery technologies, each with fire protection systems designed in accordance with California Fire Code 20169 and will take into consideration the recommendations of the National Fire Protection Association (NFPA) 855, Standard for the Installation of Stationary Energy Storage Systems.”

Page 3.7-3, last paragraph:

“20169 California Fire Code”

The 20169 CFC is an enforceable set of regulations for the safeguarding of public health, safety, and general welfare from the hazards of fire, explosion or dangerous conditions in new and existing buildings, structures, and premises, and to provide safety and assistance to fire fighters and emergency responders during emergency operations ~~(CFC 2017).~~”

Page 3.7-11, paragraph 2: “In addition, fire protection systems for the battery energy storage system (BESS) will be designed in accordance with CFC 20169 and will take into consideration the recommendations of the NFPA 855.”

3.2.5 Utilities and Service Systems, Section 3.11

Page 3.11-1, paragraph 1: “The information in this section is also based on the Water Supply Assessment, prepared by Dubose Design Group (~~January~~June 2021).”

Page 3.11-8, paragraph 1: “The Project’s estimated water demand is 210 AF for construction and ~~227.14~~45 AF for operations over the ~~30~~40-year ~~term~~ life of the ~~proposed Project~~CUP, for an amortized total of ~~14.578~~6 AFY over the ~~30~~40-year ~~term~~ life of the ~~proposed Project~~CUP.”

Page 3.11-8, paragraph 3: “The Project would present 0.06~~4~~ percent of the annual unallocated supply set aside for new nonagricultural projects.”

3.2.6 Cumulative Impacts, Section 4.5.7.2

Page 4-12, paragraph 1: “The Project also intends to commit to contribute its proportionate share to purchase, a Type 1 Fire Engine which shall meet all NFPA standards for structural firefighting for the ICFD. Related Projects are anticipated to contribute their fair share as well as determined by the ~~ICFD~~County.”

Appendix A **MITIGATION MONITORING AND REPORTING PROGRAM**

MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure	Required Time of Compliance	Responsible Implementing Party	Responsible Monitoring Party	Status of Implementation
AGRICULTURAL AND FORESTRY RESOURCES				
<p>AG-1: Payment of Agricultural and Other Benefit Fees One of the following options included below is to be implemented prior to the issuance of a grading permit or building permit for the Project:</p> <p>Mitigation for Non-Prime Farmland Option 1: Provide Agricultural Conservation Easement(s). The Permittee shall procure Agricultural Conservation Easements on a "1 on 1" basis on land of equal size, of equal quality farmland, outside the path of development. The conservation easement shall meet Department of Conservation regulations and shall be recorded prior to issuance of any grading or building permits; or</p> <p>Option 2: Pay Agricultural In-Lieu Mitigation Fee. The Permittee shall pay an "Agricultural In-Lieu Mitigation Fee" in the amount of 20 percent of the fair market value per acre for the total acres of the proposed site based on five comparable sales of land used for agricultural purposes as of the effective date of the permit, including program costs on a cost recovery/time and material basis. The Agricultural In-Lieu Mitigation Fee, will be placed in a trust account administered by the Imperial County Agricultural Commissioner's office and will be used for such purposes as the acquisition, stewardship, preservation, and enhancement of agricultural lands within Imperial County; or,</p> <p>Option 3: Public Benefit Agreement. The Permittee and County shall voluntarily enter into an enforceable Public Benefit Agreement or Development Agreement that includes an Agricultural Benefit Fee payment that is 1) consistent with Board Resolution 2012-005; 2) the Agricultural Benefit Fee must be held by the County in a restricted account to be used by the County only for such purposes as the stewardship, preservation and enhancement of agricultural lands within Imperial County and to implement the goals and objectives of the Agricultural Benefit program, as specified in the Development Agreement, including addressing the mitigation of agricultural job loss on the local economy.</p>	Prior to Construction	Project Applicant	Imperial County	

Mitigation Measure	Required Time of Compliance	Responsible Implementing Party	Responsible Monitoring Party	Status of Implementation
AIR QUALITY				
<p>AIR-1: Regulation VIII (Fugitive Dust Control Measures) All construction sites, regardless of size, must comply with the requirements contained within Regulation VIII.</p> <p><i>Standard Mitigation Measures for Fugitive Dust (PM10) Control</i></p> <ul style="list-style-type: none"> a) All disturbed areas, including Bulk Material storage which is not being actively utilized, shall be effectively stabilized and visible emissions shall be limited to no greater than 20 percent opacity for dust emissions by using water, chemical stabilizers, dust suppressants, tarps, or other suitable material such as vegetative ground cover. b) All on-site and off-site unpaved roads would be effectively stabilized, and visible emissions shall be limited to no greater than 20 percent opacity for dust emissions by paving, chemical stabilizers, dust suppressants and/or watering. c) All unpaved traffic areas 1 acre or more with 75 or more average vehicle trips per day would be effectively stabilized and visible emission shall be limited to no greater than 20 percent opacity for dust emissions by paving, chemical stabilizers, dust suppressants and/or watering. d) The transport of Bulk Materials shall be completely covered unless 6 inches of freeboard space from the top of the container is maintained with no spillage and loss of Bulk Material. In addition, the cargo compartment of all Haul Trucks is to be cleaned and/or washed at delivery site after removal of Bulk Material. e) All Track-Out or Carry-Out would be cleaned at the end of each workday or immediately when mud or dirt extends a cumulative distance of 50 linear feet or more onto a paved road within an urban area. f) Movement of Bulk Material handling or transfer shall be stabilized prior to handling or at points of transfer with application of sufficient amounts of water, chemical stabilizers or by sheltering or enclosing the operation and transfer line. g) The construction of any new unpaved road is prohibited within any area with a population of 500 or more unless the road meets the definition of a temporary unpaved road. Any temporary unpaved road shall be effectively stabilized, and visible emissions shall be limited to no greater than 20 opacity for dust emission by paving, chemical stabilizers, dust suppressants and/or watering. 	During construction	Project Applicant, Construction Contractor	Imperial County	

Mitigation Measure	Required Time of Compliance	Responsible Implementing Party	Responsible Monitoring Party	Status of Implementation
<p>AIR-2: Construction Equipment Control Measures</p> <p><i>Standard Mitigation Measures for Equipment Exhaust Emissions Control</i></p> <ul style="list-style-type: none"> a) Use of equipment with alternative fueled or catalyst-equipped diesel engine, including for all off-road and portable diesel-powered equipment. b) Minimize idling time either by shutting equipment off when not in use or limit the idling time to a maximum of 5 minutes. c) Limit, to the extent feasible, the hours of operation of heavy-duty equipment and/or the number of equipment in use. d) Replace fossil fueled equipment with electrically driven equivalents (provided they are not run via a portable generator set). <p><i>Required Mitigation Measures for Construction Equipment Mobilization</i></p> <ul style="list-style-type: none"> a) The 1.2-mile portion of the access road from the IV Substation to the project site shall be covered with construction mats. b) No more than eight pieces of construction equipment shall be delivered to the project site in one day. c) A speed limit of 15 mph on the access road shall be enforced. <p><i>Required Mitigation Measures for Construction Activities</i></p> <ul style="list-style-type: none"> a) The 1.2-mile portion of the southern access road from the IV Substation to the project site shall be covered with construction mats. b) A material delivery speed limit of 15 mph on the access road shall be enforced. c) For material deliveries from the south, one of the following dust suppressant measures would be required for the 4.4-mile service road: d) A water truck shall apply water every 3 hours, or as deliveries occur; or e) A chemical dust suppressant shall be applied. f) For the 0.3-mile portion of the northern access route that is unpaved (south of Wixom Road to the worker parking area) one of the following dust suppressant measures would be required: <ul style="list-style-type: none"> • A water truck shall apply water every 3 hours, or as worker access occurs; or • A chemical dust suppressant shall be applied. • A water truck shall apply water to all active onsite grading areas every 3 hours. <p><i>Enhanced Mitigation Measures for Construction Equipment</i></p> <p>To help provide a greater degree of reduction of PM emissions from construction combustion equipment, ICAPCD recommends the following measures:</p>	<p>During construction</p>	<p>Project Applicant, Construction Contractor</p>	<p>Imperial County, IAPCD</p>	

Mitigation Measure	Required Time of Compliance	Responsible Implementing Party	Responsible Monitoring Party	Status of Implementation
<p>a) Curtail construction during periods of high ambient pollutant concentrations; this may include ceasing of construction activity during the peak hour of vehicular traffic on adjacent roadways.</p> <p>b) Implement activity management (e.g., rescheduling activities to reduce short-term impacts).</p>				
<p>AIR-3: Operational Dust Control Plan To help reduce fugitive dust emission from on-site unpaved roads and accumulation of small dunes during operations, an Operational Dust Control Plan (ODCP) would be prepared. The ODCP would include strategies for how dust emissions would be controlled and maintained during Project operations. The ODCP would be submitted to the ICAPCD for approval prior to the issuance of a Certificate of Occupancy.</p>	During operation	Project Applicant	Imperial County, IAPCD	
BIOLOGICAL RESOURCES				
<p>BR-1 Compensation for Permanent and Temporary Impacts to Vegetative Communities To compensate for permanent and temporary impacts to on-site vegetative communities, within the Project Site, habitat (which may include preservation areas within portions of the Project Site not impacted by construction or mitigation lands outside of the main Project Site) that contains the same quality of vegetative communities impacted by the Project and that is not already public land shall be preserved and managed in perpetuity at the following ratios – temporary impacts to native vegetation communities shall be mitigated at a 1:1 mitigation ratio (one acre preserved/restored for each acre impacted) and permanent impacts shall be mitigated at a ratio of 2:1. Impacts to CDFW listed sensitive or riparian communities shall be mitigated at a ratio of 3:1. Land acquired/dedicated for impacts to native vegetation communities must be with lands occupied by habitat of a similar type and quality.</p> <p>Prior to the disturbance of vegetation, the Applicant shall obtain County approval of preserved and/or mitigation lands as well as documentation of a recorded conservation easement. The compensation for the loss of habitats may be achieved either by a) on-site habitat creation or enhancement habitats with similar species composition to those present prior to construction, b) offsite creation or enhancement of, or c) participation in an established mitigation bank program.</p> <p>Prior to the removal of native vegetation, if on- or off-site mitigation is required, a Habitat Restoration Plan (HRP) shall be prepared that will guide all restoration and monitoring activities (refer to MM BR-2 for details on the plan requirements).</p>	Prior to Construction	Project Applicant	Imperial County	

<p>BR-2: Develop a Habitat Restoration Plan</p> <p>The Applicant shall restore temporarily disturbed areas to pre-construction conditions or better prior to the issuance of a grading permit and removal of any vegetation and/or wetland habitat. To this end, the Applicant shall retain a County qualified biologist, knowledgeable in the area(s) of annual grassland and wetland habitat restoration, to prepare a Habitat Restoration Plan (HRP). The Applicant shall submit the HRP to the County for approval (in consultation with CDFW and USFWS). The biologist will also be responsible for monitoring the implementation of the plan as well as the progress on achieving the established success criteria. The HRP shall expressly identify the process by which all disturbed areas shall be restored to pre-construction conditions or better. The plan will address restoration and revegetation related to disturbance from construction. It will also address restoration and revegetation required after decommissioning of the Project should this be required. The decommissioning plan shall include, at a minimum, the following items:</p> <ul style="list-style-type: none"> a) Figures depicting areas proposed for temporary disturbance/mitigation lands – The HRP shall include detailed figures indicating the locations and vegetation types of areas proposed for temporary disturbance. These figures shall be updated, as necessary, to reflect current Site conditions should they change. b) Proposed species for restoration/revegetation – The species palette proposed for restoration/revegetation shall include a combination of native annual and perennial species known to currently occur on the Project site and in adjacent habitats. c) Seed source and collection guidelines – Seeds shall first be collected from the stock of native plants occurring on the proposed Project site, during the appropriate collection period (late spring through the summer, depending on the species) and prior to disturbance from construction activities. Additional seed may be collected from stock within a 25-mile radius will be collected to maintain local genetic integrity. If seed collection from these areas is not possible then a seed source must be obtained from a local seed supplier familiar with native species. Seed will be limited to the species and quantity specified in the seed mix palette prepared for the Project. All seed will originate from the Project region, within +/- 1000 feet elevation of the Project site. The seed supplier chosen will provide a list of three references with the bid proposal. The references will include year, contact names, and telephone numbers. Seeds will be tested for percent purity, percent germination, number of pure live seeds per pound, and weed seed content. Seed testing will be the responsibility of the seed supplier. d) Planting methodology – A description of the preferred methods proposed for container plant installation or seeding shall be provided (e.g., hydroseeding, drill seeding, broadcast seeding, etc.). Additionally, a 	<p>Prior to Construction</p>	<p>Project Applicant</p>	<p>Imperial County, CDFW, USFWS</p>	
--	------------------------------	--------------------------	-------------------------------------	--

<p>discussion on timing of seeding, type of irrigation system proposed, potential need of irrigation, type and duration of irrigation, and erosion controls proposed for revegetation activities shall be included.</p> <p>e) Invasive, non-native vegetation Control – A comprehensive discussion on weed control for the Project site will be developed and included in the HRP. This will serve to prevent the type conversion of natural habitats to those dominated by invasive species known to occur in the area.</p> <p>f) Monitoring program – Areas subject to restoration/revegetation shall be monitored to assess conditions and to make recommendations for successful habitat establishment. Monitoring will be performed by a County qualified biologist(s), knowledgeable in the area of annual grassland habitat restoration. Monitoring should include, at a minimum, the following:</p> <ol style="list-style-type: none"> 1. Qualitative Monitoring – Qualitative monitoring surveys will be performed monthly in all restored/revegetated areas for the first year following planting in any phase of the Project. Qualitative monitoring will be on a quarterly schedule thereafter, until final completion approval of each restoration/revegetation area. Qualitative surveys will assess native plant species performance, including growth and survival, germination success, reproduction, plant fitness and health as well as pest or invasive plant problems. A County qualified wildlife biologist will assist in monitoring surveys and will actively search for mammal and other wildlife use. Monitoring at this stage will indicate need for remediation or maintenance work well in advance of final success/failure determination. The monitoring reports will describe site progress and conditions and list all observations pertinent to eventual success, and make recommendations as appropriate re: remedial work, maintenance, etc. 2. Quantitative Monitoring – Quantitative monitoring will occur annually for years one to five or until the success criteria are met. Within each revegetation area, as shown figures referenced above, the biologist will collect data in a series of 1 m² quadrats to estimate cover and density of each plant species within the revegetated areas. Data will be used to measure native species growth performance, to estimate native and non-native species coverage, seed mix germination, native species recruitment and reproduction, and species diversity. Additionally, within wetland habitat restoration areas, the biologist shall conduct sampling events to document the presence of hydric soil characteristics/indicators (if present). Based on these results, the biologist will make recommendations for maintenance or remedial work on the site and for adjustments to the approved seed mix. 				
---	--	--	--	--

<p>a. Success criteria – Criteria for successful restoration/revegetation of disturbed areas shall be provided.</p> <p>b. Reporting – Reporting will include progress reports summarizing site status and recommended remedial measures that will be submitted by the biologist to the County quarterly, with the exception of the site visits immediately preceding the development of each annual status report (see below). Each progress report will list estimated species coverage and diversity, species health and overall vigor, the establishment of volunteer native species, topographical/soils conditions, problem weed species, the use of the site by wildlife species, significant drought stress, and any recommended remedial measures deemed necessary to ensure compliance with specified performance criteria. One annual site status report that summarizes site conditions will be forwarded by the biologist to the County, the USFWS and the CDFW at the end of each year following implementation of this plan until the established success criteria have been met. Each annual report will list species coverage and diversity measured during yearly quantitative surveys, compliance/non-compliance with required performance standards, species health and overall vigor, the establishment of volunteer native species, hydrological and topographical conditions, the use of the site by wildlife species, and the presence of invasive weed species. In the event of substantial noncompliance with the required performance criteria, the reports will include remedial measures deemed necessary to ensure future compliance with specified performance criteria. Each annual report will include, at the minimum:</p> <ul style="list-style-type: none"> • The name, title, and company of all persons involved in restoration monitoring and report preparation • Maps or aerials showing restoration areas, transect locations, and photo documentation locations. • An explanation of the methods used to perform the work, including the number of acres treated for removal of non-native plants • An assessment of the treatment success. 				
---	--	--	--	--

Mitigation Measure	Required Time of Compliance	Responsible Implementing Party	Responsible Monitoring Party	Status of Implementation
<p>BR-3: Implement a Worker Environmental Education Program Prior to any Project activities on the Site (i.e., surveying, mobilization, fencing, grading, or construction), a Worker Environmental Education Program (WEEP) shall be prepared and implemented by a qualified biologist(s). The WEEP shall be submitted to the County for review and approval prior to issuance of construction permits and implemented throughout the duration of the construction activities. The WEEP shall be put into action prior to the beginning of any Site related activities, including but not limited to those activities listed above, and implemented throughout the duration of Project construction. The WEEP, shall include, at a minimum, the following items:</p> <ul style="list-style-type: none"> a) Training materials and briefings shall include, but not be limited to a discussion of the Federal and State Endangered Species Acts, BGEPA, and the MBTA; the consequences of non-compliance with these acts; identification and values of plant and wildlife species and significant natural plant community habitats; hazardous substance spill prevention and containment measures; a contact person and phone number in the event of the discovery of dead or injured wildlife; and a review of mitigation requirements. b) A discussion of measures to be implemented for avoidance of the sensitive resources discussed above and the identification of an on-site contact in the event of the discovery of sensitive species on the Site. c) Protocols to be followed when roadkill is encountered in the work area or along access roads to minimize potential for additional mortality of scavengers, including listed species such as the California condor and the identification of an on-site representative to whom the roadkill will be reported. Roadkill shall be reported to the appropriate local animal control agency within 24 hours. d) Maps showing the known locations of special status wildlife, populations of rare plants and sensitive vegetative communities, seasonal depressions and known waterbodies, wetland habitat, exclusion areas, and other construction limitations (e.g., limited operating periods, etc.). These features shall be included on the Project's plans and specifications drawings. e) Literature and photographs or illustrations of potentially occurring special-status plant and/or wildlife species will be provided to all Project contractors and heavy equipment operators. f) The Applicant shall provide to the County evidence that all on-site construction and security personnel have completed the WEEP prior to the start of Site mobilization. A special hardhat sticker or wallet size card shall be issued to all personnel completing the training, which shall be carried with the trained personnel at all times while on the Project Site. All 	<p>Prior to and during Construction</p>	<p>Project Applicant, Construction Contractor</p>	<p>Imperial County</p>	

Mitigation Measure	Required Time of Compliance	Responsible Implementing Party	Responsible Monitoring Party	Status of Implementation
<p>new personnel shall receive this training and may work in the field for no more than five days without participating in the WEEP. A log of all personnel who have completed the WEEP training shall be kept on Site.</p> <p>g) A weather protected bulletin board or binder shall be centrally placed or kept on-site (e.g., in the break room, construction foreman's vehicle, construction trailer, etc.) for the duration of the construction. This board or binder will provide key provisions of regulations or Project conditions as they relate to biological resources or as they apply to grading activities. This information shall be easily accessible for personnel in all active work areas.</p> <p>h) Develop a standalone version of the WEEP, that covers all previously discussed items above, and that can be used as a reference for maintenance personnel during Project operations.</p>				
<p>BR-4: Implementation of Best Management Practices BMPs will be implemented as standard operating procedures during all ground disturbance, construction, and operation related activities to avoid or minimize Project impacts on biological resources. These BMPs will include but are not limited to the following:</p> <p>a) Compliance with BMPs will be documented and provided to the County in a written report on an annual basis. The report shall include a summary of the construction activities completed, a review of the sensitive plants and wildlife encountered, a list of compliance actions and any remedial actions taken to correct the actions, and the status of ongoing mitigation efforts.</p> <p>b) Prior to ground disturbance of any kind the Project work areas shall be clearly delineated by stakes, flags, or other clearly identifiable system.</p> <p>c) Vehicles and equipment shall be parked on pavement, existing roads, and previously disturbed areas to the extent practicable.</p> <p>d) Speed limit signs, imposing a speed limit of 15 miles per hour, will be installed throughout the Project Site prior to initiation of Site disturbance and/or construction. To minimize disturbance of areas outside of the construction zone, all Project-related vehicle traffic shall be restricted to established roads, construction areas, and other designated areas. These areas will be included in preconstruction surveys and to the extent possible, should be established in locations disturbed by previous activities to prevent further impacts. Off-road traffic outside of designated Project areas will be prohibited.</p> <p>e) No vehicles or equipment shall be refueled within 100 feet of an ephemeral drainage or wetland unless a bermed and lined refueling area is constructed. Spill kits shall be maintained on-site in sufficient quantity to accommodate at least three complete vehicle tank failures of 50</p>	<p>During Construction and operation</p>	<p>Project Applicant, Construction Contractor</p>	<p>Imperial County</p>	

Mitigation Measure	Required Time of Compliance	Responsible Implementing Party	Responsible Monitoring Party	Status of Implementation
<p>gallons each. Any vehicles driven and/or operated within or adjacent to drainages or wetlands shall be checked and maintained daily to prevent leaks of materials.</p> <p>f) All general trash, food-related trash items (e.g., wrappers, cans, bottles, food scraps, cigarettes, etc.) and other human-generated debris will be stored in animal proof containers and/or removed from the Site each day. No deliberate feeding of wildlife will be allowed.</p> <p>g) All pipes and culverts with a diameter of greater than 4 inches shall be capped or taped closed. Prior to capping or taping the pipe/culvert shall be inspected for the presence of wildlife. If encountered the wildlife shall be allowed to escape unimpeded.</p> <p>h) No firearms will be allowed on the Project Site, unless otherwise approved for security personnel.</p> <p>i) To prevent harassment or mortality of listed, special-status species and common wildlife, or destruction of their habitats no domesticated animals of any kind shall be permitted in any Project area.</p> <p>j) Use of chemicals, fuels, lubricants, or biocides will comply with all local, state, and federal regulations. All uses of such compounds shall observe label and other restrictions mandated by the U.S. EPA, California Department of Food and Agriculture, and other state and federal legislation, as well as additional Project-related restrictions deemed necessary by the USFWS and CDFW. Use of rodenticides is restricted.</p> <p>k) Any contractor or employee that inadvertently kills or injures a special-status animal, or finds one either dead, injured, or entrapped, will immediately report the incident to the on-site representative identified in the WEEP. The representative will contact the USFWS, CDFW, and County by telephone by the end of the day, or at the beginning of the next working day if the agency office is closed. In addition, formal notification shall be provided in writing within three working days of the incident or finding. Notification will include the date, time, location, and circumstances of the incident. Any threatened or endangered species found dead or injured will be turned over immediately to CDFW for care, analysis, or disposition.</p> <p>l) During the Site disturbance and/or construction phase, grading and construction activities before dawn and after dusk, is prohibited.</p> <p>m) Avoidance and minimization of vegetation removal within active construction areas, including the flagging of sensitive vegetative communities or plants.</p> <p>n) Avoidance and minimization of construction activities resulting in impacts to wetlands, streambeds, and banks of any ephemeral drainage unless permitted to do so.</p> <p>o) All excavation, steep-walled holes, or trenches in excess of 6 inches in</p>				

Mitigation Measure	Required Time of Compliance	Responsible Implementing Party	Responsible Monitoring Party	Status of Implementation
<p>depth will be covered at the close of each working day by plywood or similar materials or provided with one or more escape ramps constructed of earth dirt fill or wooden planks. Trenches will also be inspected for entrapped wildlife each morning prior to onset of construction activities and immediately prior to covering with plywood at the end of each working day. Before such holes or trenches are filled, they will be thoroughly inspected for entrapped wildlife. Any wildlife discovered will be allowed to escape before construction activities are allowed to resume or removed from the trench or hole by a qualified biologist holding the appropriate permits (if required).</p> <p>p) New light sources will be minimized, and lighting will be designed (e.g., using down- cast lights) to limit the lighted area to the minimum necessary.</p>				
<p>BR-5: Wildlife Pre-Construction Surveys and Biological Monitoring Prior to ground disturbance or vegetation clearing within the Project Site, a qualified biologist shall conduct surveys for wildlife (no more than 72 hours prior to Site disturbing activities) where suitable habitat is present and directly impacted by construction activities. Wildlife found within the Project Site or in areas potentially affected by the Project will be relocated to the nearest suitable habitat that will not be affected by the Project prior to the start of construction. Special-status species found within a Project impact area shall be relocated by an authorized biologist to suitable habitat outside the impact area.</p>	Prior to Construction	Project Applicant	Imperial County	
<p>BR-6: Implement Biological Construction Monitoring Prior to the commencement of ground disturbance or Site mobilization activities the Applicant shall retain a qualified biologist(s), for the duration of Project construction, with demonstrated expertise with listed and/or special-status plants, terrestrial mammals, and reptiles to monitor(s), on a daily basis, all construction activities. The qualified biologist(s) shall be present at all times during ground disturbing activities immediately adjacent to, or within, habitat that supports populations of the listed or special status species identified within the Project boundaries. Any listed or special-status plants shall be flagged for avoidance. Any special-status terrestrial species found within a Project impact area shall be relocated by the by the authorized biologist and relocated to suitable habitat outside the impact area. If the installation of exclusion fencing is deemed necessary by the authorized biologist, the authorized biologist shall direct the installation of the fence. Clearance surveys for special-status species shall be conducted by the authorized biologist prior to the initiation of construction each day.</p>	Prior to Construction	Project Applicant	Imperial County	

Mitigation Measure	Required Time of Compliance	Responsible Implementing Party	Responsible Monitoring Party	Status of Implementation
<p>If the biological monitor observes a dead or injured listed or special-status wildlife species on the construction Site during construction, a written report shall be sent to the County, CDFW and/or USFWS within five calendar days. The report will include the date, time of the finding or incident (if known), and location of the carcass and circumstances of its death (if known). The biological monitor shall, immediately upon finding the remains, coordinate with the on-site construction foreman to discuss the events that caused the mortality (if known) and implement measures to prevent future incidents. Details of these measures shall be included with the report. Species remains shall be collected and frozen as soon as possible, and CDFW and/or USFWS shall be contacted regarding ultimate disposal of the remains.</p>				
<p>BR-7: Conduct Pre-Construction Surveys for Nesting and Breeding Birds and Implementation of Avoidance Measures Prior to any Site disturbance (i.e., mobilization, staging, grading or construction), the Applicant shall retain a qualified biologist(s) to conduct pre-construction surveys for nesting birds within the recognized breeding season (generally February 15 – September 15 but may start earlier for some raptor species) in all areas within 500 feet of Project components (staging areas, substation sites, battery facility structures including, solar arrays, and access road locations). The initial survey event must be completed no more than three days prior to vegetation removal or ground disturbing activities. The required survey dates may be modified based on local conditions, as determined by the qualified biologist(s), with the approval of the County, in consultation with the USFWS and/or CDFW. Measures intended to exclude nesting birds shall not be implemented without prior approval by the County in consultation with USFWS and/or CDFW and shall not exceed County noise standards.</p> <p>If breeding birds with active nests are found prior to or during construction, a biological monitor shall establish a 300-foot buffer around the nest for ground-based construction activities and no activities will be allowed within the buffer(s) until the young have fledged from the nest or the nest fails.</p> <p>The prescribed buffers may be adjusted to reflect existing conditions including ambient noise, topography, and disturbance with the approval of the County, CDFW and USFWS as appropriate. The biological monitor(s) shall conduct regular monitoring of the nest to determine success/failure and to help ensure that Project activities are not conducted within the buffer(s) until the nesting cycle is complete or the nest fails. The biological monitor(s) shall be responsible for documenting the results of the surveys and ongoing monitoring and will provide a copy of the monitoring reports for impact areas to the respective agencies.</p>	<p>Prior to and during Construction</p>	<p>Project Applicant, Construction Contractor</p>	<p>Imperial County, CDFW, USFWS</p>	

Mitigation Measure	Required Time of Compliance	Responsible Implementing Party	Responsible Monitoring Party	Status of Implementation
<p>If for any reason a bird nest must be removed during the nesting season, the Applicant shall provide written documentation providing concurrence from the USFWS and CDFW authorizing the nest relocation. Additionally, the Applicant shall provide a written report documenting the relocation efforts. The report shall include what actions were taken to avoid moving the nest, the location of the nest, what species is being relocated, the number and condition of the eggs taken from the nest, the location of where the eggs are incubated, the survival rate, the location of the nests where the chicks are relocated, and whether the birds were accepted by the adopted parent.</p> <p>Surveys shall be conducted to include all structural components, related structures, as well as all construction equipment. If birds are found to be nesting in facility structures, buffers as described above shall be implemented. If birds are found to be nesting in construction equipment, that equipment shall not be used until the young have fledged the nest or, if no young are present, until after the breeding season has passed.</p> <p>If trees are to be removed as part of Project-related construction activities, they will be done so outside of the nesting season to avoid additional impacts to nesting raptors. If removal during the nesting season cannot be avoided, the biological monitor must confirm that the nest is vacant prior to its removal. If nests are found within these structures and contain eggs or young, the biological monitor shall allow no activities within a 300-foot buffer for nesting birds and/or a 500-foot buffer for raptors until the young have fledged the nest.</p>				
<p>BR-8: Implement Avian Power Line Interaction Committee guidelines The Applicant will be required to construct all transmission facilities, towers, poles, and lines in accordance with and comply with all policies set forth in the Suggested Practices for Raptor Protection on Power Lines: The State of the Art in 2006 and Reducing Avian Collisions with Power Lines: The State of the Art in 2012 (APLIC), to minimize avian electrocutions as a result of the construction of the Project. Details of design components shall be indicated on all construction plans and measures to comply with Avian Power Line Interaction Committee (APLIC) policies and guidelines shall be detailed in a separate attachment, all of which will be submitted with the construction permit application. The Applicant shall be required to monitor for new versions of the APLIC guidelines and update designs or implement new measures as needed during Project construction, provided these actions do not require the purchase of previously ordered transmission line structures. A review of compliance with submitted materials will be conducted prior to the final County inspection.</p>	<p>Prior to and during Construction</p>	<p>Project Applicant</p>	<p>Imperial County, APLIC</p>	

Mitigation Measure	Required Time of Compliance	Responsible Implementing Party	Responsible Monitoring Party	Status of Implementation
<p>BR-9: Conduct Pre-Construction Surveys for State and Federally Threatened, Endangered, Proposed, Petitioned, and Candidate Plants and Implementation of Avoidance Measures</p> <p>Prior to initial ground disturbance and for undisturbed areas in subsequent construction years, the Applicant shall conduct pre- construction surveys for State and federally listed Threatened and Endangered, Proposed, Petitioned, and Candidate plants in all areas subject to ground-disturbing activity, including, but not limited to, battery facility structures including, access roads, poles/towers, solar array footing preparation, construction areas, and assembly yards. The surveys shall be conducted during the appropriate blooming period(s) by a qualified plant ecologist/biologist according to protocols established by the USFWS, CDFW, and CNPS. All listed plant species found shall be marked and avoided. Any populations of special-status plants found during surveys will be fully described, mapped, and a CNPS Field Survey Form or written equivalent shall be prepared.</p> <p>These surveys must be accomplished during a year in which rainfall totals are at least 80 percent of average and in which the temporal distribution of rainfall is not highly abnormal (e.g., with most rainfall occurring very early or late in the season) to be reasonably certain of the presence/absence of rare plant species, unless surveys of reference populations document that precipitation conditions would not have adversely affected the ability to detect the species. This condition may be waived with the approval of the County after consultation with the CDFW and USFWS. If a listed plant species cannot be avoided, consultation with USFWS and CDFW will occur.</p> <p>Prior to Site grading or vegetation removal, any populations of listed plant species identified during the surveys within the Project limits and beyond, shall be protected and a buffer zone placed around each population. The buffer zone shall be established around these areas and shall be of sufficient size to eliminate potential disturbance to the plants from human activity and any other potential sources of disturbance including human trampling, erosion, and dust. The size of the buffer depends upon the proposed use of the immediately adjacent lands and includes consideration of the plant's ecological requirements (e.g., sunlight, moisture, shade tolerance, physical and chemical characteristics of soils) that are identified by a qualified plant ecologist and/or botanist. The buffer for herbaceous and shrub species shall be, at minimum, 50 feet from the perimeter of the population or the individual. A smaller buffer may be established, provided there are adequate measures in place to avoid the take of the species, with the approval of the USFWS, CDFW, and County.</p>	<p>Prior to Construction</p>	<p>Project Applicant, Construction Contractor</p>	<p>Imperial County, CDFW, USFWS, CNPS</p>	

Mitigation Measure	Required Time of Compliance	Responsible Implementing Party	Responsible Monitoring Party	Status of Implementation
<p>Where impacts to listed plants are determined to be unavoidable, the USFWS and/or CDFW shall be consulted for authorization. Should any CESA-listed plant species be detected, an incidental take permit would need to be obtained. Additional mitigation measures to protect or restore listed plant species or their habitat, including but not limited to a salvage plan including seed collection and replanting, may be required by the USFWS or CDFW before impacts are authorized, whichever is appropriate.</p>				
<p>BR-10: Compensate for Impacts to State and Federally Threatened, Endangered, Proposed, Petitioned, and Candidate Plants To compensate for permanent impacts to State and Federally Threatened, Endangered, Proposed, Petitioned and Candidate plants, habitat (which may include preservation areas within the undisturbed areas of the Project footprint, mitigation lands outside of the main Project Site or a combination of both) that is not already public land shall be preserved and managed in perpetuity at a 1:1 mitigation ratio (one acre preserved for each acre impacted). Prior to the disturbance of habitat for or take of listed plant species the Applicant will be required to obtain County approval of preserved and/or mitigation lands as well as provide documentation of a recorded conservation easement(s). Compensation for temporary impacts shall include land acquisition and/or preservation at a 0.5:1 ratio. The preserved habitat for a significantly impacted plant species shall be of equal or greater habitat quality to the impacted areas in terms of soil features, extent of disturbance, vegetation structure, and will contain verified extant populations, of the same size or greater, of the State or Federally listed plants that are impacted.</p> <p>Habitat shall be preserved through the use of permanent open space easements. Mitigation lands cannot be located on land that is currently held publicly. Mitigation lands may include (depending on the habitat requirements of particular species):</p> <ul style="list-style-type: none"> • Areas outside the Project boundary, but within the general Project region • Preservation areas within portions of the Project Site that are at least 100 feet from Project components and are either (1) not permanently impacted by construction and operation of the Project, or (2) temporarily disturbed and then restored according to the requirements in Mitigation Measure BR-2; and • Degraded areas (e.g., areas that have been actively dry-farmed) that are restored to high quality habitat through the implementation of a County-approved restoration plan. <p>Criteria for appropriate mitigation land are species specific; the following factors must be considered in assessing the quality of potential mitigation habitat: (1)</p>	<p>Prior to and during construction</p>	<p>Project Applicant</p>	<p>Imperial County, CDFW, USFWS</p>	

Mitigation Measure	Required Time of Compliance	Responsible Implementing Party	Responsible Monitoring Party	Status of Implementation
<p>Current land use; (2) Location (e.g., habitat corridor, part of a large block of existing habitat, adjacency to source populations, proximity to Project facilities or other potential sources of disturbance); (3) Vegetation composition and structure; (4) Slope; (5) Soil composition and drainage; and (6) Level of occupancy or use by relevant species.</p> <p>The Applicant shall either provide open space easements or provide funds for the acquisition of such easements to a “qualified easement holder” (defined below). The CDFW is a qualified easement holder. To qualify as a “qualified easement holder” a private land trust must have the following:</p> <ul style="list-style-type: none"> • Substantial experience managing open space easements that are created to meet mitigation requirements for impacts to sensitive species • Adopted the Land Trust Alliance’s Standards and Practices • A stewardship endowment fund to pay for its perpetual stewardship obligations <p>The County shall determine whether a proposed easement holder meets these requirements.</p> <p>The Applicant shall also be responsible for donating to the conservation easement holder fees sufficient to cover: (1) Administrative costs incurred in the creation of the conservation easement (appraisal, documenting baseline conditions, etc.) and (2) Funds in the form of a non-wasting endowment to cover the cost of monitoring and enforcing the terms of the conservation easement in perpetuity. The amount of these administrative and stewardship fees shall be determined by the conservation easement holder in consultation with the County.</p> <p>Open space easement(s) shall also be subject to the following conditions:</p> <ul style="list-style-type: none"> • The locations of acceptable easement(s) shall be developed with approval of CDFW and USFWS. • The primary purpose of the easement(s) shall be conservation of impacted species and habitats, but the conservation easement(s) shall also allow livestock grazing when and where it is deemed beneficial for the habitat needs of impacted species. <p>Open space easement(s) shall:</p> <ul style="list-style-type: none"> • Be held in perpetuity by a qualified easement holder (defined above). • Be subject to a legally binding agreement that shall: (1) Be recorded with the County Recorder(s); and (2) Name CDFW or another organization to which the easement(s) will be conveyed if the original holder is dissolved. • Be subject to the management requirements outlined in Mitigation 				

Mitigation Measure	Required Time of Compliance	Responsible Implementing Party	Responsible Monitoring Party	Status of Implementation
<p>Measure BR-2.</p> <p>However, if lands acquired or protected for the compensation of permanent impacts to wildlife and/or vegetative communities (discussed above) contain similar sized populations of the impacted listed plant species, no further mitigation would be required.</p>				
<p>BR-11: Conduct Pre-Construction Surveys for Special-Status Plants and Implement Avoidance Measures</p> <p>Prior to initial ground disturbance and for undisturbed areas in subsequent construction years, the Applicant shall conduct pre-construction surveys for special-status plant species in all areas subject to ground-disturbing activity, including, but not limited to, battery facility structures including, access roads, poles/towers, construction areas, and assembly yards. The surveys shall be conducted during the appropriate blooming period(s) by a qualified plant ecologist/biologist according to protocols established by the USFWS, CDFW, and CNPS. All listed plant species found shall be marked and avoided. Any populations of special-status plants found during surveys will be fully described, mapped, and a CNPS Field Survey Form or written equivalent shall be prepared. These surveys must be accomplished during a year in which rainfall totals are at least 80 percent of average and in which the temporal distribution of rainfall is not highly abnormal (e.g., with most of the rainfall occurring very early or late in the season) to be reasonably certain of the presence/absence of rare plant species, unless surveys of reference populations document that precipitation conditions would not have adversely affected the detectability of the species.</p> <p>Prior to Site grading, any populations of special-status plant species identified during the surveys shall be protected by a buffer zone. The buffer zone shall be established around these areas and shall be of sufficient size to eliminate potential disturbance to the plants from human activity and any other potential sources of disturbance including human trampling, erosion, and dust. The size of the buffer depends upon the proposed use of the immediately adjacent lands and includes consideration of the plant's ecological requirements (e.g., sunlight, moisture, shade tolerance, physical and chemical characteristics of soils) that are identified by a qualified plant ecologist and/or botanist. The buffer for herbaceous and shrub species shall be, at minimum, 50 feet from the perimeter of the population or the individual. A smaller buffer may be established, provided there are adequate measures in place to avoid the take of the species, with the approval of the USFWS, CDFW, and County. Highly visible flagging shall be placed along the buffer area and remain in good working order during the duration of any construction activities in the area. If Project related impacts result in the loss of more than 10 percent of the on-site population of any Special-Status plant</p>	<p>Prior to Construction</p>	<p>Project Applicant, Construction Contractor</p>	<p>Imperial County, CDFW, USFWS, CNPS</p>	

Mitigation Measure	Required Time of Compliance	Responsible Implementing Party	Responsible Monitoring Party	Status of Implementation
species, compensatory mitigation will be required as described below.				
<p>BR-12: Compensate for Impacts to Special-Status Plant Species</p> <p>If Project related impacts result in the loss of more than 10 percent of the on-site population of any Special-Status plant species, compensatory mitigation will be required. Prior to the disturbance of habitat for or take of Special Status plants/populations the Applicant must receive County approval of preserved and/or mitigation lands as well as present documentation of a recorded conservation easement(s). Compensation will be required for all impacts that exceed the 10 percent threshold (e.g., impacts to 15 percent of a population will only require compensation for 5 percent or the amount of impacts that exceed the 10 percent threshold). To compensate for permanent impacts to special-status plant species, habitat (which may include preservation of areas within the undisturbed areas of the Project footprint, mitigation lands outside of the main Project Site or a combination of both) that is not already public land shall be preserved and managed in perpetuity at a 1:1 mitigation ratio (one acre preserved for each acre impacted). Compensation for temporary impacts shall include land acquisition and/or preservation at a 0.5:1 ratio. The preserved habitat for a significantly impacted plant species shall be of equal or greater habitat quality to the impacted areas in terms of soil features, extent of disturbance, vegetation structure, and will contain verified extant populations, of the same size or greater, of the special-status plants that are impacted. Impacts could include direct impacts resulting from loss of habitat or indirect impacts if a significant population or portion thereof is unable to be avoided.</p> <p>Habitat shall be preserved by using permanent open space easements. Mitigation lands cannot be located on land that is currently publicly held.</p> <p>Mitigation lands may include (depending on the habitat requirements of particular species) the following:</p> <ul style="list-style-type: none"> • Areas outside the Project boundary, but within the County • Preservation areas within portions of the Project Site that are at least 100 feet from Project facilities and are either (1) not permanently impacted by construction and operation of the Project, or (2) are temporarily disturbed and then restored according to the requirements in Mitigation Measure BR-2 • Criteria for appropriate mitigation land are species-specific; however, the following factors must be considered in assessing the quality of potential mitigation habitat: (1) Current land use; (2) Location (e.g., habitat corridor, part of a large block of existing habitat, adjacency to source populations, proximity to Project facilities or other potential sources of 	Prior to Construction	Project Applicant	Imperial County, CDFW, USFWS, CNPS	

Mitigation Measure	Required Time of Compliance	Responsible Implementing Party	Responsible Monitoring Party	Status of Implementation
<p>disturbance); (3) Vegetation composition and structure; (4) Slope; (5) Soil composition and drainage; and (6) Level of occupancy or use by relevant species.</p> <p>The Applicant shall either provide open space easements or provide funds for the acquisition of open space easements to a “qualified easement holder” (defined below). CDFW is a qualified easement holder. To qualify as a “qualified easement holder” a private land trust must have the following:</p> <ul style="list-style-type: none"> • Substantial experience managing open space easements that are created to meet mitigation requirements for impacts to special status species • Adopted the Land Trust Alliance’s Standards and Practices • A stewardship endowment fund to pay for its perpetual stewardship obligations <p>The County shall determine whether a proposed easement holder meets these requirements.</p> <p>The County shall determine whether a proposed easement holder meets these requirements.</p> <p>The Applicant shall also be responsible for donating to the easement holder fees sufficient to cover: (1) Administrative costs incurred in the creation of the easement (appraisal, documenting baseline conditions, etc.) and (2) Funds in the form of a non-wasting endowment to cover the cost of monitoring and enforcing the terms of the easement in perpetuity. The amount of these administrative and stewardship fees shall be determined by the easement holder in consultation with the County.</p> <p>Open space easement(s) shall also be subject to the following conditions:</p> <ul style="list-style-type: none"> • The locations of acceptable easement(s) shall be developed with approval of CDFW and USFWS • The primary purpose of the easement(s) shall be conservation of impacted species and habitats, but the easement(s) shall also allow livestock grazing when and where it is deemed beneficial for the habitat needs of impacted species <p>Open space easement(s) shall:</p> <ul style="list-style-type: none"> • Be held in perpetuity by a qualified easement holder (defined above) • Be subject to a legally binding agreement that shall: (1) Be recorded with the County Recorder(s); and (2) Name CDFW or another organization to 				

Mitigation Measure	Required Time of Compliance	Responsible Implementing Party	Responsible Monitoring Party	Status of Implementation
<p>which the easement(s) will be conveyed if the original holder is dissolved</p> <ul style="list-style-type: none"> • Be subject to the management requirements outlined in Mitigation Measure BR-2 <p>If lands acquired or protected for the compensation of permanent impacts to wildlife and/or vegetative communities contain similar sized populations of the impacted special-status plant species, of equal or greater habitat value, these mitigation lands may be used to achieve the required compensation ratios for special status plant species.</p>				
<p>BR-13: Complete Focused Pre-Construction Surveys for American Badger and Desert Kit Fox Surveys and Implementation of Avoidance Measures</p> <p>No more than 30 days prior to the commencement of construction activities, the Applicant shall retain a qualified biologist to conduct pre-construction surveys for American badger and desert kit fox within suitable habitat on the Project Site. If present, occupied dens shall be flagged and ground-disturbing activities avoided within 50 feet of the occupied den. Maternity dens shall be avoided during pup-rearing season (15 February through 1 July) and a minimum 200-foot buffer established. The extent of buffers shall be flagged in the field utilizing a method highly visible by construction crews. Buffers may be modified with the concurrence of the CDFW. Maternity dens shall be flagged for avoidance, identified on construction maps, and a biological monitor shall be present during construction to monitor for adequate protection of all identified dens and to help ensure that all flagging is kept in good working order.</p> <p>If avoidance of a non-maternity den (impacts to maternity dens is not allowed) is not feasible, badgers or foxes shall be relocated by slowly excavating the burrow (either by hand or mechanized equipment under the direct supervision of the biologist, removing no more than 4 inches at a time) before or after the rearing season (15 February through 1 July). Any passive relocation of badgers or foxes shall occur only after consultation with the CDFW and the biological monitor.</p> <p>Prior to the final County inspection or occupancy, whichever comes first, a written report documenting all badger related activities (e.g., den flagging, monitoring, badger removal, etc.) shall be provided to the County. A copy of the report will also be provided to the CDFW.</p>	Prior to Construction	Project Applicant	Imperial County, CDFW	
<p>BR-14: Pre-Construction Surveys and Avoidance/Relocation Measures for Flat-tailed Horned Lizard</p> <p>Focused pre-construction surveys shall be conducted for flat-tailed horned lizard. During construction, areas of active surface disturbance shall be surveyed</p>	Prior to Construction	Project Applicant	Imperial County, CDFW, USFWS	

Mitigation Measure	Required Time of Compliance	Responsible Implementing Party	Responsible Monitoring Party	Status of Implementation
<p>periodically, at least hourly, when surface temperatures exceed 29°C (85°F) for the presence of flat-tailed horned lizard. Flat-tailed horned lizards would be removed from harm's way during construction activities by the on-site biological monitor(s). To the extent feasible, methods to find flattailed horned lizards would be designed to achieve a maximal capture rate and would include, but not be limited to using strip transects, tracking, and raking around shrubs. During construction, the minimum survey effort would be 30 minutes per 0.40 hectare (one acre). Persons that handle flat-tailed horned lizards would first obtain all necessary permits and authorization from the CDFW. A Horned Lizard Observation Data Sheet and a Project Reporting Form, per Appendix 8 of the Rangewide Management Strategy, would also need to be completed. During construction, quarterly reports describing flat-tailed horned lizards removal activity would be submitted to the USFWS, CDFW, and the County.</p> <p>The removal of flat-tailed horned lizard out of harm's way would include relocation to nearby suitable habitat in low-impact areas of the Yuba Management Area, which is located to the west and south of the Project Site. Relocated flat-tailed horned lizards would be placed in the shade of a large shrub in undisturbed habitat. If surface temperatures in the sun are less than 24°C (75°F) or exceed 38°C (100°F), a qualified biologist, if authorized, would hold the flat- tailed horned lizard for later release. Initially, captured flat-tailed horned lizards would be held in a cloth bag, cooler, or other appropriate clean, dry container from which the lizard cannot escape. Lizards would be held at temperatures between 75°F and 90°F and would not be exposed to direct sunlight. Release would occur as soon as possible after capture and during daylight hours. The qualified biologist would be allowed some judgment and discretion when relocating lizards to maximize survival of flat-tailed horned lizards found in the Project area.</p> <ul style="list-style-type: none"> To the maximum extent practicable, grading in flat-tailed horned lizard habitat would be conducted during the active season, which is defined as March 1 through September 30, or when ground temperatures are between 24°C (75°F) and 38°C (100°F). If grading cannot be conducted during this time, any flat-tailed horned lizards found would be removed to low-impact areas (see above) where suitable burrowing habitat exists, (e.g., sandy substrates and shrub cover). 				
<p>BR-15: Compensation for Impact to Flat-Tailed Horned Lizard Pursuant to Title 43 CFR and the Federal Land Policy and Management Act of 1976, federal land management agencies may permit actions that result in flat-tailed horned lizard habitat loss on their lands; however, for losses both within and outside the Management Areas, compensation is charged if residual effects would</p>	After construction	Project Applicant	Imperial County	

Mitigation Measure	Required Time of Compliance	Responsible Implementing Party	Responsible Monitoring Party	Status of Implementation
<p>occur after all reasonable on-site mitigation has been applied. The goal of compensation is to prevent the net loss of flat-tailed horned lizard habitat and make the net effect of a project neutral or positive to flat-tailed horned lizards by maintaining a habitat base for flat-tailed horned lizards. To achieve this goal, compensation will be based on the acreage of flat-tailed horned lizard habitat lost after all reasonable on-site mitigation has been applied at a 1:1 ratio for habitat lost outside a flat-tailed horned lizard Management Area. For this Project, compensation will be required for a loss of approximately 54 acres of flat-tailed horned lizard habitat.</p>				
<p>BR-16: Develop a Habitat Mitigation and Monitoring Plan To help ensure the success of on-site preserved land and acquired mitigation lands, required for compensation of permanent impacts to vegetative communities and listed or special-status plants and wildlife, the Applicant shall retain a qualified biologist to prepare a Habitat Monitoring and Mitigation Plan (HMMP). The HMMP will be submitted to the County for approval, prior to the issuance of a construction permit. Prior to the final County inspection final impact acreages must be presented to the County and acquisition of off-site lands must be verified.</p> <p>The HMMP will include, at a minimum, the following information:</p> <ol style="list-style-type: none"> a) Summary of anticipated habitat impacts and the proposed mitigation. b) Detailed description of the location and boundaries of undisturbed Project areas proposed for preservation, off-site mitigation lands and a description of existing site-wide conditions. The HMMP shall include detailed analysis showing that the mitigation lands meet the performance criteria outlined in MM BR-2 (Develop a Habitat Restoration Plan) and MM BR-15 (Compensate for Impacts to Flat-Tailed Horned Lizard). c) Discussion of measures to be undertaken to enhance (e.g., through focused management) the on-site preserved habitat and off-site mitigation lands for listed and special-status species. d) Description of management and maintenance measures (e.g., vegetation management, fencing maintenance, etc.). e) Discussion of habitat and species monitoring measures for on-site preservation areas and offsite mitigation lands, including specific, objectives, performance criteria, monitoring methods, data analysis, reporting requirements, monitoring schedule, etc. f) Development of a monitoring strategy for the monitoring of indirect impacts to vegetation and wildlife from alteration to the solar and hydric regimes as a result of Project facilities. g) Development of a monitoring strategy, which shall serve to document the persistence of flat-tailed horned lizard populations within the Project Site and on mitigation lands. This monitoring will be conducted for a minimum 	<p>Prior to and after construction</p>	<p>Project Applicant</p>	<p>Imperial County</p>	

Mitigation Measure	Required Time of Compliance	Responsible Implementing Party	Responsible Monitoring Party	Status of Implementation
<p>of 5 years after the completion of construction activities. The strategy should include, at the minimum, the following:</p> <ul style="list-style-type: none"> h) Documentation of pre-Project population levels for the species noted above, based on results of focused pre-construction surveys and previously supplied Applicant data. i) On-going monitoring of species populations upon completion of construction activities, while the Project is in operation, for a minimum of three years. j) Monitoring of reference populations for this species in areas that contain undisturbed habitat, such as the Yuba Management Area. k) An analysis of the comparison of percent changes in population levels at the Project and reference sites to be used in the determination of additional compensatory mitigation. l) The applicant shall prepare a contingency plan for mitigation elements that do not meet performance or final success criteria within 5 years. This plan will include specific triggers for remediation if performance criteria are not being met and a description of the process by which remediation of problems with the mitigation site (e.g., presence of noxious weeds) will occur. 				
<p>BR-17: Burrowing Owl Protection Measures The following measures shall be implemented during Project construction, operation, and decommissioning with respect to burrowing owls:</p> <ul style="list-style-type: none"> • A qualified biologist(s) shall be on-site during all construction activities in suitable burrowing owl habitat. A qualified biologist (i.e., a biologist with previous burrowing owl survey experience) shall conduct pre-construction clearance surveys of the permanent and temporary impact areas to locate active breeding or wintering burrowing owl burrows no more than 14 days prior to construction. The survey methodology shall be consistent with the methods outlined in the CDFG Staff Report (CDFG 2012). Copies of the survey results shall be submitted to CDFW and the County. • If no burrowing owls are detected, no further mitigation is necessary. If burrowing owls are detected, no ground-disturbing activities, such as road construction or facility construction, shall be permitted except in accordance with the staff report or by written authorization of CDFW staff. Burrowing owls shall not be excluded from burrows unless or until a Burrowing Owl Exclusion Plan is developed by the lead biologist and approved by the applicable local CDFW office and submitted to the County. The plan shall adhere to the requirements set forth in the Burrowing Owl Mitigation Staff Report (CDFW 2012). 	<p>Prior to and during construction</p>	<p>Project Applicant</p>	<p>Imperial County, CDFW</p>	

Mitigation Measure	Required Time of Compliance	Responsible Implementing Party	Responsible Monitoring Party	Status of Implementation
<ul style="list-style-type: none"> In accordance with the Burrowing Owl Exclusion Plan, a qualified biologist shall excavate burrows using hand tools. Sections of flexible plastic pipe or burlap bag shall be inserted into the tunnels during excavation to maintain an escape route for any animals inside the burrow. One-way doors shall be installed at the entrance to the active burrow and other potentially active burrows within 160 feet of the active burrow. Forty-eight hours after the installation of the oneway doors, the doors can be removed, and ground-disturbing activities can proceed. Alternatively, burrows can be filled to prevent reoccupation. During construction activities, monthly and final compliance reports shall be provided to CDFW, the County, and other applicable resource agencies documenting the effectiveness of mitigation measures and the level of burrowing owl take associated with the Project. 				
<p>BR-18: Compensation for Impacts to Burrowing Owl Should burrowing owls be found on-site, compensatory mitigation for lost breeding or wintering habitat shall be implemented on-site or off-site in accordance with Burrowing Owl Mitigation Staff Report guidance and in consultation with CDFW.</p> <p>At a minimum, the following recommendations shall be implemented:</p> <ul style="list-style-type: none"> Temporarily disturbed habitat shall be restored, if feasible, to pre-Project conditions, including decompaction soil and revegetating. Permanent impacts to nesting, occupied and satellite burrows, and burrowing owl habitat shall be mitigated such that the habitat acreage, number of burrows, and burrowing owl impacted are replaced at a 1:1 ratio based on a site-specific analysis that shall include the following: Permanent conservation of similar vegetation communities to provide for burrowing owl nesting, foraging, wintering, and dispersal (i.e., during breeding and nonbreeding seasons) comparable to or better than that of the impact area, and with sufficiently large acreage, and presence of fossorial mammals. Permanently protect mitigation lands through a conservation easement deeded to a nonprofit conservation organization or public agency with a conservation mission. If the Project is located within the service area of a CDFW-approved burrowing owl conservation bank, the applicant may purchase available burrowing owl conservation bank. <p>If the acquired lands or mitigation credits for other wildlife species or vegetation communities can be managed to support burrowing owl, the proposed mitigation lands could be aggregated so that the purchase of mitigation lands for one species could cover all or a portion of the mitigation requirements for the remaining</p>	During and after construction	Project Applicant	Imperial County, CDFW	

Mitigation Measure	Required Time of Compliance	Responsible Implementing Party	Responsible Monitoring Party	Status of Implementation
species. Mitigation lands shall not already be public land.				
GEOLOGY AND SOILS				
<p>GEO-1: Inadvertent Discovery In the event that unanticipated paleontological resources or unique geologic resources are encountered during ground-disturbing activities, work must cease within 50 feet of the discovery and a paleontologist shall be hired to assess the scientific significance of the find. The consulting paleontologist shall have knowledge of local paleontology and the minimum levels of experience and expertise as defined by the Society of Vertebrate Paleontology's Standard Procedures (2010) for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources. If any paleontological resources or unique geologic features are found within the Project Site, the consulting paleontologist shall prepare a paleontological Treatment and Monitoring Plan to include the methods that will be used to protect paleontological resources that may exist within the Site, as well as procedures for monitoring, fossil preparation and identification, curation of specimens into an accredited repository, and preparation of a report at the conclusion of the monitoring program.</p>	During construction	Project Applicant	Imperial County	
HYDROLOGY AND WATER QUALITY				
<p>HYD-1: Prepare Stormwater Pollution Prevent Plan and Implement Best Management Practices Prior to issuance of any grading permit, the Applicant or its contractor shall prepare a Project-specific SWPPP and be responsible for securing coverage under SWRCB's NPDES stormwater permit for general construction activity (Order 2009-0009-DWQ). The SWPPP shall detail the treatment measures and BMPs to control pollutants that shall be implemented and complied with during both the construction and decommissioning of the Project. Example BMPs may include but are not limited to the following practices:</p> <ul style="list-style-type: none"> • Designation of restricted-entry zones • Sediment tracking control measures (e.g., crushed stone or riffle metal plate at construction entrance) • Truck washdown areas • Diversion of runoff away from disturbed areas • Protective measures for sensitive areas, outlet protection • Provision mulching for soil stabilization during construction, and provision for revegetation upon completion of construction within a given area • Treatment measures to trap sediment once it has been mobilized, such as straw bale barriers, straw mulching, fiber rolls and wattles, silt fencing, 	Prior to construction	Project Applicant, Construction Contractor	Imperial County, Imperial Irrigation District	

Mitigation Measure	Required Time of Compliance	Responsible Implementing Party	Responsible Monitoring Party	Status of Implementation
and siltation or sediment ponds				
<p>HYD-2: Final Project Drainage Plan Prior to issuance of any grading permit, the applicant shall submit a Final Project Drainage Plan. The Drainage Plan shall adhere to the County's Engineering Guidelines Manual, IID "Draft" Hydrology Manual, or other recognized source with approval by the County Engineer to control and manage the discharge of stormwater to the proposed retention basins. Retention basins shall be integrated into the Drainage Plan to the maximum extent practical. The Drainage Plan shall provide both short- and long-term drainage solutions to ensure the proper sequencing of drainage facilities and management of runoff generated from the Project's impervious surfaces, as necessary.</p>	Prior to construction	Project Applicant, Construction Contractor	Imperial County, Imperial Irrigation District	
TRIBAL CULTURAL RESOURCES				
<p>CULT-1: Workers Environmental Awareness Program A qualified archaeologist shall be retained to prepare a cultural resource focused Workers Environmental Awareness Program (WEAP) training that shall be given to all ground disturbing construction personnel to minimize harm to undiscovered archaeological resources or potential tribal resources that may be discovered during construction. All Site workers shall be required to complete WEAP Training with a focus on cultural resources, including education on the consequences of unauthorized collection of artifacts and that reviews discovery protocol. WEAP training shall also explain the protocol for notification, and requirements to retain a qualified archaeologist to evaluate any unexpected finds, as well as protocols regarding notification of tribal representatives.</p>	Prior to and during construction	Project Applicant	Imperial County	
<p>CULT-2: Continued Consultation with the San Pasqual Ban of Mission Indians If no other responses to Imperial County's invitation to consult on the Project are received, prior to construction, the County shall continue consultation with the San Pasqual Band of Mission Indians (San Pasqual). If the County, as the lead agency, determines through continued consultation that there is substantial evidence the Project may adversely impact a yet unidentified Tribal Cultural Resource that meets criteria established in Public Resources Code Section 5024.1, the County shall determine if measures are needed to minimize potential impacts to TCRs including:</p> <ul style="list-style-type: none"> • Requirements for Native American Monitoring of Project Ground Disturbing Activities • Development of an Unexpected Discovery Plan for Archaeological 	Prior to construction	Project Applicant	Imperial County	

Mitigation Measure	Required Time of Compliance	Responsible Implementing Party	Responsible Monitoring Party	Status of Implementation
<p>Resources</p> <ul style="list-style-type: none"> Development of a Treatment Plan for Artifacts Considered to be Tribal Cultural Resources <p>If the County, through continued consultation efforts, determines there is not substantial evidence to support the existence of potential TCRs at the Project site, no additional measures shall be required.</p>				

Appendix B UPDATED WATER SUPPLY ASSESSMENT

WATER SUPPLY ASSESSMENT – WESTSIDE MAIN CANAL BATTERY STORAGE

PREPARED FOR IMPERIAL COUNTY PLANNING & DEVELOPMENT
SERVICES

BY DUBOSE DESIGN GROUP

JUNE 2021 (REVISED)

1 TABLE OF CONTENTS

1.1	LIST OF TABLES	3
1.2	LIST OF FIGURES	4
2	<u>ACRONYMS</u>	5
3	<u>PURPOSE OF WATER SUPPLY ASSESSMENT</u>	7
4	<u>PROJECT DETERMINATION ACCORDING TO SB 610 - WATER SUPPLY ASSESSMENT</u>	8
4.1	EXECUTIVE SUMMARY	9
5	<u>PROJECT DESCRIPTION</u>	10
5.1	PROJECT OBJECTIVES	11
5.2	PROJECT LOCATION AND SITE DESCRIPTION	12
5.3	CURRENT SITE CONDITIONS	12
6	<u>PROJECT COMPONENTS</u>	16
6.1	PHASING	16
6.2	COMMON COMPONENTS	16
6.3	OPERATIONS AND MAINTENANCE FACILITIES	17
6.4	WATER CONNECTIONS.....	18
6.5	PROJECT ACCESS ROADS	19
6.6	CLEAR-SPAN BRIDGE.....	19
6.7	CONSTRUCTION	19
6.8	CONSTRUCTION EQUIPMENT AND WORKFORCE.....	20
6.9	FIRE PROTECTION/FIRE SUPPRESSION	20
7	<u>DESCRIPTION OF IID SERVICE AREA.....</u>	23
7.1	CLIMATE FACTORS	23
7.2	IMPERIAL VALLEY HISTORIC AND FUTURE LAND AND WATER USES	28

7.3 IMPERIAL INTEGRATED REGIONAL WATER MANAGEMENT PLAN (OCTOBER 2012)29

7.4 IID INTERIM WATER SUPPLY POLICY FOR NON-AGRICULTURAL PROJECTS (SEPTEMBER 2009).....32

7.5 IID TEMPORARY LAND CONVERSION FOLLOWING POLICY (MAY 2012)33

7.6 IMPERIAL IRRIGATION DISTRICT’S WATER RIGHTS34

CALIFORNIA LAW35

LAW OF THE RIVER35

COLORADO RIVER COMPACT (1922).....35

BOULDER CANYON PROJECT ACT (1928)36

CALIFORNIA SEVEN-PARTY-AGREEMENT (1931)36

ARIZONA V. CALIFORNIA U.S. SUPREME COURT DECISION (1964, 1979)36

COLORADO RIVER BASIN PROJECT ACT (1968)37

QUANTIFICATION SETTLEMENT AGREEMENT AND RELATED AGREEMENTS (2003)37

COLORADO RIVER WATER DELIVERY AGREEMENT (2003).....38

INADVERTENT OVERRUN PAYBACK POLICY (2003)40

1970 CRITERIA FOR COORDINATED LONG-RANGE OPERATION OF COLORADO RIVER RESERVOIRS.....40

ANNUAL OPERATING PLAN FOR COLORADO RIVER RESERVOIRS (APPLICABLE ONLY IF LAKE MEAD HAS SURPLUS/SHORTAGE)41

2007 COLORADO RIVER INTERIM GUIDELINES FOR LOWER BASIN SHORTAGES (2007 INTERIM GUIDELINES).....41

THE 2007 INTERIM GUIDELINES PREFERRED ALTERNATIVE HIGHLIGHTS THE FOLLOWING:43

LOWER COLORADO REGION WATER SHORTAGE OPERATIONS44

8 IMPERIAL IRRIGATION DISTRICT WATER SUPPLY AND DEMAND 45

9 WATER AVAILABILITY – NORMAL YEAR..... 46

9.1 GROUNDWATER, AGRICULTURAL PRACTICES AND DRAINAGE.....46

10 EXPECTED WATER AVAILABILITY – SINGLE DRY AND MULTIPLE DRY YEARS 48

10.1 EQUITABLE DISTRIBUTION PLAN50

10.2 WATER MANAGEMENT UNDER INADVERTENT OVERRUN PAYBACK POLICY (IOPP).....51

11 PROJECT WATER AVAILABILITY FOR A 30-YEAR PERIOD TO MEET PROJECTED DEMANDS..... 52

11.1 INTERIM WATER SUPPLY POLICY WATER53

12 EXPECTED WATER DEMANDS FOR THE APPLICANT 55

13 IID’S ABILITY TO MEET DEMANDS WITH WATER SUPPLY..... 56

13.1 TRACKING WATER SAVINGS FROM GROWTH OF NON-AGRICULTURAL LAND USES 60

13.2 EXPANDING WATER SUPPLY PORTFOLIO 61

13.3 IID NEAR TERM WATER SUPPLY PROJECTIONS 63

14 PUBLIC WATER SYSTEM/ LEAD AGENCY FINDINGS..... 64

15 ASSESSMENT CONCLUSION 66

16 RESOURCES AND REFERENCES 67

17 ATTACHMENT A: IID INTERIM WATER SUPPLY POLICY FOR NON-AGRICULTURAL PROJECTS 1

1.1 List of Tables

Table 1: Project APNs, Canals and Gates, & Land Relationship to Project10

Table 2: Project Water Summary10

Table 3: Amortized Project Water Summary10

Table 4: Climate Characteristics, Imperial, CA 100-Year Record, 1920-201926

Table 5: IID Areawide Annual Precipitation (In), (1990-2019)26

Table 6: Monthly Mean Temperature (°F) – Imperial, CA 10-Year, 30-Year & 100-Year (2010-2019, 1990-2019, 1920-2019)27

Table 7 Monthly Mean Rainfall (In) – Imperial, CA 10-Year, 30-Year & 100-Year (2010-2019, 1990-2019, 1920-2019)27

Table 8: Non-Agricultural Water Demand within IID Water Service Area, 2015-2055 (KAFY)30

Table 9: Historic and forecasted Agricultural Water Consumptive Use and Delivery Demand within IID Water Service Area, 2015-2055 (KAFY)31

Table 10: IID System Operations Consumptive Use within IID Water Service Area and from AAC at Mesa Lateral 5 to Imperial Dam, (KAF), 2019.....32

Table 11: Interim Water Supply Policy 2019 Annual Non-Agricultural Water Supply Development Fee Schedule33

Table 12: CRWDA Annual 4.4 MAF Apportionment (Priorities 1 to 4) for California Agencies (AFY)39

Table 13: Unregulated Inflow to Lake Powell, Percent of Historic Average, 2000-2019.....41

Table 14: IID Historic and Forecast Net Consumptive Use for Normal Year, Single-Dry Year and Multiple-Dry Year Water Supply, 2003-2037, et seq. (CRWDA Exhibit B)47

Table 15: IID Annual Rainfall (In), Net Consumptive Use and Underrun/Overrun Amounts (AF), 1988-201849

Table 16: IID Inadvertent Overrun Payback to the Colorado River under the IOPP, 2012-201952

Table 17: Project Water Uses (AFY).....55

Table 18: Ten- Year Historic Delivery (AFY), 2010-201956

Table 19: IID System Operations Consumptive Use within IID Water Service Area and from AAC at Mesa Lateral 5 to Imperial Dam, (KAF), 2019.....57

1.2 List of Figures

Figure 1 Project Site Regional Location Map13

Figure 3 Project Layout/Site Plan15

Figure 4: IID Imperial Unit Boundary and Canal Network.....25

Figure 5 Major Colorado River Reservoir Storage Facilities and Basin Location Map42

Figure 6 Lake Mead Water Elevation Levels 2020.....45

Figure 7 Lake Mead IOPP Schematic51

2 ACRONYMS

A-3	Agricultural Zone – 3
AAC	All-American Canal
AC	Acre
AF	Acre-Foot or Acre-Feet
AFY	Acre-Feet per Year
AOP	Annual Operations Plan
APN	Assessor’s Parcel Number
BLM	Bureau of Land Management
BMS	Battery Management System
CAP	Central Arizona Project
CDCR	California Department of Corrections and Rehabilitation
CDPH	California Department of Public Health
CDWR	California Department of Water Resources
CED	Consolidated Economic Development
CEQA	California Environmental Quality Act
County	County of Imperial
CPI	Consumer Price Index
CRWDA	Colorado River Water Delivery Agreement
CUP	Conditional Use Permit
CVWD	Coachella Valley Water District
CWC	California Water Code
EDP	IID Equitable Distribution Plan
EIS	Environmental Impact Statement
ET	evapotranspiration
FSM	Fern Side Main Canal
gpd	Gallons Per Day
HVAC	Heating, Ventilation and Air-conditioning
ICPDS	Imperial County Planning and Development Services
ICS	Intentionally Created Surplus
IID	Imperial Irrigation District
IOPP	Inadvertent Overrun Payback Policy
ISG	Interim Surplus Guidelines
IRWMP	Integrated Regional Water Management Plan
IWSP	Interim Water Supply Policy
kV	kilovolt
KAF	Thousand Acre Feet
LAFCO	Local Agency Formation Commission
LCR	Lower Colorado Region
LCRWSP	Lower Colorado Water Supply Project
MCI	Municipal, commercial, industrial
MGD	Million Gallons per Day
MW	Megawatt
MWD	Metropolitan Water District of Southern California

NAF	Naval Air Facility
NFPA	National Fire Protection Association
O&M	Operating and Maintenance
PV	Photovoltaic
PVID	Palo Verde Irrigation District
QSA	Quantification Settlement Agreement and Related Agreements
SB	Senate Bill
SDCWA	San Diego County Water Authority
SNWA	Southern Nevada Water Authority
SWRCB	State Water Resource Control Board
TLCFP	Temporary Land Conversion Fallowing Policy
USBR	United States Bureau of Reclamation
USEPA	United States Environmental Protection Agency
WSA	Water Supply Assessment
WSM	West Side Main Canal

3 PURPOSE OF WATER SUPPLY ASSESSMENT

This Water Supply Assessment (WSA) was prepared for the Imperial County Planning & Development Services (Lead Agency) by Dubose Design Group, regarding Consolidated Edison Development, (the “Applicant”). This study is a requirement of California law, specifically Senate Bill 610 (referred to as SB 610). SB 610 is an act that amended Section 21151.9 of the Public Resources Code, and Sections 10631, 10656, 10910, 10911, 10912, and 10915 of the Water Code. SB 221 is an act that amended Section 11010 of the Business and Professions Code, while amending Section 65867.5 and adding Sections 66455.3 and 66473.7 to the Government Code. SB 610 was approved by the Governor and filed with the Secretary of State on October 9, 2001, and became effective January 1, 2002.¹ SB 610 requires a lead agency, to determine that a project (as defined in CWC Section 10912) subject to California Environmental Quality Act (CEQA), to identify any public water system that may supply water for the project and to request the applicants to prepare a specified water supply assessment. This study has been prepared pursuant to the requirements of CWC Section 10910, as amended by SB 610 (Costa, Chapter 643, Stats. 2001). The purpose of SB 610 is to advance water supply planning efforts in the State of California; therefore, SB 610 requires the Lead Agency, to identify any public water system or water purveyor that may supply water for the project and to prepare the WSA after a consultation. Once the water supply system is identified and water usage is established for construction and operations for the life of the project, the lead agency is then able to coordinate with the local water supplier and make informed land use decisions to help provide California’s cities, farms and rural communities with adequate water supplies.

This study has been prepared pursuant to the requirements of CWC Section 10910, as amended by SB 610 (Costa, Chapter 643, Stats. 2001). The purpose of SB 610 is to advance water supply planning efforts in the State of California; therefore, SB 610 requires the Lead Agency, to identify any public water system or water purveyor that may supply water for the project and to prepare the WSA after a consultation. Once the water supply system is identified and water usage is established for construction and operations for the life of the project, the lead agency is then able to coordinate with the local water supplier and make informed land use decisions to help provide California’s cities, farms and rural communities with adequate water supplies.

¹SB 610 amended Section 21151.9 of the California Public Resources Code, and amended Sections 10631, 10656, 10910, 10911, 10912, and 10915, repealed Section 10913, and added and amended Section 10657 of the Water Code. SB 610 was approved by California Governor Gray Davis and filed with the Secretary of State on October 9, 2001.

Under SB 610, water supply assessments must be furnished to local governments for inclusion in any environmental documentation for certain projects (as defined in California Water Code (CWC) Section 10912 [a]) that are subject to the California Environmental Quality Act (CEQA). Due to increased water demands statewide, this water bill seeks to improve the link between information on water availability and certain land use decisions made by cities and counties. This bill takes a significant step toward managing the demand placed on California’s water supply. It provides further regulations and incentives to preserve and protect future water needs. Ultimately, this bill will coordinate local water supply and land use decisions to help provide California’s cities, farms, rural communities, and industrial developments with adequate long-term water supplies. The WSA will allow the lead agency to determine whether water supplies will be sufficient to satisfy the demands of the project, in addition to existing and planned future uses.

4 PROJECT DETERMINATION ACCORDING TO SB 610 - WATER SUPPLY ASSESSMENT

With the introduction of SB 610, any project under the California Environmental Quality Act (CEQA) shall provide a Water Supply Assessment if the project meets the definition of CWC § 10912. Water Code section 10911(c) requires for that the lead agency “determine, based on the entire record, whether projected water supplies will be sufficient to satisfy the demands of the project, in addition to existing and planned future uses.” Specifically, Water Code section 10910(c)(3) states that “If the projected water demand associated with the proposed project was not accounted for in the most recently adopted urban water management plan, or the public water system has no urban water management plan, the water supply assessment for the project shall include a discussion with regard to whether the total projected water supplies, determined to be available by the city or county for the project during normal, single dry, and multiple dry water years during a 20 year projection, will meet the projected water demand associated with the proposed project, in addition to the public water system’s existing and planned future uses, including agricultural and manufacturing uses.”

After review of CWC § 10912a, and Section 10912 (a)(5)(B), it was determined that the Westside Main Canal Battery Storage Project, a utility-scale energy storage complex incorporating lithium ion battery systems and/or flow battery technologies production plant is deemed a project as it is considered an industrial water use project use that is considered an industrial plant of 40 Acres or more in accordance

to CWC § 10912a (5). The proposed project totals 148 Acres, additionally the proposed project intends to use 15 acres of temporary staging area, totaling 163 Acres, which exceeds the 40 Acre or more allowance.

4.1 EXECUTIVE SUMMARY

ICPDS has requested a WSA as part of the environmental review for the proposed Westside Main Canal Battery Storage. This study is intended for use by the Imperial County, the lead agency in its evaluation of water supplies for existing and future land uses. The evaluation examines the following water elements:

- Water availability during a normal year
- Water availability during a single dry, and multiple dry water years
- Water availability during a 20-year projection to meet existing demands
- Expected 30-year water demands of the project
- Reasonably foreseeable planned future water demands to be served by the Imperial Irrigation District

The proposed Project site is located within Imperial Irrigation District's (IID) Imperial Unit and district boundary and as such is eligible to receive water service. IID has adopted an Interim Water Supply Policy (IWSP) for Non-Agricultural Projects, from which water supplies can be contracted to serve new developments within IID's water service area. For applications processed under the IWSP, applicants shall be required to pay a processing fee and, after IID board approval of the corresponding agreement, will be required to pay a reservation fee(s) and annual water supply development fees.

The IWSP sets aside 25,000 acre-feet annually (AFY) of IID's Colorado River water supply to serve new non-agricultural projects. As of June, 2020, a balance of 23,800 AFY remain available under the IWSP for new non-agricultural projects ensuring reasonably sufficient supplies for such projects. The proposed Project water demand at full build out over the span of 30 years would be approximately 258 AF over the life of the project. The proposed Project estimated water demand of 210 AF for construction and 45 AF for operations over the 30-year life of the project, for a amortized total of 8.6 AFY over the 30-year life of the proposed Project, represent .04 percent (.04%) of the annual unallocated supply set aside for new nonagricultural projects. Thus, the proposed Project's demand would not affect IID's ability to provide water to other users in IID's water service area.

Table 1: Project APNs, Canals and Gates, & Land Relationship to Project

APN	IID CANAL	ABRV.	GATE	AC	LAND RELATIONSHIP TO PROJECT
051-350-009	N/A	N/A	N/A	NA	The Project would access the small portion of parcel within an IID easement for connection to the existing IID Campo Verde Imperial Valley 230 kilovolt (kV) radial gen-tie line during the construction of a substation on the Project site.
051-350-010	Westside Main	WSM	6	148	Project site, the site has not been farmed for the last 15 years. Project total of 148 AC.
051-350-011	Westside Main	WSM	6		
051-350-018	Fern Side Main	FSM	11A	15	Used for site access as a temporary construction staging area. This portion of the project totals 15 AC.
051-350-019	Fern Side Main	FSM	11A		

Table 2: Project Water Summary

Phase	Expected Years	Total Acre Feet (AF)	Notes
Construction	1-10 Years	210.0	It is anticipated that approximately 210 acre-feet (AF) of water would be required for the full buildout/construction of the site, over the projected 10-year construction time frame.
Operations	11-30 Years	45	Water usage for the O&M building and personnel would be approximately 2,000 gallons per day (gpd), Gal/Year equates to 2.25 AFY.
On-Site Water Storage for Mitigation Measures	11-30 Years	3.07	Additionally, approximately 1,000,000 gallons of raw water (3.07 AF) would be stored on site in storage tanks for fire suppression. ²
Total	30 Years	258.07	-----

Table 3: Amortized Project Water Summary

Project Water Use – Life of Project	Years	Total Years Combined*	Unallocated IWSP	% of Remaining Unallocated IWSP per Year**
8.6 AF Per Year	30 Years	258 AF	23,800 AF	.04%

* (8.6 AF/Year x 30 Years)

** (8.6 AF/ YR/23,800 AC-FT/YR x 100)

5 PROJECT DESCRIPTION

Consolidated Edison Development (CED, Applicant) is proposing to develop 148 Acres known as the Westside Main Battery Storage Project (proposed Project, Project) which would provide a utility-scale energy storage complex with lithium ion battery systems, and/or flow battery technologies and behind-

² Applicant will not be flushing tanks used to store fire suppression water.

the-meter solar facilities distributed throughout the site. The Project would allow for excess, intermittent renewable energy to be stored and later dispatched optimally back into the electric grid as firm, reliable generation. The Project complements both the existing operational renewable energy facilities, and those planned for development, in Imperial County (County), and supports the broader Southern California bulk electric system. A brief project description and water summary can be summarized in both Table 2 and Table 3, both tables indicate that the applicant is proposing to utilize the following amount of water for construction operation and mitigation through the indicated phases for the project. As described in table 2, Project Water Summary, the construction phase is anticipated to last a duration of 1-10 years utilizing a total of 210 acre-feet (AF). The operation phase will follow construction phase during the 1-30-year period and is anticipated to use a total of 45 AF of water. All potable water which will service the O&M building will be delivered to the site . Personnel for the site is projected to use less than 2,000 gallons per day (gpd) of potable water with the assumption that would operate 365 days a year which would be a total of 2.25 AFY. All drinkable water will be imported through an outside vendor contracted with a certified supplier. Additionally, dust mitigated measures are expected to be met throughout the operational phase of the project and throughout the 1-30-year period utilizing approximately 3.07 acre-feet of water. As described in table 3, amortized project water summary stated that the total years combined of 30 years totals 258 acre-feet which equates to 8.6 AFY.

5.1 PROJECT OBJECTIVES

The Project is pursuing the following objectives:

1. To construct and operate utility-scale energy storage technologies that are safe, efficient, and environmentally responsible.
2. To provide load-serving entities and system operators the ability to effectively manage intermittent renewable generation on the grid, thereby creating reliable, dispatchable generation upon demand.
3. To facilitate deployment of additional renewable energy resources in furtherance of the State of California Renewable Portfolio Standard.
4. To develop an up to 2,000 MW energy storage facility on previously disturbed land that is no longer used for agricultural production.
5. To promote local economic development by maximizing the utilization of the local workforce for a variety of trades and businesses.

5.2 PROJECT LOCATION AND SITE DESCRIPTION

The Project is proposed to be in the unincorporated Mount Signal area of the County, approximately 8.0 miles southwest of the city of El Centro and approximately 5.3 miles north of the U.S.-Mexico border (Figure 1-Project Site Regional Location). The project site is comprised of two parcels, Assessor Parcel Number (APN) 051-350-010 and APN 051-350-011, totaling approximately 148 acres. These parcels have limited access corridors for vehicular traffic and are considered less desirable for agricultural production, as no farming activities have occurred in the last 15 years.

The project site is located approximately one-third mile north of the Imperial Valley Substation (IV Substation) and directly south of the intersection of Liebert Road and the Imperial Irrigation District's (IID) WSM (the Canal). The project site is bound by the WSM Canal to the north, Bureau of Land Management (BLM) lands to the south and west, and vacant private land to the east. The Campo Verde solar generation facility is located north of the project site, across the WSM Canal. The two project parcels will be developed as a utility-scale energy storage complex. The project will utilize portions of two parcels located north of the Canal (APN 051-350-019 owned by IID and APN 051-350-018 owned by a private landowner) for site access and as a temporary construction staging area.

5.3 CURRENT SITE CONDITIONS

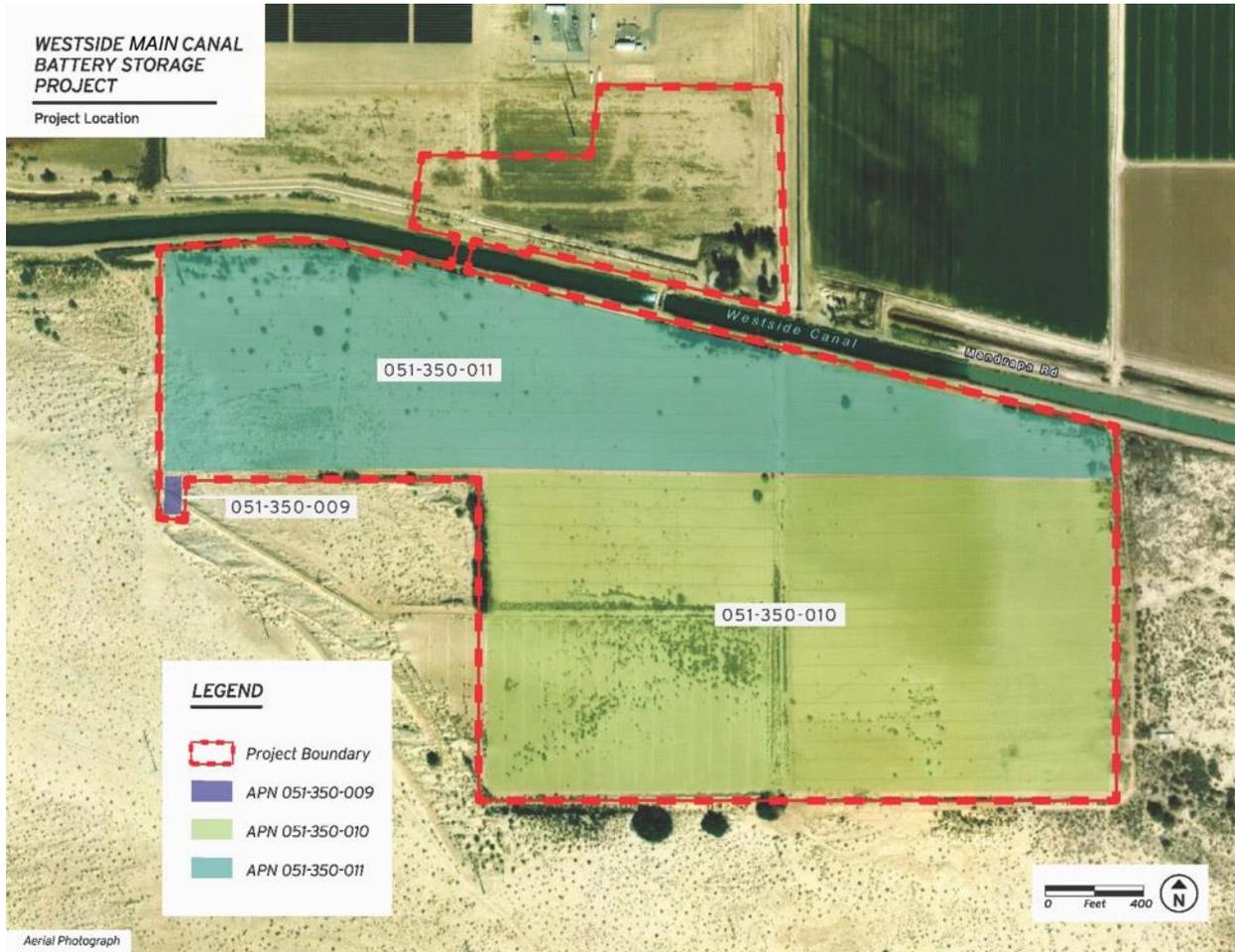
The site is comprised of two parcels, Assessor Parcel Number (APN) 051-350-010 and APN 051-350-011, totaling approximately 148 acres. This land has limited access corridors for vehicular traffic and was historically used for agricultural production but has not been farmed for the last 15 years. The Project would also utilize portions of two parcels located north of the IID's WSM Canal (APN 051-350-019 owned by IID and APN 051-350-018 owned by a private landowner) for site access and as a temporary construction staging area totaling approximately 15 acres. The land currently is vacant with little to no vegetation and is comprised of native with sandy loam composition see **Figure 2**.

Figure 1 Project Site Regional Location Map

Westside Main Battery Storage Project



Figure 2 Aerial Map of Project Vicinity



6 PROJECT COMPONENTS

The project is expected to be constructed in 3 to 5 phases over a 10-year period, with each phase ranging from approximately 25 megawatts (MW) up to 350 MW per phase. Construction of the first phase includes roads, bridge, and common facilities, and the first battery storage facility and, if approved, is anticipated to begin in 2021 with completion expected in 2022. Subsequent phases would then be completed as demand/market conditions require. The total nameplate (or rated capacity) capacity of the project at full build-out (all phases completed) is approximately 2,000 MW. On-site photovoltaic (PV) solar generation would serve as station auxiliary power and be deployed throughout the project site as both rooftop solar on buildings, as well as ground-mounted solar. Figure 3 shows the conceptual site plan for the project with a representation of the various energy storage technologies, ground and roof-mounted solar, common facilities within the Project site, and vehicular access and bridge outside the Project site.

6.1 PHASING

The timing and energy storage capacity of the Project's phases would be dependent on commercial contracts for the energy/capacity to be stored/discharged in response to the need for energy storage to manage renewable energy growth throughout the greater southern California area. This energy storage complex would thus become a valuable tool for commercial customer(s) and system operators to better manage intermittent renewable generation by converting it into reliable, dispatchable generation. The date for project build-out is currently not known and would be dependent on the factors listed above. It is anticipated that each phase would be constructed within 1-2 years of each other.

6.2 COMMON COMPONENTS

The Project would consist of multiple phases of development, construction, and operation of an energy storage facility. Although the Applicant plans to build the energy storage components over time in multiple phases, the first phase of Project construction would include the majority of required construction activities. The first phase would include construction of the Operating and Maintenance (O&M) facilities, water connections and fire suppression systems for the Project, storm water retention, substation, and legal permanent vehicle access, as well as the first energy storage facility. As per the site

plan (see Figure 2), the northwest area of the Project serves as the location for the common facilities, which include substation(s) and the O&M building. With the project being built in phases, the necessary infrastructure, such as water-mains, retention ponds and access roads, would be built out to serve the project phases from west to east and be expanded over time to serve each phase.

A summary of the common facilities is presented below:

- 230 KV Loop-In Substation o Connection to Campo Verde Imperial Valley 230 kV radial transmission line o Located on Applicant property
- Project substation
- O&M building
- Project parking
- Storm water detention basins
- Fencing and Gates

Large industrial buildings, warehouses, engineered containers, and/or electrolyte storage tanks would be the primary structures needed to house the main project components. Other components to be located on the project site and adjacent to the proposed buildings/warehouses include some of the following:

- Inverters, transformers, power distribution panels
- Underground water-main loop for Project operation and fire prevention
- Underground wiring to connect to Project substation
- Project site access roads (unpaved/crushed rock)
- 5 Raw Water storage tanks, 200,000 gallon capacity each
- Heating, Ventilation, and Air Conditioning (HVAC) units
- Ground-mounted or roof-mounted PV arrays
- Energy Storage sites
- Emergency backup generator(s).

6.3 OPERATIONS AND MAINTENANCE FACILITIES

The O&M building described in Phase One above is expected to be the only manned facility on the site and would include up to 20 full-time employees at full project build-out working allocated shifts during a 24-hour period. Water usage for the O&M facilities and personnel would be less than 2,000 gallons per day (gpd). No offices or staffed control centers would be located within the storage-specific warehouses/buildings. For sanitary waste, the Project would include a septic leach field to be located near the O&M building. The proposed O&M building would also require an HVAC unit.

6.4 WATER CONNECTIONS

During construction, the Project would utilize at least two temporary connections to the WSM Canal for dust suppression and other construction uses such as concrete production. Permanent water to serve the Project's non-potable operational water requirements and fire suppression needs would come from the WSM Canal. Water infrastructure for the non-potable operational water requirements/fire suppression would be laid underground throughout the site by open trenching. A segment of line from the project boundary to the connection at the WSM Canal would be constructed by a horizontal directional underground bore to connect to an IID Canal tap. It is anticipated that approximately 210 acre-feet (AF) of water would be required for the full buildout/construction of the site, over the projected 10-year construction time frame.

Following construction, potable water will be delivered to the site from local water suppliers. This potable water would be used for operations using on-site aboveground storage tanks. Water usage for the O&M building and personnel would be less than 2,000 gallons per day (gpd). Additionally, approximately five (5), 2,000,000 gallons of water would be stored on site in storage tanks for fire suppression. The project would connect to the WSM Canal consistent with the IID approved encroachment permit secured for the Project. The applicant intends to maintain the water allocated within the fire suppression tanks by regularly testing and treating its pH maintaining its viability. This use for fire suppression water was accounted for in the WSA. The applicant does not intend to flush out fire suppression water.

PERMANENT VEHICLE ACCESS

There are no circulation element roadways in the immediate vicinity of the project site. The nearest freeways are Interstate (I)-8, located 4.6 miles north of the project site, and State Route (SR) 98, located 5.2 miles south of the project site. Drew Road, a 2-lane Collector, is located 1.3 miles east of the project site. All other roadways in the immediate vicinity of the project site are rural roadways. All roadways that would be used to access the project site from Interstate 8 are currently paved, except for the portion of Liebert Road south of Wixom Road. However, this segment would be improved prior to project operation. Permanent access to the project site will be via a private maintained road from Liebert Road on to a Private Bridge that will cross the IID's Westside Main Canal, through an IID encroachment permit.

6.5 PROJECT ACCESS ROADS

Prior to any construction on the main project site (Phase 1), vehicular access for the Project would need to be established. The proposed Project site is surrounded by private landowners to the east, BLM land to the south and west, and IID maintenance roads and the Canal to the north. Due to the property having no current legal direct vehicular access routes, the Applicant is proposing to construct private access roads on both the north and south side of the canal on private land and a permanent clear-span bridge over the Canal. The proposed private access roads would be designed and constructed in accordance with County standards.

6.6 CLEAR-SPAN BRIDGE

The permanent new clear-span bridge would span the Canal to connect to a proposed access road on the north side of the Canal. The north proposed access road would ultimately connect the project to Liebert Road. Construction of the permanent clear-span bridge spanning the IID's WSM requires CED to have access to both the north side and the south of the Canal to perform the necessary construction activities. In addition to being necessary to facilitate construction of the new permanent clear-span bridge, access from the south side of the WSM would allow CED to commence construction on the initial phase (Phase I) of the battery storage project simultaneously, thereby shortening the duration of construction and potentially minimizing the associated impacts. CED is evaluating various options for temporary construction access, including accessing the project site from the south side of the Canal off SR98, as well as options involving access from the north side of the Canal from I-8. The preferred temporary access option would be used until construction of the permanent bridge is completed.

6.7 CONSTRUCTION

The project consists of multiple phases of development, construction, and operation of an energy storage facility. Although the project applicant plans to build the energy storage components over time in multiple phases, the first phase of the project construction of the O&M facilities, water /fire suppression for the project, storm water retention basins, substations, and legal permanent vehicle access, as well as the first energy storage facility.

Prior to any construction on the main project site, vehicular access for the project is required. The project is surrounded by the private landowners to the east, BLM land to the south and west, and IID maintenance roads and the WSM Canal to the north. Due to the property having no legal direct vehicular

access routes, the applicant is proposing to construct a private access road on both the north and south side of the canal on private land and a bridge over the WSM Canal. The project proposes a new private clear-span bridge to span the WSM Canal, which will connect to a proposed access road easement on the north side of the WSM Canal. The north proposed access road will ultimately connect the project to Liebert Road.

6.8 CONSTRUCTION EQUIPMENT AND WORKFORCE

Construction would include the use of standard construction equipment such as scrapers, excavators, loaders, and water trucks, and other similar machinery. Construction equipment would be used for site preparation activities such as clearing, grading, perimeter fencing, development of staging areas and site access roads, and would involve facility installation activities, including support masts, trenching utility connections, construction of electrical distribution facilities, O&M building, access roads, and a clear-span bridge. Delivery trucks also would bring materials to the site.

6.9 FIRE PROTECTION/FIRE SUPPRESSION

Fire protection systems for battery systems will be designed in accordance with California Fire Code 2016 and will take into consideration the recommendations of the National Fire Protection Association (NFPA) 855. Depending on the technology used in a phase, fire suppression agents such as Novec 1230 or FM 200, or water may be used as a suppressant. In addition, fire prevention methods will be implemented to reduce potential fire risk, including voltage, current and temperature alarms. Energy storage equipment will comply with UL-9540 and will account for the results of UL-9540A. The project has the potential to utilize either lithium-ion batteries and/or flow batteries. Flow batteries are generally not flammable and do not require fire suppression systems. In locations where equipment is located within buildings, automated fire sprinkler systems will be designed in accordance with California Fire Code. A fire loop system and fire hydrants will be located throughout the site for general fire suppression. Buildings and containers for both lithium-ion and flow batteries will be unoccupied enclosures. These buildings will have an automatic sprinkler system designed in accordance with California Fire Code Section 903. To mitigate potential hazards, redundant separate methods of failure detection will be implemented. These include alarms from the Battery Management System (BMS), including voltage, current, and temperature alarms. Detection methods for off gas detection will be implemented, as applicable. These are in addition to other protective measures such as ventilation, overcurrent protection, battery controls operating

batteries within designated parameters, temperature and humidity controls, smoke detection, and maintenance in accordance with manufacturer guidelines. Flow battery tanks would be designed to have secondary containment in the event of a failure. Remote alarms will be installed for operations personnel as well as emergency response teams in addition to exterior hazard lighting. In addition, an Incidence Response Plan will be implemented depending upon the technology installed for each phase.

The fire suppression systems will be designed in accordance with the 2016 California Fire Code or current Fire Code at the time of construction. A fire loop system will be installed around the site with fire hydrants spaced at 300' intervals in accordance with fire flow requirements. The fire loop will be built out and extended to serve each phase as the site is developed. Fire water will be obtained by tapping into the WSM Canal and will be stored in tanks on the applicant's property. Raw water from the WSM Canal will be used to fill a total of 5 tanks with a capacity of 200,000 gallons each. The tanks will be required to provide the needed fire flow volume at full build out and will be located on the project site. The tanks will also be installed in phases as the site is developed as required by Federal, State and Local fire regulations. The fire suppression system will consider National Fire Protection Agency (NFPA) 855 standards. Depending on the technology used in a particular phase, fire suppression agents such as Novec 1230 or FM 200 may be used. In addition, fire prevention methods will be implemented to reduce potential fire risk, including voltage, current and temperature alarms. Energy storage equipment will comply with UL9540 and will account for the results of UL-9540A. The 1,000,000 gallons of raw water will be monitored and tested to maintain viable pH levels. This use for fire suppression water was accounted for in the WSA. The applicant will not flush tank mitigation water out but rather be utilizing water as needed though the mitigation measures specified. The applicant will not be flushing any fire suppression water stored on site.

PROJECT OPERATION

Operation of the project would require routine maintenance and security. It is anticipated that the Project would employ a plant manager and an O&M manager, as well as the addition of a facility manager once the complex deploys 500 MW of generation. The complex would also employ staff technicians, with at least one additional technician for every approximately 250 MW of generation. It is expected that the project would employ a total of 20 full-time employees at full build-out. Water usage for the O&M facilities would be less than 2,000 gpd of treated water.

7 DESCRIPTION OF IID SERVICE AREA

The proposed Project site is located in Imperial County, California. The County is comprised of approximately 4,597 square miles or 2,942,080 acres.³ Imperial County is bordered by San Diego County to the west, Riverside County to the north, the Colorado River/Arizona boundary to the east, and 84 miles of International Boundary with the Republic of Mexico to the south. Approximately fifty percent of Imperial County is undeveloped land under federal ownership and jurisdiction. The Salton Sea accounts for approximately 11 percent of Imperial County's surface area. In 2019, fifteen percent (15%) of the area was in irrigated agriculture (463,948 acres), including 14,676 acres of the Yuma Project, some 35 sections or 5,600 acres served by Palo Verde Irrigation District (PVID), and 443,672 acres served by IID.3F4, 4F5

The area served by IID is located in the Imperial Valley, which is generally contiguous with IID's Imperial Hydrologic Unit, lies south of the Salton Sea, north of the U.S./Mexico International Border, and generally in the 658,942-acre area between IID's Westside Main and East Highline Canals.⁸ In 2019, IID delivered untreated water to 443,677 net irrigated acres, predominantly in the Imperial Valley, along with small areas of East and West Mesa land.

The developed area consists of seven incorporated cities (Brawley, Calexico, Calipatria, El Centro, Holtville, Imperial and Westmorland), three unincorporated communities (Heber, Niland, Seeley), and three institutions (Naval Air Facility [NAF] El Centro, Calipatria CDCR, and Centinela CDCR) and supporting facilities. Figure 4 provides a map of the IID Imperial Unit boundary, as well as cities, communities, and main canals.

7.1 Climate Factors

Imperial Valley, located in the Northern Sonoran Desert, has a subtropical desert climate characterized by hot, dry summers and mild winters. Clear and sunny conditions typically prevail, and frost is rare. The region receives 85 to 90 percent of possible sunshine each year, the highest in the United States. Winter temperatures are mild, rarely dropping below 32°F, but summer temperatures are very hot, with more

³ *Imperial County General Plan, Land Use Element 2008 Update*

⁴ USBR website: [Yuma Project](#). 7 June 2017, PVID website: [About Us](#), *Acreage Map*. 7 June 2017.

⁵ Palo Verde Irrigation District Acreage Map <http://www.pvid.org/pviddocs/acreage_2012.pdf> 7 June 2013

⁸ [IID Annual Inventory of Areas Receiving Water Years 2019, 2018, 2017](#)

than 100 days over 100°F each year. The remainder of the year has a relatively mild climate with temperatures averaging in the mid-70s.

The 100-year average climate characteristics are provided in **Table 4**. Rainfall contributes around 50,000 AF of effective agricultural water per inch of rain. Most rainfall occurs from November through March; however, summer storms can be significant in some years. Annual areawide rainfall is shown in **Table 5**. The thirty-year, 1990-2019, average annual air temperature was 73.6°F and average annual rainfall was 2.82 inches, see **Table 4** and **Table 3**. This record shows that while average annual rainfall has fluctuated, the 10-year average temperatures have slightly increased over the 30-year averages.

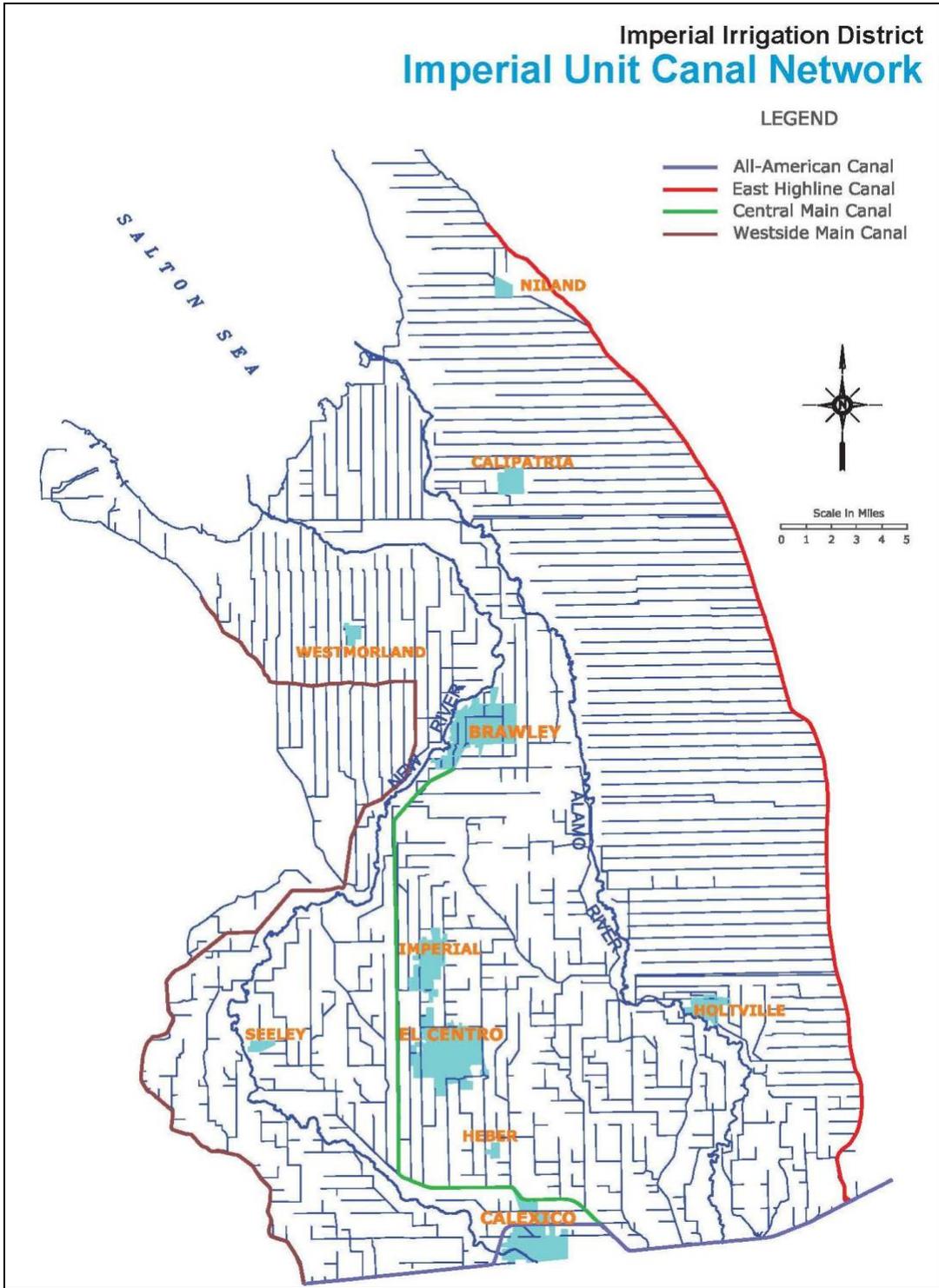


Figure 4: IID Imperial Unit Boundary and Canal Network

Table 4: Climate Characteristics, Imperial, CA 100-Year Record, 1920-2019

Climate Characteristic	Annual Value
Average Precipitation (100-year record, 1920-2019)	2.82 inches (In)
Minimum Temperature, Jan 1937	16 °F
Maximum Temperature, July 1995	121 °F
Average Minimum Temperature, 1920-2019	48.2 °F
Average Maximum Temperature, 1920-2019	98.2 °F
Average Temperature, 1920-2019	72.9 °F

Source: IID Imperial Weather Station Record

Table 5: IID Areawide Annual Precipitation (In), (1990-2019)

1990	1991	1992	1993	1994	1995	1996
1.646	3.347	4.939	2.784	1.775	1.251	0.685
1997	1998	1999	2000	2001	2002	2003
1.328	2.604	1.399	0.612	0.516	0.266	2.402
2004	2005	2006	2007	2008	2009	2010
4.116	4.140	0.410	1.331	1.301	0.619	3.907
2011	2012	2013	2014	2015	2016	2017
2.261	2.752	2.772	1.103	2.000	1.867	2.183
2018	2019					
1.305	3.017					

Source: Computation based on polygon average of CIMIS as station came online in the WIS.⁹

Notable from **Table 3** (above) and **5** (below) is that while average annual rainfall measured at IID Headquarters in Imperial, California, has been decreasing, monthly average temperatures are remarkably consistent.

⁹ From 1/1/1990-3/23/2004, 3 CIMIS stations: Seeley, Calipatria/Mulberry, Meloland; 3/24/2004-7/5/2009, 4 CIMIS stations (added Westmorland N.); 7/6/2009-12/1/2009, 3 CIMIS stations: Westmorland N. offline; 12/2/2009-2/31/2009, 4 CIMIS stations, Westmorland N. back online; 1/1/2010-9/20/2010.

Table 6: Monthly Mean Temperature (°F) – Imperial, CA 10-Year, 30-Year & 100-Year (2010-2019, 1990-2019, 1920-2019)

	Jan			Feb			Mar			Apr		
	Max	Min	Avg									
10-year	82	32	56	85	35	60	94	41	67	99	47	72
30-year	81	33	57	84	37	60	92	41	66	99	47	71
100-year	80	31	55	84	35	59	91	40	64	98	46	71
	May			Jun			Jul			Aug		
	Max	Min	Avg									
10-year	105	52	76	115	61	87	114	70	92	114	70	92
30-year	105	54	78	113	60	86	114	68	92	113	70	92
100-year	105	52	78	112	59	86	114	68	92	113	68	91
	Sep			Oct			Nov			Dec		
	Max	Min	Avg									
10-year	111	61	87	100	51	75	91	38	64	81	31	55
30-year	110	62	87	101	50	76	90	39	64	79	32	55
100-year	110	60	86	101	49	75	90	38	63	80	32	56

Table 7 Monthly Mean Rainfall (In) – Imperial, CA 10-Year, 30-Year & 100-Year (2010-2019, 1990-2019, 1920-2019)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
10-year	0.54	0.28	0.15	0.04	0.08	0.01	0.24	0.28	0.28	0.14	0.26	0.48	2.77
30-year	0.49	0.41	0.26	0.07	0.06	0.00	0.14	0.22	0.27	0.16	0.22	0.40	2.65
100-year	0.40	0.39	0.24	0.10	0.03	0.00	0.12	0.34	0.38	0.25	0.21	0.51	2.82

Source: IID WIS: CIMIS stations polygon calculation (Data provided by IID staff).

Imperial Valley depends on the Colorado River for its water, which IID transports, untreated, to delivery gates for agricultural, municipal, industrial (including geothermal and solar energy), environmental (managed marsh), recreational (lakes), and other non-agricultural uses. IID supplies the cities, communities, institutions and Golden State Water (which includes all or portions of Calipatria, Niland, and some adjacent Imperial County territory) with untreated water that they treat to meet state and federal drinking water guidelines before distribution to their customers. Industries outside the municipal areas treat the water to required standards of their industry. To comply with U.S. Environmental Protection Agency (USEPA) requirements and avoid termination of canal water service, residents in the IID water service area who do not receive treated water service must obtain alternative water service for drinking and cooking from a state-approved provider. To avoid penalties that could exceed \$25,000 a day, IID strictly enforces this rule. The IID Water Department tracks nearly 4,000 raw water service accounts required by the California Department of Public Health (CDPH) to have alternate state approved drinking

water service. IID maintains a small-acreage pipe and drinking water database and provides an annual compliance update to CDPH.

7.2 IMPERIAL VALLEY HISTORIC AND FUTURE LAND AND WATER USES

Agricultural development in the Imperial Valley began at the turn of the twentieth century. In 2019, gross agricultural production for Imperial County was valued at \$2,015,843,000 of which approximately \$1,693,308,120 was produced in the IID water service area.¹⁰ While the agriculture-based economy is expected to continue, land use is projected to change somewhat over the years as industrial and/or alternative energy development and urbanization occur in rural areas and in areas adjacent to existing urban centers, respectively.

Imperial Valley's economy is gradually diversifying. Agriculture will likely continue to be the primary industry within the valley; however, two principal factors anticipated to reduce crop acreage are renewable energy (geothermal and solar) and urban development. Over the next twenty years, urbanization is expected to slightly decrease agriculture land use to provide space for an increase in residential, commercial and industrial uses. The transition from agricultural land use typically results in a net decrease in water demand for municipal, commercial, and solar energy development, and a net increase in water demand for geothermal energy development. Local energy resources include geothermal, wind, biomass and solar. The County General Plan provides for development of energy production centers or energy parks within Imperial County.⁸ Alternative energy facilities will help California meet its statutory and regulatory goals for increasing renewable power generation and use and decrease water demands in Imperial County.

The IID Board has adopted the following policies and programs to address how to accommodate water demands under the terms of the QSA/Transfers Agreements and minimize potential negative impacts on agricultural water uses:

Imperial Integrated Regional Water Management Plan (IRWMP): Adopted by the board on December 18, 2012, and by the County of Imperial, to meet the basic requirement of California Department of Water Resources (CDWR) for an IRWMP. In all, 14 local agencies adopted the 2012 Imperial IRWMP.

¹⁰ <https://agcom.imperialcounty.org/wp-content/uploads/2020/12/2019-Crop-Report.pdf>

[Interim Water Supply Policy for Non-Agricultural Projects](#): Adopted by the board on September 29, 2009, to ensure sufficient water will be available for new development, in particular, anticipated renewable energy projects until the board selects and implements capital development projects such as those considered in the Imperial IRWMP.

[Temporary Land Conversion Fallowing Policy](#): adopted by the board on May 8, 2012, and revised on March 29, 2016, to provide a framework for a temporary, long-term fallowing program to work in concert with the IWSP and IID’s coordinated land use/water supply strategy.

[Equitable Distribution Plan](#): adopted by the board on October 28, 2013, to provide a mechanism for IID to administer apportionment of the district’s quantified annual supply of Colorado River water; IID board approved a resolution repealing the Equitable Distribution Plan (EDP) on February 6, 2018.

In addition, water users within the IID service area are subject to the statewide requirement of reasonable and beneficial use of water under the California Constitution, Article X, section 2.

7.3 IMPERIAL INTEGRATED REGIONAL WATER MANAGEMENT PLAN (OCTOBER 2012)

The Imperial Integrated Regional Water Management Plan (IRWMP) serves as the governing document for regional water planning to meet present and future water resource needs and demands by addressing such issues as additional water supply options, demand management, and determination and prioritization of uses and classes of service provided. In November 2012, the Imperial County Board of Supervisors approved the Imperial IRWMP, and the City of Imperial City Council and the IID Board of Directors approved it in December 2012. Approval by these three (3) stakeholders meets the basic requirement of California Department of Water Resources (CDWR) for an IRWMP. Through the IRWMP process, IID presented to the region stakeholders options in the event long-term water supply augmentation is needed, such as water storage and banking, recycling of municipal wastewater, and desalination of brackish water¹¹. As discussed herein, long term water supply augmentation is not anticipated to be necessary to meet proposed Project demands.

Chapter 5 of the 2012 Imperial IRWMP addresses water supplies (Colorado River and groundwater), demand, baseline and forecasted through 2050, and IID water budget. Chapter 12 addresses projects,

¹¹ October 2012 [Imperial Integrated Regional Water Management Plan](#), Chapter 12.

programs and policies, and funding alternatives. Chapter 12 of the IRMWP lists, and Appendix N details, a set of capital projects that IID might pursue, including the amount of water that might result (AFY) and cost (\$/AF) if necessary. These also highlight potential capital improvement projects that could be implemented in the future.

Imperial Valley historic non-agricultural water demand for 2015 and forecasted future for 2020 to 2055 are provided in **Table -8** in five-year increments. Total water demand for non-agricultural uses is projected to be 199.3 KAF in the year 2055. This is a forecasted increase in the use of non-agricultural water from 107.2 KAF for the period of 2015 to 2055.¹² These values were modified from Chapter 5 of the Imperial IRWMP to reflect updated conditions from the IID Provisional Water Balance for calendar year 2015. Due to the recession in 2009 and other factors, non-agricultural growth projections have lessened since the 2012 Imperial IRWMP. *Projections in Table 8 have been adjusted have been adjusted (reduced by 3%) to reflect IID 2015 delivery data.*

Table 8: Non-Agricultural Water Demand within IID Water Service Area, 2015-2055 (KAFY)

	2015	2020	2025	2030	2035	2040	2045	2050	2055
Municipal	30.0	33.9	36.8	39.8	41.5	46.3	51.7	57.8	61.9
Industrial	26.4	33.1	39.8	46.5	53.2	59.9	66.6	73.3	80.0
Other	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5
Feedlots/Dairies	17.8	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
Envr Resources	8.3	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Recreation	7.4	7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Service Pipes	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
Total Non Ag	107.4	123.5	133.3	142.8	151.2	162.7	174.8	187.6	198.4

Notes: 2015 non-agricultural water demands are from IID 2015 Provisional Water Balance rerun 03/28/2019 2020-2055 demands are modified from 2012 Imperial IRWMP Chapter 5, Table 5-22 p 5-50 based on IID 2015 Provisional Water Balance. Industrial Demand includes geothermal, but not solar, energy production.

Agricultural evapotranspiration (ET) demand of approximately 1,476.4 KAF in 2015, decreased in 2019 to around 1,494.9 KAF. The termination of fallowing programs provided 103.5 KAF of water for Salton Sea mitigation in 2017. Forecasted agricultural ET remains constant, as reductions in water use are to come from efficiency conservation not reduction in agricultural production. Market forces and other factors may impact forecasted future water demand.

¹² [Wistaria Solar Ranch, Final Environmental Impact Report](#), December 2014

Table 9 provides the 2015 historic and 2020-2055 forecasted agricultural consumptive use and delivery demand within the IID water service area. When accounting for agriculture ET, tailwater and tilewater, total agricultural consumptive use (CU) demand ranges from 2,157.9 KAF in 2015 to 2,209.5 KAF in 2055. Forecasted total agricultural delivery demand is around 1 KAFY higher than the CU demand, ranging from 2,158.9 KAF in 2015 to 2,210.5 KAF in 2055.

Table 9: Historic and forecasted Agricultural Water Consumptive Use and Delivery Demand within IID Water Service Area, 2015-2055 (KAFY)

	2015	2020	2025	2030	2035	2040	2045	2050	2055
Ag ET from Delivered & Stored Soil Water	1,475.4	1,567.5	1,567.5	1,567.5	1,567.5	1,567.5	1,567.5	1,567.5	1,567.5
Ag Tailwater to Salton Sea	282.9	318.0	268.0	218.0	218.0	218.0	218.0	218.0	218.0
Ag Tilewater to Salton Sea	398.6	423.0	423.0	423.0	423.0	423.0	423.0	423.0	423.0
Total Ag CU Demand	2,157.9	2,308.5	2,258.5	2,208.5	2,208.5	2,208.5	2,208.5	2,208.5	2,208.5
<i>Subsurface Flow to Salton Sea</i>	<i>1.0</i>								
Total Ag Delivery Demand	2,158.9	2,309.5	2,259.5	2,209.5	2,209.5	2,209.5	2,209.5	2,209.5	2,209.5

Notes: 2015 record from IID 2015 Provisional Water Balance rerun 06/28/2019; 2020-2055 forecasts from spreadsheet used to develop Figure 19, et seq. in Imperial IRWMP Chapter 5 (Data provided by IID staff). Next Update 2021

In addition to agricultural and nonagricultural water demands, system operational demands must be included to account for operational discharge, main and lateral canal seepage; and for All American Canal (AAC) seepage, river evaporation and phreatophyte ET from Imperial Dam to IID’s measurement site at AAC Mesa Lateral 5. These system operation demands are shown in **Table 10**. IID measures system operational uses at All-American Canal Station 2900 just upstream of Mesa Lateral 5 Heading. Total system operational use for 2019 was 257.9 KAF, including 10 KAF of LCWSP input, 39.8 KAF of seepage interception input, and 30.9 KAF of unaccounted canal water input.

Table 10: IID System Operations Consumptive Use within IID Water Service Area and from AAC at Mesa Lateral 5 to Imperial Dam, (KAF), 2019

Delivery System Evaporation	24.6
Canal Seepage	91.7
Canal Spill	13.1
Lateral Spill	118.1
Seepage Interception	-39.8
Unaccounted Canal Water	30.9
Total System Operational Use, In valley	238.6
Imperial Dam to AAC @ Mesa Lat 5	29.2
LCWSP	-10
Total System Operational Use in 2019	257.8
<i>Source: 2019 Water Balance rerun 04/22/2020</i>	

7.4 IID INTERIM WATER SUPPLY POLICY FOR NON-AGRICULTURAL PROJECTS (SEPTEMBER 2009)

The IID IWSP provides a mechanism to address water supply requests for projects being developed within the IID service area. The IWSP designates up to 25,000 AFY of IID’s annual Colorado River water supply for new non-agricultural projects, provides a mechanism and process to develop a water supply agreement for any appropriately permitted project, and establishes a framework and set of fees to ensure the supplies used to meet new demands do not adversely affect existing users by funding water conservation or augmentation projects as needed.¹³

Depending on the nature, complexity, and water demands of the proposed project, new projects may be charged a one-time Reservation Fee and an annual Water Supply Development Fee for the contracted water volume used solely to assist in funding new water supply projects. The applicability of the fee to certain projects will be determined by IID on a case-by-case basis, depending on the proportion of types of land uses and water demand proposed for a project. The 2019 fee schedule is shown in **Table 11**.

¹³ IID website: [Municipal, Industrial and Commercial Customers](#).

Table 11: Interim Water Supply Policy 2019 Annual Non-Agricultural Water Supply Development Fee Schedule

Annual Demand (AF)	Reservation Fee (\$/AF)*	Development Fee (\$/AF)*
0-500	\$73.15	\$292.62
501-1000	\$103.00	\$412.00
1001-2500	\$129.34	\$517.34
2501-5000	\$159.77	\$639.07

Adjusted annually in accordance with the Consumer Price Index (CPI).

IID customers with new projects receiving water under the IWSP will be charged the appropriate water rate based on measured deliveries, see [IID Water Rate Schedules](#). As of January 2021, IID has issued one Water Supply Agreement for 1,200 AFY, leaving a balance of 23,800 AFY of supply available for contracting under the IWSP.

7.5 IID Temporary Land Conversion Following Policy (May 2012)

Imperial County planning officials determined that renewable energy facilities were consistent with the county's agricultural zoning designation and began issuing CUPs for these projects with ten- to twenty-year terms. These longer-term, but temporary, land use designations were not conducive to a coordinated land use/water supply policy as envisioned in the Imperial IRWMP, because temporary water supply assignments during a conditional use permit (CUP) term were not sufficient to meet the water supply verification requirements for new project approvals. Agricultural landowners also sought long-term assurances from IID that, at project termination, irrigation service would be available for them to resume their farming operations.

Based on these conditions, IID determined it had to develop a water supply policy that conformed to the local land use decision-making in order to facilitate new development and economic diversity in Imperial County which has resulted in the IID Temporary Land Conversion Following Policy (TLCFP).¹⁴ IID concluded that certain lower water use projects could still provide benefits to local water users. The resulting benefits; however, may not be to the same categories of use (e.g., MCI) but to the district as a whole.

At the general manager's direction, staff developed a framework for a fallowing program that could be used to supplement the IWSP and meet the multiple policy objectives envisioned for the coordinated land

¹⁴ IID website: [Temporary Land Conversion Following Policy \(TLCFP\)](#), and The [TLCFP](#) are the sources of the text for this section.

use/water supply strategy. Certain private projects that, if implemented, will temporarily remove land from agricultural production within the district's water service area include renewable solar energy and other non-agricultural projects. Such projects may need a short-term water supply for construction and decommissioning activities and longer-term water service for facility operation and maintenance or for treating to potable water standards. Conserved water will be credited to the extent that water use for the project is less than historic water use for the project site's footprint as determined by the ten year water use history.¹⁵

Water demands for certain non-agricultural projects are typically less than that required for agricultural production. This reduced demand allows water to be made available for other users under IID's annual consumptive use cap. This allows the district to avail itself of the ability during the term of the QSA/Transfer Agreements under [CWC Section 1013](#) to create conserved water through projects such as temporary land fallowing conservation measures. This conserved water can then be used to satisfy the district's conserved water transfer obligation and for environmental mitigation purposes.

Under the terms of the legislation adopted to facilitate the QSA/Transfer Agreements and enacted in CWC Section 1013, the TLCFP was adopted by the IID board on May 8, 2012 and revised on March 29, 2016 to update the fee schedule for 2016. This policy provides a framework for a temporary, long-term fallowing program to work in concert with the IWSP. While conserved water generated from the TLCFP is limited by law for use for water transfer or environmental purposes, by satisfying multiple district objectives the TLCFP serves to reduce efficiency conservation and water use reduction demands on IID water users, thus providing district wide benefits.

7.6 IMPERIAL IRRIGATION DISTRICT'S WATER RIGHTS

The laws and regulations that influence IID's water supply are noted in this section. The Law of the River (as described below), along with the 2003 Quantification Settlement Agreement and Related Agreements serve as the laws, regulations and agreements that primarily influence the findings of this WSA. These agreements grant California the most senior water rights along the Colorado River and IID specify that IID has access to 3.1 MAF per year. These two components will influence future decisions in terms of water supply during periods of shortages.

¹⁵ For details of how water conservation yield attributable to land removed from agricultural production and temporarily fallowed is computed, see [TLCFP for Water Conservation Yield](#).

CALIFORNIA LAW

IID's has a longstanding right to divert Colorado River water, and IID holds legal titles to all of its water and water rights in trust for landowners within the district (CWC §20529 and §22437; *Bryant v. Yellen*, 447 U.S. 352, 371 (1980), fn.23.). Beginning in 1885, a number of individuals, as well as the California Development Company, made a series of appropriations of Colorado River water under California law for use in the Imperial Valley. The rights to these appropriations were among the properties acquired by IID from the California Development Company.

LAW OF THE RIVER

Colorado River water rights are governed by numerous compacts, state and federal laws, court decisions and decrees, contracts, and regulatory guidelines collectively known as the "Law of the River." Together, these documents form the basis for allocation of the water, regulation of land use, and management of the Colorado River water supply among the seven basin states and Mexico.

Of all regulatory literature that governs Colorado River water rights, the following are the specifics that impact IID:

- Colorado River Compact (1922)
- Boulder Canyon Project Act (1928)
- California Seven-Party Agreement (1931)
- Arizona v. California US Supreme Court Decision (1964, 1979)
- Colorado River Basin Project Act (1968)
- Quantification Settlement Agreement and Related Agreements (2003)
- 2003 Colorado River Water Delivery Agreement: Federal QSA for purposes of Section 5(b) Interim Surplus Guidelines (CRWDA)
- 1970 Criteria for Coordinated Long-Range Operation of Colorado River Reservoirs
- Annual Operating Plan (AOP) for Colorado River Reservoirs
- 2007 Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lakes Powell and Mead (2007 Interim Guidelines)

COLORADO RIVER COMPACT (1922)

With authorization of their legislatures and urging of the federal government, representatives from the seven Colorado River basin states began negotiations regarding distribution of water from the Colorado River in 1921. In November 1922, an interstate agreement called the "Colorado River Compact" was signed by the representatives giving the Lower Basin perpetual rights to annual apportionments of 7.5 million acre-feet (MAF) of Colorado River water (75 MAF over ten years). The Upper Basin was to receive the remainder, which based on the available hydrological record was also expected to be 7.5 MAF annually, with enough left over to provide 1.5 MAF annually to Mexico.

BOULDER CANYON PROJECT ACT (1928)

Provisions in the 1928 Boulder Canyon Project Act made the compact effective and authorized construction of Hoover Dam and the All-American Canal, and served as the United States' consent to accept the Compact. Through a Presidential Proclamation on June 25, 1929, this act resulted in ratification of the Compact by six of the basin states and required California to limit its annual consumptive use to 4.4 MAF of the lower basin's apportionment plus not less than half of any excess or surplus water unapportioned by the Compact. A lawsuit was filed by the State of Arizona after its refusal to sign. Through the implementation of its 1929 Limitation Act, California abided by this federal mandate. The Boulder Canyon Act authorized the Secretary of the Interior (Secretary) to "contract for the storage of water... and for the delivery thereof... for irrigation and domestic uses," and additionally defined the lower basin's 7.5 MAF apportionment split, with an annual allocation 0.3 MAF to Nevada, 2.8 MAF to Arizona, and 4.4 MAF to California. Even though the three states never formally settled or agreed to these terms, a 1964 Supreme Court decision (*Arizona v. California*, 373 U.S. 546) declared the three states' consent to be insignificant since the Boulder Canyon Project Act was authorized by the Secretary.

CALIFORNIA SEVEN-PARTY-AGREEMENT (1931)

Following implementation of the Boulder Canyon Project Act, the Secretary requested that California make recommendations regarding distribution of its apportionment of Colorado River water. In August 1931, under chairmanship of the State Engineer, the California Seven-Party Agreement was developed and authorized by the affected parties to prioritize California water rights. The Secretary accepted this agreement and established these priorities through General Regulations issued in September of 1931. The first four (4) priority allocations account for California's annual apportionment of 4.4 MAF, with agricultural entities using 3.85 MAF of that total. Additional priorities are defined for years in which the Secretary declares that excess waters are available.

ARIZONA V. CALIFORNIA U.S. SUPREME COURT DECISION (1964, 1979)

The 1964 Supreme Court decision settled a 25-year disagreement between Arizona and California that stemmed from Arizona's desire to build the Central Arizona Project to enable use of its full apportionment. California's argument was that as Arizona used water from the Gila River, which is a Colorado River tributary, it was using a portion of its annual Colorado River apportionment. An additional argument from California was that it had developed a historical use of some of Arizona's apportionment, which, under the doctrine of prior appropriation, precluded Arizona from developing the project. California's arguments were rejected by the U.S. Supreme Court. Under direction of the Supreme Court,

the Secretary was restricted from delivering water outside of the framework of apportionments defined by law. Preparation of annual reports documenting consumptive use of water in the three lower basin states was also mandated by the Supreme Court. In 1979, present perfected water rights (PPRs) referred to in the Colorado River Compact and in the Boulder Canyon Project Act were addressed by the Supreme Court in the form of a Supplemental Decree.

In March of 2006, a Consolidated Decree was issued by the Supreme Court to provide a single reference to the conditions of the original 1964 decrees and several additional decrees in 1966, 1979, 1984 and 2000 that stemmed from the original ruling. The Consolidated Decree also reflects the settlements of the federal reserved water rights claim for the Fort Yuma Indian Reservation.

COLORADO RIVER BASIN PROJECT ACT (1968)

In 1968, various water development projects in both the upper and lower basins, including the Central Arizona Project (CAP) were authorized by Congress. Under the Colorado River Basin Project Act, priority was given to California's apportionment over (before) the CAP water supply in times of shortage. Also under the act, the Secretary was directed to prepare long-range criteria for the Colorado River reservoir system in consultation with the Colorado River Basin States.

QUANTIFICATION SETTLEMENT AGREEMENT AND RELATED AGREEMENTS (2003)

With completion of a large portion of the CAP infrastructure in 1994, creation of the Arizona Water Banking Authority in 1995, and the growth of Las Vegas in the 1990s, California encountered increasing pressure to live within its rights under the Law of the River. After years of negotiating among Colorado River Compact States and affected California water delivery agencies, a Quantification Settlement Agreement and Related Agreements and documents were signed on October 10, 2003, by the Secretary of Interior, IID, Coachella Valley Water District (CVWD), Metropolitan Water District of Southern California (MWD), San Diego County Water Authority (SDCWA), and other affected parties.

The Quantification Settlement Agreement and Related Agreements (QSA/Transfer Agreements) are a set of interrelated contracts that resolve certain disputes among the United States, the State of California, IID, MWD, CVWD and SDCWA, for a period of 35 to 75 years, regarding the reasonable and beneficial use of Colorado River water; the ability to conserve, transfer and acquire conserved Colorado River water; the

quantification and priority of Priorities 3(a) and 6(a)¹⁶ within California for use of Colorado River water; and the obligation to implement and fund environmental impact mitigation.

Conserved water transfer agreements between IID and SDCWA, IID and CVWD, and IID and MWD are all part of the QSA/Transfer Agreements. For IID, these contracts identify conserved water volumes and establish transfer schedules along with price and payment terms. As specified in the agreements, IID will transfer nearly 415,000 AF annually over a 35-year period (or loner), as follows:

- to MWD 110,000 AF [modified to 105,000 AF in 2007],
- to SDCWA 200,000 AF,
- to CVWD and MWD combined 103,000 AF, and
- to certain San Luis Rey Indian Tribes 11,500 AFY of water.

All of the conserved water will ultimately come from IID system and on-farm efficiency conservation improvements. In the interim, IID has implemented a Fallowing Program to generate water associated with Salton Sea mitigation related to the impacts of the IID/SDCWA water transfer, as required by the State Water Resources Control Board, which is to run from 2003 through 2017. In return for its QSA/Transfer Agreements programs and deliveries, IID will receive payments totaling billions of dollars to fund needed efficiency conservation measures and to pay growers for conserved on-farm water, so IID can transfer nearly 14.5 MAF of water without impacting local productivity. In addition, IID will transfer to SDCWA 67,700 AFY annually of water conserved from the lining of the AAC in exchange for payment of lining project costs and a grant to IID of certain rights to use the conserved water. In addition to the 105,000 acre-feet of water currently being conserved under the 1988 IID/MWD Conservation Program, these more recent agreements define an additional 303,000 AFY to be conserved by IID from on-farm and distribution system conservation projects for transferred to SDCWA, CVWD, and MWD.

COLORADO RIVER WATER DELIVERY AGREEMENT (2003)¹⁷

As part of QSA/Transfer Agreements among California and federal agencies, the Colorado River Water Delivery Agreement: Federal QSA for purposes of Section 5(b) Interim Surplus Guidelines (CRWDA) was entered into by the Secretary of the Interior, IID, CVWD, MWD and SDCWA. This agreement involves the

¹⁶ *Priorities 1, 2, 3(b), 6(b), and 7 of current Section 5 Contracts for the delivery of Colorado River water in the State of California and Indian and miscellaneous Present Perfected Rights within the State of California and other existing surplus water contracts are not affected by the QSA Agreement.*

¹⁷ [CRWDA: Federal QSA](#) accessed 7 June 2017.

federal government because of the change in place of diversion from Imperial Dam into the All-American Canal to Parker Dam into MWD’s Colorado River Aqueduct.

The CRWDA assists California to meet its “4.4 Plan” goals by quantifying deliveries for a specific number of years for certain Colorado River entitlements so transfers may occur. In particular, for the term of the CRWDA, quantification of Priority 3(a) was effected through caps on water deliveries to IID (consumptive use of 3.1 MAF per year) and CVWD (consumptive use of 330 KAF per year). In addition, California’s Priority 3(a) apportionment between IID and CVWD, with provisions for transfer of supplies involving IID, CVWD, MWD and SDCWA are quantified in the CRWDA for a period of 35 years or 45 years (assumes SDCWA does not terminate in year 35) or 75 years (assumes SDCWA and IID mutually consent to renewal term of 30 years).

Allocations for consumptive use of Colorado River water by IID, CVWD and MWD that will enable California to stay within its basic annual apportionment (4.4 MAF plus not less than half of any declared surplus) are defined by the terms of the QSA/Transfer Agreements (**Table 12**). As specified in the QSA/Transfer Agreements, by 2026, IID annual use within (Imperial Valley) is to be reduced to just over 2.6 MAF of its 3.1 MAF quantified annual apportionment. The remaining nearly 500,000 AF (which includes the 67,000 AF from AAC lining) are to be transferred annually to urban water users outside of the Imperial Valley.

Table 12: CRWDA Annual 4.4 MAF Apportionment (Priorities 1 to 4) for California Agencies (AFY)

User	Apportionment (AFY)
Palo Verde Irrigation District and Yuma Project*	420,000
Imperial Irrigation District	3,100,000
Coachella Valley Water District	330,000
Metropolitan Water District of Southern California*	550,000
Total:	4,400,000

* PVID and Yuma Project did not agree to a cap; value represents a contractual obligation by MWD to assume responsibility for any overages or be credited with any volume below this value.

Notes: All values are consumptive use at point of Colorado River diversion: Palo Verde Diversion Dam (PVID), Imperial Dam (IID and CVWD), and Parker Dam (MWD). Source: IID Annual Water Report

Quantification of Priority 6(a) was effected through quantifying annual consumptive use amounts to be made available in order of priority to MWD (38 KAF), IID (63 KAF), and CVWD (119 KAF) with the provision that any additional water available to Priority 6(a) be delivered under IID’s and CVWD’s existing water delivery contract with the Secretary.¹⁸ The CRWDA provides that the underlying water delivery contract

¹⁸ When water levels in the Colorado River reservoirs are low, Priority 5, 6 and 7 apportionments are not available for diversion.

with the Secretary remain in full force and effect. (*Colorado River Documents 2008*, Chapter 6, pages 6-12 and 6-13). The CRWDA also provides a source of water to effect a San Luis Rey Indian Water rights settlement. Additionally, the CRWDA satisfies the requirement of the 2001 Interim Surplus Guidelines (ISG) that a QSA be adopted as a prerequisite to the interim surplus determination by the Secretary in the ISG.

INADVERTENT OVERRUN PAYBACK POLICY (2003)

The CRWDA Inadvertent Overrun Payback Policy (IOPP), adopted by the Secretary contemporaneously with the execution of the CRWDA, provides additional flexibility to Colorado River management and applies to entitlement holders in the Lower Division States (Arizona, California and Nevada).¹⁹ The IOPP defines inadvertent overruns as “Colorado River water diverted, pumped, or received by an entitlement holder of the Lower Division States that is in excess of the water users’ entitlement for the year.” An entitlement holder is allowed a maximum overrun of 10 percent (10%) of its Colorado River water entitlement.

In the event of an overrun, the IOPP provides a mechanism to payback the overrun. When the Secretary has declared a normal year for Colorado River diversions, a contractor has from one to three years to pay back its obligation, with a minimum annual payback equal to 20 percent of the entitlement holder’s maximum allowable cumulative overrun account or 33.3 percent of the total account balance, whichever is greater. However, when Lake Mead is below 1125 feet on January 1, the terms of the IOPP require that the payment of the inadvertent overrun obligation be made in the calendar year after the overrun is reported in the USBR Lower Colorado Region Colorado River Accounting and Water Use Report [for] Arizona, California, and Nevada (Decree Accounting Report).²⁰

1970 CRITERIA FOR COORDINATED LONG-RANGE OPERATION OF COLORADO RIVER RESERVOIRS

The 1970 Operating Criteria control operation of the Colorado River reservoirs in compliance with requirements set forth in the Colorado River Compact of 1922, the United States-Mexico Water Treaty of 1944, the Colorado River Storage Project Act of 1956, the Boulder Canyon Projects Act (Lake Mead) and the Colorado River Basin Project Act (Upper Basin Reservoirs) of 1968, and other applicable federal laws. Under these Operating Criteria, the Secretary makes annual determinations published in the USBR Annual

¹⁹ USBR, 2003 CRWDA ROD Implementation Agreement, IOPP and Related Federal Actions Final EIS. Section IX. Implementing the Decision A. Inadvertent Overrun and Payback Policy. Pages 16-19 of 34.

²⁰ 2003 [CRWDA ROD](#). Section IX. A.6.c., page 18 of 34.

Operating Plan for Colorado River Reservoirs (discussed below) regarding the release of Colorado River water for deliveries to the lower basin states. A requirement to equalize active storage between Lake Powell and Lake Mead when there is sufficient storage in the Upper Basin is included in these operating criteria. **Figure 5** identifies the major storage facilities at the upper and lower basin boundaries.

ANNUAL OPERATING PLAN FOR COLORADO RIVER RESERVOIRS (Applicable Only if Lake Mead has Surplus/Shortage)

The AOP is developed in accordance with Section 602 of the Colorado River Basin Project Act (Public Law 90-537); the Criteria for Coordinated Long-Range Operations of Colorado River Reservoirs Pursuant to the Colorado River Basin Project Act of 1968, as amended, promulgated by the Secretary of the Interior; and Section 1804(c)(3) of the Grand Canyon Protection Act (Public Law 102-575). As part of the AOP process, the Secretary makes determinations regarding the availability of Colorado River water for deliveries to the lower basin states, including whether normal, surplus, and shortage conditions are in effect on the lower portion of the Colorado River.

2007 COLORADO RIVER INTERIM GUIDELINES FOR LOWER BASIN SHORTAGES (2007 INTERIM GUIDELINES)

A multi-year drought in the Colorado River Upper Basin triggered the need for the 2007 Interim Shortage Guidelines. In the summer of 1999, Lake Powell was essentially full with reservoir storage at 97 percent of capacity. However, precipitation fell off starting in October 1999 and 2002 inflow was the lowest recorded since Lake Powell began filling in 1963.^{21,22} By August 2011, inflow was 279 percent (279%) of average; however, drought resumed in 2012 and continued through calendar year 2018. Using the record in **Table 13**, average unregulated inflow to Lake Powell for water years 2000-2017 is 74 percent (74%); or if 2011 is excluded, 70 percent (70%) of the historic average, see

Table 13.

Table 13: Unregulated Inflow to Lake Powell, Percent of Historic Average, 2000-2019

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
62%	59%	25%	51%	49%	105%	73%	68%	102%	88%	73%
2011	2012	2013	2014	2015	2016	2017	2018	2019		
136%	35%	49%	90%	83%	80%	100%	43%	36%		

Source: [Drought in the Upper Colorado River Basin](#) (2000-2010), and [UCR Water Operations: Historic Data](#) (2011-2019)

²¹ Water Year: October 1 through September 30 of following year, so water year ending September 30, 1999

²² [Drought in the Upper Colorado River Basin](#). August 2011

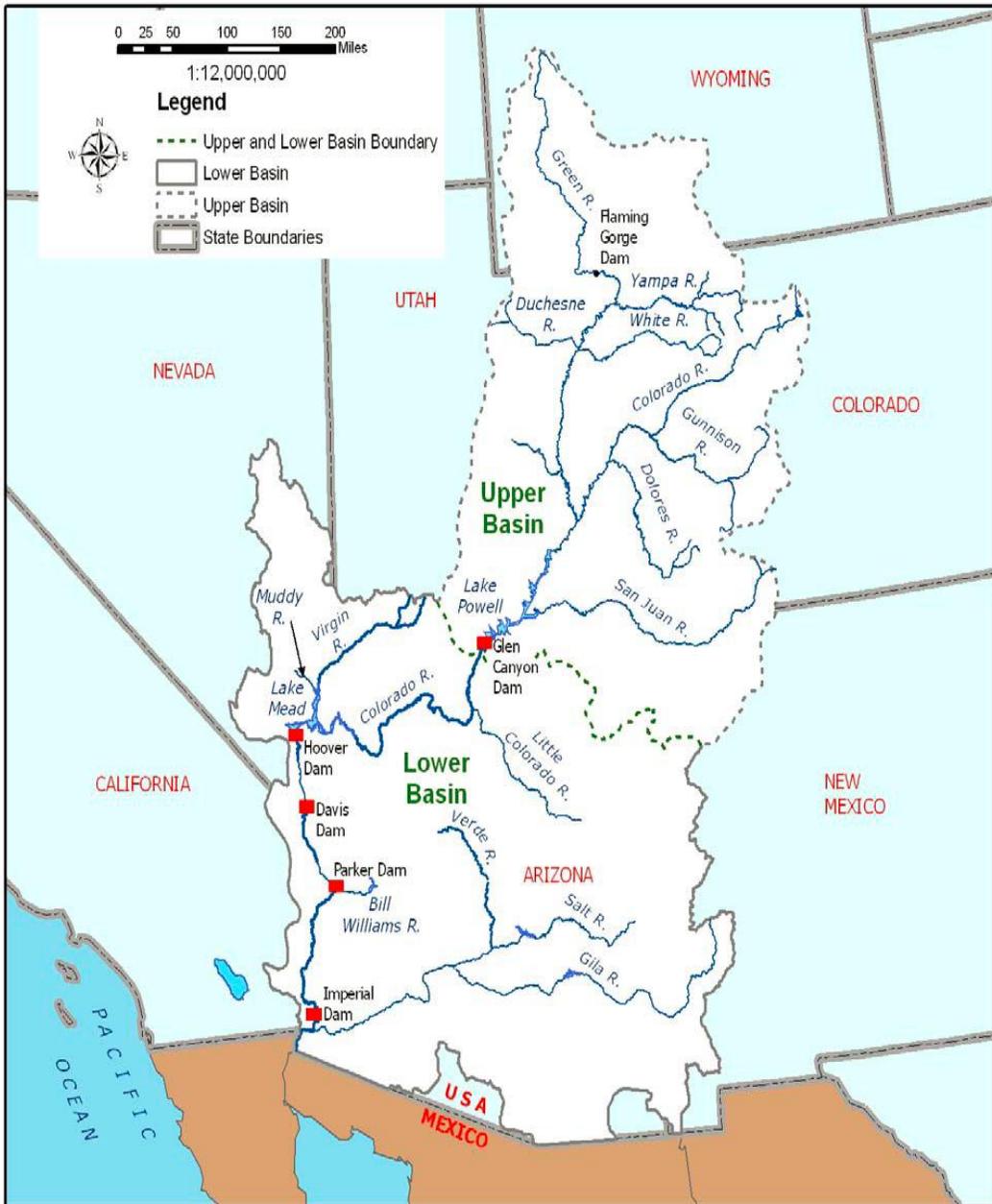


Figure 5 Major Colorado River Reservoir Storage Facilities and Basin Location Map

Source: [Final EIS – Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead, Volume 1 Chapter 1 Purpose and Need](#) , p I-10.

In the midst of the drought period, USBR developed 2007 Interim Guidelines with consensus from the seven basin states, which selected the Draft EIS Preferred Alternative as the basis for USBR's final determination. The basin states found the Preferred Alternative best met all aspects of the purpose and need for the federal action.²³

The 2007 interim Guidelines Preferred Alternative highlights the following:

1. The need for the Interim Guidelines to remain in place for an extended period of time.
2. The desirability of the Preferred Alternative based on the facilitated consensus recommendation from the basin states.
3. The likely durability of the mechanisms adopted in the Preferred Alternative in light of the extraordinary efforts that the basin states and water users have undertaken to develop implementing agreements that will facilitate the water management tools (shortage sharing, forbearance, and conservation efforts) identified in the Preferred Alternative
4. That the range of elements in the Preferred Alternative will enhance the Secretary's ability to manage the Colorado River reservoirs in a manner that recognizes the inherent tradeoffs between water delivery and water storage.

In June 2007, USBR announced that a preferred alternative for Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations of Lake Powell and Lake Mead (Final Preferred Alternative) had been determined. The Final Preferred Alternative, based on the basin states' consensus alternative and an alternative submitted by the environmental interests called "Conservation Before Shortage," is comprised of four key operational elements which are to guide operations of Lake Powell and Lake Mead through 2026 are:

1. Shortage strategy for Lake Mead and Lower Division states: The Preferred Alternative proposed discrete levels of shortage volumes associated with Lake Mead elevations to conserve reservoir storage and provide water users and managers in the Lower Basin with greater certainty to know when, and by how much, water deliveries will be reduced during low reservoir conditions.

²³ USBR *Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead* <<http://www.usbr.gov/lc/region/programs/strategies.html>>

2. Coordinated operations of Lake Powell and Lake Mead: The Preferred Alternative proposed a fully coordinated operation of the reservoirs to minimize shortages in the Lower Basin and to avoid risk of curtailments of water use in the Upper Basin.
3. Mechanism for storage and delivery of conserved water in Lake Mead: The Preferred Alternative proposed the Intentionally Created Surplus (ICS) mechanism to provide for the creation, accounting, and delivery of conserved system and non-system water thereby promoting water conservation in the Lower Basin. Credits for Colorado River or non-Colorado River water that has been conserved by users in the Lower Basin creating an ICS would be made available for release from Lake Mead at a later time. The total amount of credits would be 2.1 MAF, but this amount could be increased up to 4.2 MAF in future years.
4. Modifying and extending elements of the Interim Surplus Guidelines (ISG). The ISG determines conditions under which surplus water is made available for use within the Lower Division states. These modifications eliminate the most liberal surplus conditions thereby leaving more water in storage to reduce the severity of future shortages.

With respect to the various interests, positions and views of the seven basin states, this provision adds an important element to the evolution of the legal framework for prudent management of the Colorado River. Furthermore, the coordinated operation element allows for adjustment of Lake Powell releases to respond to low reservoir storage conditions in either Lake Powell or Lake Mead²⁴. States found the Preferred Alternative best met all aspects of the purpose and need for the federal action.²⁵ The 2007 Interim Guidelines are in place from 2008 through December 31, 2025 (through preparation of the 2026 Annual Operating Plan). Reclamation's Upper and Lower Colorado Basin Regions manage the operations of Lake Powell and Lake Mead pursuant to the Record of Decision for the 2007 Interim Guidelines.

LOWER COLORADO REGION WATER SHORTAGE OPERATIONS

The drought in the Colorado River watershed has continued through 2019 despite an increase in observed runoff in August 2011 when unregulated inflow to Lake Powell was 279 percent of the average. Since 2000, Lake Mead has been below the "average" level of lake elevations (see **Figure 6**). Such

²⁴ For a discussion of the 2007 Interim Guidelines, see: [Intermountain West Climate Summary](#) by The Western Water Assessment, issued Jan. 21, 2008, Vol. 5, Issue 1, January 2009 Climate Summary, Feature Article, pages 5-7, 22 Mar 2013.

²⁵ [USBR Colorado River Interim Guidelines for Lower Basin Shortages and Coordinated Operations for Lake Powell and Lake Mead](#).

conditions have caused the preparation of shortage plans for waters users in Arizona and Nevada, and in Mexico.

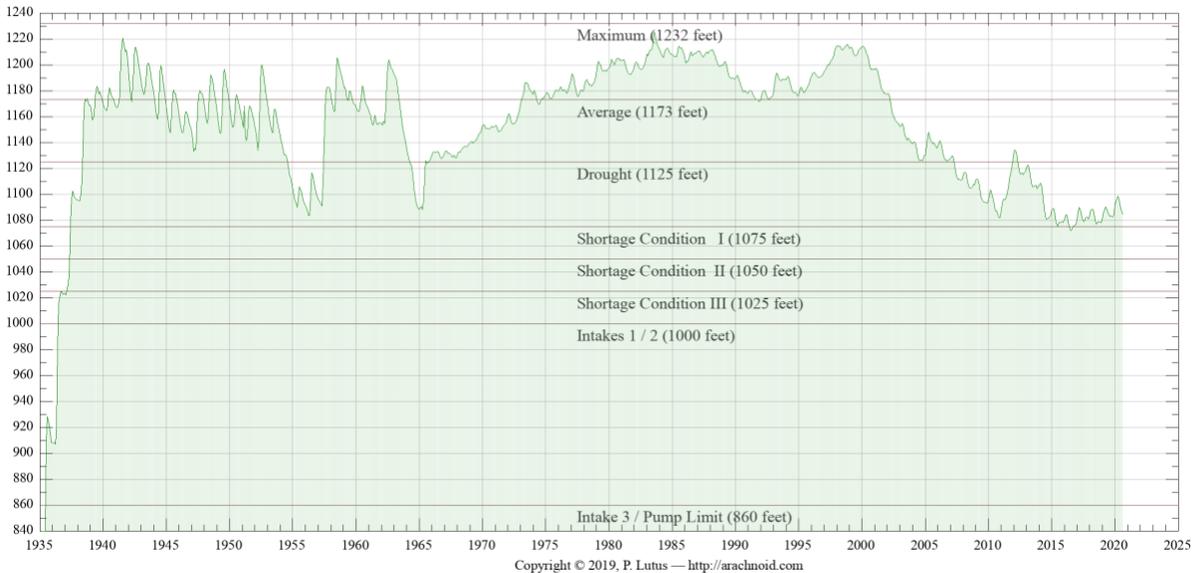


Figure 6 Lake Mead Water Elevation Levels 2020

visit <<http://www.arachnoid.com/NaturalResources/index.html>>

According to guidelines put in place in 2007, Arizona and Nevada begin to take shortages when the water elevation in Lake Mead falls below 1,075 feet. The volumes of shortages increase as water levels fall to 1,050 feet and again at 1,025 feet. In 2012, Mexico agreed to participate in a 5-year pilot agreement to share specific volumes of shortages at the same elevations. The 2007 interim shortage guidelines contain no reductions for California, which has senior water rights to the Central Arizona Project water supply, through 2025 when the guidelines expire. If Lake Mead's elevation drops to 1,025 feet, a re-consultation process would be triggered among the basin states to address next steps. Consultation would start out within each state, then move to the three lower basin states, followed by all seven states and the USBR. Mexico will then be brought into the process unless they choose to participate earlier.

8 IMPERIAL IRRIGATION DISTRICT WATER SUPPLY AND DEMAND

SB 610 requires an analysis of a normal, single dry, and multiple dry water years to show that adequate water is available for the proposed Project in various climate scenarios. Water availability for this Project in a normal year is no different from water availability during a single-dry and multiple-dry year scenarios.

This is due to the small effect rainfall has on water availability in IID's arid environment along with IID's strong entitlements to the Colorado River water supply. Local rainfall does have some impact on how much water is consumed (i.e. if rain falls on agricultural lands, those lands will not demand as much irrigation), but does not impact the definition of a normal year, a single-dry year or a multiple-dry year scenario.

9 WATER AVAILABILITY – NORMAL YEAR

IID is entitled to annual net consumptive use of 3.1 MAF of Colorado River, less its QSA/Transfer Agreement obligations. Imperial Dam, located north of Yuma, Arizona, serves as a diversion structure for water deliveries throughout southeastern California, Arizona and Mexico. Water is transported to the IID water service area through the AAC for use throughout the Imperial Valley. IID historic and forecast net consumptive use volumes at Imperial Dam from CRWDA Exhibit B are shown in **Table 14**. Volumes 2003-2019 are adjusted for USBR Decree Accounting historic records. Volumes for 2020-2077 are from CRWDA Exhibit B modified to reflect 2014 Letter Agreement changes to the 1988 IID/MWD Water Conservation Agreement.²⁶

9.1 GROUNDWATER, AGRICULTURAL PRACTICES AND DRAINAGE

Groundwater underlying the Imperial Valley is generally of poor quality unsuitable for domestic or irrigation purposes. Groundwater in the area of the project is brackish (contains a high salt content). Agricultural practices in the Imperial Valley, including in the project vicinity, consist of aerial and ground application of pesticides and application of chemical fertilizers to both ground and irrigation water at the farm delivery gate. Most of the agricultural fields in the valley are underlain by tile drainage systems (perforated pipelines encapsulated by sand/gravel) installed at a depth of approximately 5 to 7 feet below the ground surface. The tile drains maintain groundwater at levels below the root system of crops. The tile drains transport soluble salts contained in the Colorado River water and that are leached from the soil profile during irrigation. The tile drainage is collected in IID's drainage system, most of which discharges

²⁶ [2014 Imperial Irrigation District Letter Agreement](#) for Substitution and Conservation Modifications to the IID/MWD Water Conservation Agreement - December 17, 2014.

into the New and Alamo rivers and flows to the Salton Sea. A few IID drains discharge directly to the Salton Sea.

Table 14: IID Historic and Forecast Net Consumptive Use for Normal Year, Single-Dry Year and Multiple-Dry Year Water Supply, 2003-2037, et seq. (CRWDA Exhibit B)

IID Quantification and Transfers, Volumes in KAF at Imperial Dam ¹										
Col 1	2	3	4	5	6	7	8	9	10	11
Year	IID Priority 3(a)									
	IID 3(a) Quantified Amount	IID Reductions								IID Total Reduction (Σ Cols 3-9) ⁵
1988 MWD Transfer ²		SDCWA Transfer	AAC Lining	Salton Sea Mitigation SDCWA Transfer ³	Intra-Priority 3 CVWD Transfer	MWD Transfer w\ Salton Sea Restoration ⁴	Misc. PPRs			
2003	3,100	105.1	10.0	0.0	0.0	0.0	0.0	11.5	126.6	2978.2
2004	3,100	101.9	20.0	0.0	15.0	0.0	0.0	11.5	148.4	2743.9
2005	3,100	101.9	30.0	0.0	15.0	0.0	0.0	11.5	158.4	2756.8
2006	3,100	101.2	40.0	0.0	20.0	0.0	0.0	11.5	172.7	2909.7
2007	3,100	105.0	50.0	0.0	25.0	0.0	0.0	11.5	191.5	2872.8
2008	3,100	105.0	50.0	8.9	26.0	4.0	0.0	11.5	205.4	2825.1
2009	3,100	105.0	60.0	65.5	30.1	8.0	0.0	11.5	280.1	2566.7
2010	3,100	105.0	70.0	67.7	33.8	12.0	0.0	11.5	294.8	2540.5
2011	3,100	103.9	63.3	67.7	0.0	16.0	0.0	11.5	262.4	2915.8
2012	3,100	104.1	106.7	67.7	15.2	21.0	0.0	11.5	326.2	2,903.2
2013	3,100	105.0	100.0	67.7	71.4	26.0	0.0	11.5	381.6	2,554.9
2014	3,100	104.1	100.0	67.7	89.2	31.0	0.0	11.5	403.5	2,533.4
2015	3,100	107.82	100.0	67.7	153.3	36.0	0.0	11.5	476.3	2,480.9
2016	3,100	105.0	100.0	67.7	130.8	41.0	0.0	11.5	456.0	2,504.3
2017	3,100	105.0	100.0	67.7	105.3	45.0	0.0	9.9	434.5	2,548.2
2018	3,100	105	130	67.7	0.1	63	0.0	11.5	377.3	2,722.8
2019	3,100	105	160	67.7	46.55	68	0.0	11.5	458.75	2,687.8
2020	3,100	105	193	67.7	0	73	0	11.5	450.2	2,649.8
2021	3,100	105	205	67.7	0	78	0	11.5	467.2	2,632.8
2022	3,100	105	203	67.7	0	83	0	11.5	470.2	2,629.8
2023	3,100	105	200	67.7	0	88	0	11.5	472.2	2,627.8
2024	3,100	105	200	67.7	0	93	0	11.5	477.2	2,622.8
2025	3,100	105	200	67.7	0	98	0	11.5	482.2	2,617.8
2026	3,100	105	200	67.7	0	103	0	11.5	487.2	2,612.8
2027	3,100	105	200	67.7	0	103	0	11.5	487.2	2,612.8
2028	3,100	105	200	67.7	0	103	0	11.5	487.2	2,612.8
2029-37	3,100	105	200	67.7	0	103	0	11.5	487.2	2,612.8
2038-47 ⁶	3,100	105	200	67.7	0	103	0	11.5	487.2	2,612.8
2048-77 ⁷	3,100	105	200	67.7	0	50 ⁸	0	11.5	434.2	2,665.8

- 2003 through 2019, volumes are adjusted for actual USBR Decree Accounting values; IID Total Reduction and Net Available for Consumptive Use may not equal Col 2 minus Col 10, if IID conservation/use was not included in Exhibit B.
- 2014 Letter of Agreement provides that, effective January 2016 total amount of conserved water available is 105 KAFY
- Salton Sea Mitigation volumes may vary based on conservation volumes and method of conservation.
- This transfer is not likely given lack of progress on Salton Sea restoration as of 2018; shaded entries represents volumes that may vary..*
- Reductions include conservation for 1988 IID/MWD Transfer, IID/SDCWA Transfer, AAC Lining; SDCWA Transfer Mitigation, MWD Transfer w/Salton Sea Restoration (if any); Misc. PPRs. Amounts are independent of increases and reductions as allowed by the IOPP.
- Assumes SDCWA does not elect termination in year 35.
- Assumes SDCWA and IID mutually consent to renewal term of 30 years.
- Modified from 100 KAFY in CRWDA Exhibit B; stating in 2018 MWD will provide CVWD 50 KAFY of the 100 KAFY.

Source: [CRWDA: Federal QSA](#) Exhibit B, p 13; updated values from [2019 QSA Implementation Report](#)

Due to limits on annual consumptive use of Colorado River water under the QSA/Transfer Agreements, IID’s water supply during a normal year is best represented by the CRWDA Exhibit B Net Available for

Consumptive Use (**Table 14, Column 11**). The annual volume is IID Priority 3(a) Quantified Amount of 3.1 million acre-feet (MAF) (**Table 14, Column 2**) less the IID transfer program reductions for each year (**Table -14, Columns 3-9**). IID suggests **Table 14** which assumes full use of IID’s quantified water supply, be used in determining base normal year water availability.

CRWDA Exhibit B Net Available for Consumptive Use volumes less system operation demand represents the amount of water available for delivery by IID Water Department to its customers each year. In a normal year, perhaps 50,000 to 100,000 AF of effective rainfall would fall in the IID water service area. However, rainfall is not evenly distributed throughout the IID water service area and is not taken into account by IID in the submittal of its Estimate of Diversion (annual water order) to the USBR.

10 EXPECTED WATER AVAILABILITY – SINGLE DRY AND MULTIPLE DRY YEARS

When drought conditions exist within the IID water service area, as has been the case for the past decade or so, the water supply available to meet agricultural and non-agricultural water demands remains the same as normal year water supply because IID continues to rely solely on its entitlement for Colorado River water. Due to the priority of IID water rights and other agreements, drought conditions affecting Colorado River water supplies cause shortages for Arizona, Nevada and Mexico, before impacting California and IID. Accordingly, the Net Available for Consumptive Use volumes in **Table 14, Column 11** represents the water supply at Imperial Dam available for diversion by IID in single-dry year and multiple-dry year scenarios.

Under CRWDA Inadvertent Overrun Payback Policy (IOPP), IID has some flexibility to manage its water use. When the water level in Lake Mead is above 1,125 feet, an overrun of its USBR approved annual water order is permissible, and IID has up to three years to pay water use above the annual water order. When Lake Mead’s water level is at or below 1,125 feet on January 1 in the calendar year after the overrun is reported in the USBR Lower Colorado Region Decree Accounting Report, the IOPP prohibits additional overruns and requires that outstanding overruns be paid back in the subsequent calendar year rather than in three years as allowed under normal conditions; that is, the payback is to be made in the calendar year following publication of the overrun in the USBR Decree Accounting Report. For historic IID annual rainfall, net consumptive use, transfers and IID underrun/overrun amounts see **Table 14**. For the purposes of the WSA, years with a shortage condition that impacts non-agricultural projects such as an IOPP payback obligation constitute “dry” years for IID.

In years of inadvertent overrun payback, conditions such as those in Sections 3.7 and 3.8 of the 2012 IWSP Water Agreement may go into effect, with the result that less water would be available for non-agricultural development contractors. Under such conditions, IID has requested that Consolidated Edison Development

(CED) (the “Applicant”), work with IID to ensure it can manage the reduction. IID has further indicated that, provided a water supply agreement is approved and executed by IID under the provisions of the IWSP, IID will have sufficient water to support the water of this Project.

Table 15: IID Annual Rainfall (In), Net Consumptive Use and Underrun/Overrun Amounts (AF), 1988-2018

Year	IID Total Annual Rainfall	IID Water Users	IID/MWD Transfer	IID/ SDCWA Transfer	SDCWA Transfer Salton Sea Mitigation	IID Underrun / Overrun	IID/CVWD Transfer	AAC Lining
1988		2,947,581						
1989		3,009,451						
1990	91,104	3,054,188	6,110					
1991	192,671	2,898,963	26,700					
1992	375,955	2,575,659	33,929					
1993	288,081	2,772,148	54,830					
1994	137,226	3,048,076	72,870					
1995	159,189	3,070,582	74,570					
1996	78,507	3,159,609	90,880					
1997	64,407	3,158,486	97,740					
1998	100,092	3,101,548	107,160					
1999	67,854	3,088,980	108,500					
2000	29,642	3,112,770	109,460					
2001	12,850	3,089,911	106,880					
2002	12,850	3,152,984	104,940					
2003	116,232	2,978,223	105,130	10,000	0	6,555		
2004	199,358	2,743,909	101,900	20,000	15,000	166,408		
2005	202,983	2,756,846	101,940	30,000	15,000	159,881		
2006	19,893	2,909,680	101,160	40,000	20,000	12,414		
2007	64,580	2,872,754	105,000	50,000	25,021	6,358		
2008	63,124	2,825,116	105,000	50,000	26,085	47,999	4,000	8,898
2009	30,0354	2,566,713	105,000	60,000	30,158	237,767	8,000	65,577
2010	189,566	2,545,593	105,000	70,000	33,736	207,925	12,000	67,700
2011	109,703	2,915,784	103,940	63,278	0	82,662	16,000	67,700
2012	133,526	2,903,216	104,140	106,722	15,182	134,076	21,000	67,700
2013	134,497	2,554,845	105,000	100,000	71,398	65,981	26,000	67,700
2014	53,517	2,533,414	104,100	100,000	89,168	797	31,000	67,700
2015	97,039	2,480,933	107,820	100,000	153,327	97,188	36,000	67,700
2016	90,586	2,504,258	105,000	100,000	130,796	62,497	41,000	67,700
2017	105,919	2,548,164	105,000	100,000	105,311	30,227	45,000	67,700
2018	63,318	2,625,422	105,000	130,000	0	0	63,000	67,700
2019	146,384	2,558,136	105,000	160,000	46,555	34,215	68,000	67,700

Notes: Volumes in acre-feet and except Total Annual Rainfall are USBR Decree Accounting Report record at Imperial Dam.

IID Total Annual Rainfall from IID Provisional Water Balance, first available calculations are for 1990

Not all IID QSA programs are shown on this table.

Source: [USBR Decree Accounting reports](#), except IID Total Rainfall and IID Overrun/Underrun is a separate calculation

Source: [2019 IID QSA Implementation Report](#) and [2019 IID SWRCB Report](#), page 31 of 335; IID Total Rainfall and IID Overrun/ Underrun is a separate calculation.

10.1 Equitable Distribution Plan

As previously noted, the Equitable Distribution Plan was repealed by the IID board on February 2018 as a result of a legal challenge that is still in the appeal process as of the date of this WSA. November 28, 2006, the IID Board of Directors adopted Resolution No 22-2006 approving development and implementation of an Equitable Distribution Plan to deal with times when customers' demand would exceed IID's Colorado River supply – scenarios such as 2 and 3, above. As part of this Resolution, the IID Board directed the General Manager to prepare the rules and regulations necessary or appropriate to implement the plan within the district, which the board adopted in November 2006. The 2009 Regulations for EDP were created to enable IID to implement a water management tool (apportionment) to address years in which water demand is expected to exceed supply. A 2006 study by Hanemann and Brookes suggested that such conditions were likely to occur 40-50% of the years during the decade following the report. So far, for the ten years from 2003 through 2012, demand has exceeded supply by some amount for a total of six years (see **Table 15**, above). IID has not experienced any overruns since 2014.

The EDP, adopted in 2007 allows the IID Board to institute an apportionment program. The 2006 Hanemann-Brookes study stated supply was likely to exceed demand "4 or 5 times out of the next 10 years".²⁷ In the eight years from 2004 through 2011, IID was accounted as overrunning its annual water limit four times and as noted above, as of 2013, IID had an outstanding overrun balance of over 200,000 AF. As of 2019, IID did not have any outstanding overruns.

An annual EDP Apportionment will be established for each subsequent year from a favorable court decision, if not for the duration of the QSA/Transfer Agreements. The IID 2013 Revised EDP, adopted by the Board on October 28, 2013, allows IID to pay back its outstanding overruns using EDP Apportionment, and it is expected that an annual EDP Apportionment will be established for each of the next several years, if not for the duration of the QSA/Transfer Agreements. For purposes of this WSA, years with a shortage condition that impacts non-agricultural projects such as an IOPP payback obligation constitute "dry" years for IID.

For single-dry year and multiple-dry water year assessments, not only does IID's EDP govern; but when but so may provisions like sections 3.7 and 3.8 of the 2012 IWSP Water Agreement, as stated above. IOPP

²⁷Regarding the Equitable Distribution of Water in the Imperial Irrigation District Draft Final Report, Hanemann & Brookes, 2006, <<http://www.iid.com/Modules/ShowDocument.aspx?documentid=116>> 8 Feb 2013

payback, EDP Apportionment, and the IWSP are further discussed under single-dry and multiple-dry year projections.

10.2 WATER MANAGEMENT UNDER INADVERTENT OVERRUN PAYBACK POLICY (IOPP)

On January 1, 2013, the water level in Lake Mead was 1120.5 feet, and for the first time since the IOPP came into effect Lower Colorado River Basin water users faced a shortage condition (**Figure 6-IOPP Schematic**). For IID, this means that outstanding overruns must be paid back to the river in calendar years 2013 and 2014 as described below and shown in **Table 16**.

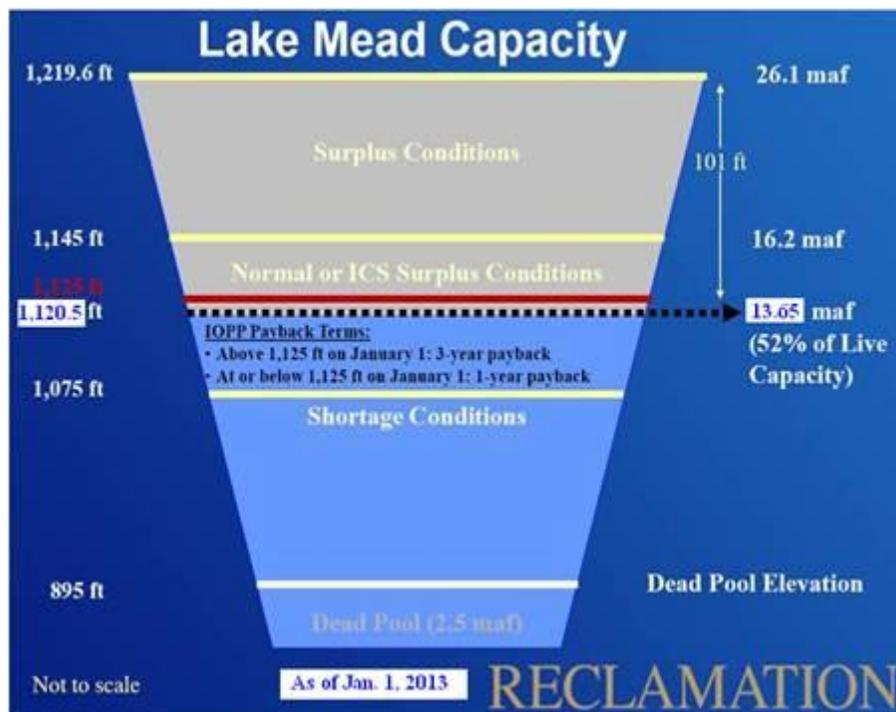


Figure 7 Lake Mead IOPP Schematic

IID’s maximum allowable cumulative overrun account is 62,000 AF.²⁸ Thus, for IID’s 2011 overrun of 82,662 AF (which was published in IOPP in 2012), 62,000 AF were paid back at the river in calendar year 2013, with the remaining 20,662 AF paid back in 2014; however, due to an early payback of 6,290 AF in 2012, IID had 55,710 AF to pay back in 2013 and 20,662 AF of the 2011 overrun to pay back in 2014. In addition, because of the low level of Lake Mead on Jan 1, 2013, IID’s entire 2012 overrun of 134,076 AF was paid

²⁸ For IID Quantified Amount: 3.1 MAFY * 10 percent = 310,000 AF allowable cumulative overrun account amount; minimum repayment in a calendar year is the less of 310,000 * 20 percent = 62,000 or the amount in the account, if less than 62,000 AF.

back in 2014, for a total of 154,738 AF in 2014. Furthermore, under the terms of the IOPP, no overruns are allowed in year when payback is required. IID has not experienced an overrun since 2012.

Table 16: IID Inadvertent Overrun Payback to the Colorado River under the IOPP, 2012-2019

Calendar Year of Payback	2011 Overrun Payback (AF)	2012 Overrun Payback (AF)	Payback Total for 2014 Calendar Year (AF)
2013	55,710	-	55,710
2014	20,662	134,076	154,738
Total Payback	76,372	134,076	210,448

The 2013 IOPP payback obligation and prohibition on overruns in payback years, led the IID Board to implement an apportionment program pursuant to the 2009 Regulations for EDP, which were subsequently revised and modified. The Revised 2013 EDP was version approved and adopted by the IID Board on October 28, 2013 (see Attachment B). The Revised 2013 EDP also establishes an agriculture water clearinghouse to facilitate the movement of apportioned water between agricultural water users and between farm units. This is to allow growers and IID to balance water demands for different types of crops and soils with the apportionment s that are made. IID’s Water Conservation Committee agreed on a July 1, 2013 start date for the agricultural water clearinghouse

Generally, the EDP Apportionment is not expected to impact industrial use. However, given the possibility of continuing drought on the Colorado River and other stressors, provisions such as the 2012 IWSP Water Agreement sections 3.7 and 3.8 as well for dry and multiple dry year water assessment may come into effect. However, IID has agreed to work with project proponents to ensure to the extent possible that the IWSP Water Agreement terms will not negatively impact project operation.

11 PROJECT WATER AVAILABILITY FOR A 30-YEAR PERIOD TO MEET PROJECTED DEMANDS

The proposed Project will obtain drinking water from a certified State of California provider. The Applicant will be purchasing all potable drinking water from a local certified vendor approved through Imperial County Environmental Health Services. Untreated Colorado River water will be supplied to the project via the adjacent WSM underunder IID’s Interim Water Supply Policy (IWSP) for non-agricultural projects or Schedule 7, General Industrial Water. Project Site and has not been farmed for the last 15 years. The Project totals to 163 Acres. Therefore by default, the proposed project would incur an increase in water

usage. The Project is proposing a General Plan Amendment and Rezone to change the land use designation and zoning for the Project site from Agriculture (A-3) to Industrial, with the Industrial zoning limited to Energy Production/Use.

As stated above the current land use for the project site is currently zoned A-3. The site does not currently receive water as shown in the historical data provided in **Table 18**. Although the site may have not used much water in the last 10 years, the site is able to receive water through the WSM Canal. The current gate (WSM Gate 6) is in operational condition, upgrades to any IID facilities will be designed and constructed by the IID Water Engineering Department.

Imperial County Entitlement Discretionary Permits Include:

- General Plan Amendment
- Zone Change
- Development Agreement
- Conditional Use Permit

As noted previously, under the terms of California legislation adopted to facilitate the QSA/Transfer Agreements and enacted in CWC Section 1013, the IID board adopted the TLCFP to address how to deal with any such temporary reduction of water use by projects like such as solar projects that are developed under a CUP.

While conserved water generated from the TLCFP is limited by law for use for water transfer or environmental purposes, by satisfying multiple district objectives the TLCFP serves to reduce the need for efficiency conservation and other water use reduction practices on the part of IID and its water users providing the district with wide benefits. One of the considerations in developing the TLCFP was to provide agricultural land owners with long-term assurances from IID that, at Project termination, irrigation service would be available for them to resume farming operations.

11.1 INTERIM WATER SUPPLY POLICY WATER

At the present time, IID is providing water for use by solar energy generation projects under Water Rate Schedule 7 General Industrial Use. If IID determines that the proposed Project should obtain water under IID's Interim Water Supply Policy (IWSP) for non-agricultural projects rather than Schedule 7 General Industrial Use, the Applicant will do so. IID will determine whether the Project should obtain water under IID's Interim Water Supply Policy (IWSP) for non-agricultural projects in addition to Schedule 7 General Industrial Water.

The IWSP, provided herein as Attachment A, designates up to 25,000 AFY of water for potential Non-Agricultural Projects within IID's water service area. As of June 2019, IID has 23,800 AF available under the IWSP for new projects such as the proposed project. The IWSP establishes a schedule for Processing Fees, Reservation Fees, and Connection Fees that change each year for all non-agricultural projects, and annual Water Supply Development fees for some non-agricultural projects. The proposed Project's water use will be subject to the annual Water Supply Development fee if IID determines that water for the Project is to be supplied under the IWSP.

The likelihood that IID will not receive its annual 3.1 MAF apportionment less QSA/Transfer Agreement obligations of Colorado River water is low due to the high priority of the IID entitlement relative to other Colorado River contractors; see IID's Water Rights section on **page 21**. If such reductions were to come into effect within the 30-year Project life, the Applicants are to work with IID to ensure any reduction can be managed.

As such, lower Colorado River water shortage does not present a material risk to the available water supply that would prevent the County from making the findings necessary to approve this WSA. IID, like any water provider, has jurisdiction to manage the water supply within its service area and impose conservation measures during a period of temporary water shortage. Furthermore, without the proposed Project, IID's task of managing water supply under the QSA/Transfer Agreements would be more difficult, because agricultural use on the proposed Project site would be significantly higher than the proposed demand for the proposed Project as explained in section Expected Water Demand for the Proposed Project that follows.

Water for construction (primarily for dust control) would be obtained from IID canals or laterals in conformance with IID rules and regulations for MCI temporary water use.²⁹ To obtain water delivery service, the Applicant will complete an IID-410 Certificate of Ownership and Authorization (Water Card), which allows the Water Department to provide the District with information needed to manage the District apportioned supply. Water cards are used for Agriculture, Municipal, Industrial and Service Pipe

²⁹ Complete the Application for Temporary Water Use and submit to Division office. Complete encroachment permit through Real Estate – non-refundable application fee of \$250, see IID website: [Real Estate / Encroachments, Permissions, and Other Permitting](#). Fee for temporary service water: Schedule No. 7 General Industrial Use / Temporary Service Minimum charge for up to 5 AF, pay full flat fee for 5 AF at General Industrial Use rate (\$425); use more than 5 AF, pay fee for actual use at General Industrial Rate (\$85/AF).

accounts. If water is to be provided under IWSP in addition to Schedule 7, General Industrial Use, the Applicant will seek to enter into a IWSP Water Supply Agreement albeit currently fallowed land.

12 EXPECTED WATER DEMANDS FOR THE APPLICANT

Water for the Project will be needed on-site for construction, operations, and dust mitigation measures set forth by the County of Imperial. Raw Colorado River water will be supplied to the project via the adjacent canal **WSM canal (Gate 6)** under a water agreement with IID (Industrial Water Use Agreement, IWSP Water Supply Agreement), see **Table 17**. The project is anticipated to go through a Zone Change and General Plan Amendment. Please refer to Project Description. The proposed project is projected to increase the amount of water currently being used as recorded through IID Water History Logs. Project raw water uses are summarized in in **Table 17**.

Table 17: Project Water Uses (AFY)

Use	Acre-Feet Per Year
Raw Water for Construction (Years 1-10)	21.00*
Raw Water for Operations (Years 11-30)	2.25
Raw Water for Mitigation (Years 11-30)	3.07

(Construction water is Years 1-10, 210/10=21, As Average.)*

IID delivers untreated Colorado River water to the proposed Project site for agricultural uses through the following gates and laterals. The 10-year record for 2010-2019 of water delivery accounting is shown in

Table 18: Ten- Year Historic Delivery (AFY), 2010-2019

Canal/Gate	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
WSM/6	0	0	0	4.9	0	0		0	0	0
TOTAL	0	0	0	4.9	0	0	0	0	0	0

Source: IID Staff, Nov. 18, 2019 (Jose Moreno), July, 14, 2020, (Justina Arce)

The proposed Project has an estimated total water demand of 258 AF or 8.6 AFY amortized over a 30-year term (for all delivery gate for Project). Thus, the proposed Project demand is a 166% ³⁰increase³¹ from the AFY from the historical 10-year average annual delivery for agricultural uses at the proposed Project site. The proposed Project’s estimated water demand represents only .04 percent (.04%) of the 23,800 AYF balance of supply available for contracting under the IWSP.

13 IID’S ABILITY TO MEET DEMANDS WITH WATER SUPPLY

Non-agricultural water demands for the IID water service area are projected for 2020-2055 in **Table 8**, and IID agricultural demands including system operation are projected for 2020-2055 in **Table 9**, all volumes within the IID water service area. IID water supplies available for consumptive use after accounting for mandatory transfers are projected to 2077 in **Table 14 (Column 11)**, volumes at Imperial Dam.

To assess IID’s ability to meet future water demands, IID historic and forecasted demands are compared with CRWDA Exhibit B net availability, volumes at Imperial Dam **Table 14 (Column 11)**. The analysis requires accounting for system operation consumptive use within the IID water service area, from AAC at Mesa Lateral 5 to Imperial Dam, and for water pumped for use by the USBR Lower Colorado Water Supply

³⁰ 166 % increase is not usually seen. The historic water use over 10 years average at .49 and the amortized annual increase of 8.6 AFY is the reason for the unusual increase. As the project age this number will begin to normalize to a more realistic number.

³¹ Project Anticipated Water Use Increase –Historical Average/ Historical Average *100 =% Increase

Project (LCRWSP), an IID consumptive use component in the USBR Decree Accounting Report. IID system operation consumptive use for 2019 is provided in Table 19 to show the components included in the calculation and their 2019 volumes.

Table 19: IID System Operations Consumptive Use within IID Water Service Area and from AAC at Mesa Lateral 5 to Imperial Dam, (KAF), 2019

	Consumptive Use (KAF)
IID Delivery System Evaporation	24.6
IID Canal Seepage	91.7
IID Main Canal Spill	13.1
IID Lateral Canal Spill	118.1
IID Seepage Interception	-39.8
IID Unaccounted Canal Water	30.9
Total IID System Operational Use, within water service area	238.6
“Losses” from AAC @ Mesa Lat 5 to Imperial Dam	29.2
LCWSP pumpage	-10
Total System Operational Use in 2019	257.8

Sources: 2015 Water Balance rerun 04/22/2020, and 2016 IID Water Conservation Plan

IID’s ability to meet customer water demands through 2055 as shown in **Table 20**.

- Non-agricultural use from **Table 8**
- Agricultural and Salton Sea mitigation uses from **Table 9**
- CRWDA Exhibit B net available for IID consumptive use from Table 14
- System operation consumptive use from 2015

Table 20: IID Historic and Forecasted Consumptive Use (CU) vs CRWDA Exhibit B IID Net Available Consumptive Use, volumes at Imperial Dam (KAFY), 2015-2055.

	2015	2020	2025	2030	2035	2040	2045	2050	2055
Non-Ag Delivery	110.1	123.4	133.1	142.9	151.4	163.2	175.4	188.4	199.3
Ag Delivery	2,156.8	2,309.6	2,259.5	2,209.5	2,209.5	2,209.5	2,209.5	2,209.5	2,209.5
QSA SS Mitigation Delivery	153.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
System Op CU in IID & to Imperial Dam	220.2	235.6	230.5	225.4	225.4	225.4	225.4	225.4	225.4
IID CU at Imperial Dam	2,480.9	2,668.6	2,623.1	2,577.8	2,586.3	2,598.1	2,610.3	2,623.3	2,634.2
Exhibit B IID Net Available for CU at Imperial Dam	2,480.9	2,649.8	2,617.8	2,612.8	2,612.8	2,612.8	2,612.8	2,665.8	2,665.8
IID Underrun/Overrun at Imperial Dam	90.0	-18.80	-5.30	35.00	26.50	14.70	2.50	42.50	31.60

Notes: 2015 Provisional Water Balance rerun 06/28/2019

Non-Ag Delivery CI 15.0%, Ag Delivery CI 3.0%, QSA SS mitigation CI 15%

QSA Salton Sea Mitigation Delivery terminates on 12/31/2017

Underrun/Overrun = IID CU at Imperial Dam minus CRWDA Exhibit B Net Available

Notes: Ag Delivery for 2020-2055 does not take into account land conversion for solar use nor reduction in agricultural land area due to urban expansion.

As shown above, IID forecasted demand has the potential to exceed CRWDA Exhibit B Net Consumptive Use volumes during several time intervals through the lifespan projection for the Project. However, due to temporary land conversion throughout Imperial County for solar use and urban land expansion that will reduce agricultural acres in the future, a water savings of approximately 217,000 AFY will be generated into the future and for the lifetime of the Project.

In addition, USBR 2019 Decree Accounting Report states that IID Consumptive Use is 2,558.1 KAF (excludes 46,555 AF for water transfer associated with Salton Sea mitigation and 1,579 AF of ICS for storage in Lake Mead) with an underrun of -34.2 KAF, as reported by IID in 2019 Annual SWRCB Report per WRO 2002-2013; that is, IID uses less than the amount in its approved Water Order (2,629,675 AF).

Table 21: 2019 Approved Water Order, Actual CU (Decree Accounting Report) and IID Underrun, KAF at Imperial Dam

IID Approved Water Order	2,639.7 less 10 supplied by LCRWSP
IID Consumptive Use	2,558.1
IID Underrun /Overrun	-34,215

Sources: 2019 IID Revised Water Order, approved on March 10, 2020, 2019 Decree Accounting Report, and 2019 Annual Report of IID Pursuant to SWRCB Revised Order WRO 2002-2013

As reported in the [2017-2018 IID QSA Implementation Report](#) and [2019 SWRCB IID Report](#) and presented in **Table 21** from 2013 to 2017 IID consumptive use (CU) resulted in underruns; i.e., annual CU was less than the district's QSA Entitlement of 3.1 MAFY minus QSA/Transfer Agreements obligations. This would indicate that even though **Table 15** shows IID Overrun/Underrun at Imperial Dam exceeding CRWDA Exhibit B Net Available for CU, for the 30-year life of the proposed Project, IID consumptive use may be less than forecasted. However, with repeal of the IID EDP in February 2018, it is uncertain whether underruns will continue.

Meanwhile, forecasted Ag Delivery reductions presented in **Table 9** are premised on implementation of on-farm practices that will result in efficiency conservation. These reductions do not take into account land conversion for solar projects nor reduction in agricultural land area due to urban expansion; that is to say, the forecasted Ag Delivery is for acreage in 2003 with reduction for projected on-farm conservation efficiency. Thus, Ag Delivery demand may well be less than forecasted in **Table 9**. In any case, the proposed Project will use less water than the historical agricultural demand of proposed Project site, so the proposed Project will ease rather than exacerbate overall IID water demands.

In the event that IID has issued water supply agreements that exhaust the 25 KAFY IWSP set aside, and it becomes apparent that IID delivery demands due to non-agriculture use are going to cause the district to exceed its quantified 3.1 MAFY entitlement less QSA/Transfer Agreements obligations, IID has identified options to meet these new non-agricultural demands. These options include (1) tracking water yield from temporary land conversion from agricultural to non-agricultural land uses (renewable solar energy); and (2) only if necessary, developing projects to expand the size of the district's water supply portfolio.

These factors will be discussed in the next two sections, **Tracking Water Savings from Growth of Non-Agricultural land Uses and Expanding Water Supply Portfolio**.

13.1 Tracking Water Savings from Growth of Non-Agricultural Land Uses

The Imperial County Board of Supervisors has targeted up to 25,000 acres of agricultural lands, about 5 percent (5%) of the farmable acreage served by IID, for temporary conversion to solar farms; because the board found that this level of reduction would not adversely affect agricultural production. As reported for IID's [2019 Temporary Land Conversion Following Program](#) existing solar developments at the end of 2019 have converted 10,146 acres of farmland. These projects had a yield at-river of 65,791 AF of water in 2019. The balance of the 25,000-acre agriculture-to-solar policy is 14,854 acres. On average, each agricultural acre converted reduces agricultural demand by 5.1 AFY, which results in a total at-river yield (reduction in consumptive use) of 127,500 AFY.

However, due to the nature of the conditional use permits under which solar farms are developed, IID cannot rely on this supply being permanently available. In fact, should a solar project decommission early, that land may go immediately back to agricultural use (it remains zoned an agricultural land). Nevertheless, during their operation, the solar farms do ameliorate pressure on IID to implement projects to meet demand from new non-agricultural projects.

Unlike the impact of solar projects, other non-agricultural uses are projected to grow, as reflected in the nearly 76 percent (76%) increase in non-agricultural water demand from 107.2 KAF in 2015 to 198.4 KAF in 2055 reflected herein in **Table 8**. This increase in demand of 91.2 KAFY will more than likely be met by solar development; however, as the land remains zoned as agricultural land, that source is not reliable to be permanently available to IID.

The amount of land developed for residential, commercial, and industrial purposes is projected to grow by 55,733 acres from 2015 to 2050³² within the sphere of influence of the incorporated cities and specific plan areas in Imperial County. A conservative estimate is that such development will displace at least another 24,500 acres of farmland based on the Imperial Local Agency Formation Commission (LAFCO) sphere of influence maps and existing zoning and land use in Imperial County. At 5.13 AFY yield at-river, there would be a 125,000 AFY reduction IID net consumptive use.

³² IRWMP, Chapter 5, Table 5-14.

The total foreseeable solar project temporary yield at-river (91,800 AFY) and municipal development permanent yield at-river (125,000 AFY) is to reduce forecasted IID net consumptive use at-river 216,800 AFY, which is more than enough to meet the forecast Demand minus Exhibit B Net Available volumes shown in [Table 14](#). This Yield at-river is sufficient to meet the forecasted excess of non-agricultural use over Net Available supply within the IID service area for the next 20 years, as is required for SB 610 analysis.

Farmland retirement associated with municipal development would reduce IID agricultural delivery requirements beyond the efficiency conservation projections shown in [Table 9](#). Therefore, in the event that [Schedule 7 General Industrial Use](#) water is unavailable, the Applicants will rely on IID IWSP water to supply the Project, as discussed above in the section **IID Water Supply Policy for Non-Agricultural Projects (September 2009)**.

13.2 EXPANDING WATER SUPPLY PORTFOLIO

While forecasted long-term annual yield-at-river from the reduction in agricultural acreage due to municipal development in the IID service area is sufficient to meet the forecasted excess of non-agricultural use over CRWDA Net Available supply, [Table 14](#), without expanding IID's Water Supply Portfolio, IID has also evaluated the feasibility of a number of capital projects to increase its water supply portfolio.

As reported in [2012 Imperial IRWMP Chapter 12](#), IID contracted with GEI Consultants, Inc. to identify a range of capital project alternatives that the District could implement. Qualitative and quantitative screening criteria and assumptions were developed in consultation with IID staff. Locations within the IID water service area with physical, geographical, and environmental characteristics most suited to implementing short- and long-term alternatives were identified. Technical project evaluation criteria included volumes of water that could be delivered and/or stored by each project, regulatory and permitting complexity, preliminary engineering components, land use requirements, and costs.

After preliminary evaluation, a total of 27 projects were configured:

- 17 groundwater or drain water desalination
- 2 groundwater blending
- 6 recycled water
- 1 groundwater banking
- 1 IID system conservation (concrete lining)

Projects were assessed at a reconnaissance level to allow for comparison of project costs. IID staff and the board identified key factors to categorize project alternatives and establish priorities. Lower priority projects were less feasible due to technical, political, or financial constraints. Preferential criteria were features that increased the relative benefits of a project and grant it a higher priority. Four criteria were used to prioritize the IID capital projects:

1. **Financial Feasibility.** Projects whose unit cost was more than \$600/AF were eliminated from further consideration.
2. **Annual Yield.** Project alternatives generating 5,000 AF or less of total annual yield were determined not to be cost-effective and lacking necessary economies of scale.
3. **Groundwater Banking.** Groundwater banking to capture and store underruns is recognized as a beneficial use of Colorado River water. Project alternatives without groundwater banking were given a lower priority.
4. **Partnering.** Project alternatives in which IID was dependent on others (private and/or public agencies) for implementation were considered to have a lower priority in the IID review; this criterion was reserved for the IRWMP process, where partnering is a desirable attribute.

Based on these criteria, the top ten included six desalination, two groundwater blending, one system conservation, and one groundwater storage capital projects. These capital projects are listed **Table 22** which follows.

Table 22: IID Capital Project Alternatives and Cost (May 2009 price levels \$)

Name	Description	Capital Cost	O&M Cost	Equivalent Annual Cost	Unit Cost (\$/AF)	In-Valley Yield (AF)
GW 18	Groundwater Blending E. Mesa Well Field Pumping to AAC	\$39,501,517	\$198,000	\$2,482,000	\$99	25,000
GW 19	Groundwater Blending: E. Mesa Well Field Pumping to AAC w/Percolation Ponds	\$48,605,551	\$243,000	\$3,054,000	\$122	25,000
WB 1	Coachella Valley Groundwater Storage	\$92,200,000	\$7,544,000	\$5,736,746	\$266	50,000
DES 8	E. Brawley Desalination with Well Field and Groundwater Recharge	\$100,991,177	\$6,166,000	\$12,006,000	\$480	25,000
AWC 1	IID System Conservation Projects	\$56,225,000	N/A	\$4,068,000	\$504	8,000
DES 12	East Mesa Desalination with Well Field and Groundwater Recharge	\$112,318,224	\$6,336,000	\$12,831,000	\$513	25,000
DES 4	Keystone Desalination with IID Drainwater/ Alamo River	\$147,437,743	\$15,323,901	\$23,849,901	\$477	50,000
DES 14	So. Salton Sea Desalination with Alamo River Water and Industrial Distribution	\$158,619,378	\$15,491,901	\$24,664,901	\$493	50,000
DES 15	So. Salton Sea Desalination with Alamo River Water and MCI Distribution	\$182,975,327	\$15,857,901	\$26,438,901	\$529	50,000
DES 2	Keystone Desalination with Well Field and Groundwater Recharge	\$282,399,468	\$13,158,000	\$29,489,000	\$590	50,000

Source: Imperial IRWMP, Chapter 12; see also Imperial IRWMP Appendix N, IID Capital Projects

13.3 IID Near Term Water Supply Projections

As mentioned above, IID’s quantified Priority 3(a) water right under the QSA/Transfer Agreements secures 3.1 MAF per year, less transfer obligations of water for IID’s use from the Colorado River, without relying on rainfall in the IID service area. Even with this strong entitlement to water, IID actively promotes on-farm efficiency conservation and is implementing system efficiency conservation measures including

seepage recovery from IID canals and the All-American Canal (ACC) and measures to reduce operational discharge. As the IID website [Water Department](#) states:

Through the implementation of extraordinary conservation projects, the development of innovative efficiency measures and the utilization of progressive management tools, the IID Water Department is working to ensure both the long-term viability of agriculture and the continued protection of water resources within its service area.

Overall, agricultural water demand in the Imperial Valley will decrease due to IID system and grower on-farm efficiency conservation measures that are designed to maintain agricultural productivity at pre-QSA levels while producing sufficient yield-at-river to meet IID's QSA/Transfer Agreements obligations. These efficiencies combined with the conversion of some agricultural land uses to non-agricultural land uses (both solar and municipal), ensure that IID can continue to meet the water delivery demand of its existing and future agricultural and non-agricultural water users, including this Project for the next 30 years and for the life of the proposed Project.

14 PUBLIC WATER SYSTEM/ LEAD AGENCY FINDINGS

IID serves as the regional wholesale water supplier, importing raw Colorado River water and delivering it, untreated, to agricultural, municipal, industrial, environmental, and recreational water users within its Imperial Unit water service area. The County of Imperial serves as the responsible agency with land use authority over the proposed project. Water Assessment findings are summarized as follows:

1. IID's annual entitlement to consumptive use of Colorado River water is capped at 3.1 MAF less water transfer obligations, pursuant to the QSA and Related Agreements. Under the terms of the CRWDA, IID is implementing efficiency conservation measure to reduce net consumptive use of Colorado River water needed to meet its QSA/Transfer Agreements obligations while retaining historical levels of agricultural productivity.
2. In 2019 IID consumptively used 2,588,136 AF of Colorado River water (volume at Imperial Dam); 2,315,988 AF were delivered to customers of which 2,225,089 AF or 96 percent went to agricultural users.
3. Reduction of IID's net consumptive use of Colorado River water under the terms of the Colorado River Water Delivery Agreement is to be the result of efficiency conservation measures.

Agricultural consumptive use in the Imperial Valley will not decline. However, IID operational spill and tailwater will decline, impacting the Salton Sea.

4. Due to the dependability of IID's water rights, Colorado River flows, and Colorado River storage facilities for Colorado River water, it is unlikely that the water supply of IID would be disrupted, even in dry years or under shortage conditions because Mexico, Arizona and Nevada have lower priority and are responsible for reducing their water use during a declared Colorado River water shortage before impacting California.
5. Historically, IID has never been denied the right to use the annual volume of water it has available for its consumptive uses under its entitlement. Nevertheless, IID is participating in discussions for possible actions in response to extreme drought on the Colorado River.
6. The proposed Project has an estimated total water demand of 258 AF or 8.6 AFY amortized over a 30-year term (for the delivery gate for Project). Thus, the proposed Project demand is a **166%** (increase) of **8.6 AFY** from the historical 10-year average of **.49 AFY** of the historic 10-year average annual delivery for agricultural uses at the proposed Project site.
7. The Project's water use will be covered under the [Schedule 7 General Industrial Use](#). In the event that IID determines that the proposed Project is to utilize IWSP for Non-Agricultural Projects water, the Applicant will enter into an IWSP Water Supply Agreement with IID. In which case, the proposed Project would use .04 percent (.04%) of the **23,800 AYF** of IWSP water. Which would leave a remaining amount of 23,785.43 AFY.
8. Based on the Environmental Impact Report (EIR) prepared for this proposed Project pursuant to the CEQA, California Public Resources Code sections 21000, *et seq.*, the Lead Agency hereby finds that the IID projected water supply will be sufficient to satisfy the demands of this proposed Project in addition to existing and planned future uses, including agricultural and non-agricultural uses for a 20-year Water Supply Assessment period and for the 30 -year proposed Project life. California State Clearing House Number: 2020040122, Westside Main Canal Battery Storage Project.

15 ASSESSMENT CONCLUSION

This Water Supply Assessment has determined that IID water supply is adequate for the proposed Project. The Imperial Irrigation District's IWSP for Non-Agricultural Projects dedicates 25,000 AF of IID's annual water supply to serve new projects. As of June 2020, 23,800 AF per year remain available for new projects ensuring reasonably sufficient supplies for new non-agricultural water users. The Project water demand of approximately 258 AF and 8.6 AFY amortized represents .04 % of the unallocated supply set aside in the IWSP for non-agricultural project, and approximately .04 percent (.04 %) of forecasted future non-agricultural water demands planned in the Imperial IRWMP through 2055. The water demand for the proposed Project at full build-out represents a 166% increase from the 10-year historic average agricultural water use for 2010-2019 at the proposed Project site.

For all the reasons described herein, the amount of water available and the stability of the IID water supply along with on-farm and system efficiency conservation and other measures being undertaken by IID and its customers ensure that the proposed Project 's water needs will be met for the next 30 years as assessed for compliance under SB-610.

16 RESOURCES AND REFERENCES

1. California Department of Water Resources. (2003). [Guidebook for Implementation of Senate Bill 610 and Senate Bill 221 of 2001](#) to assist water suppliers, cities, and counties in integrating water and land use planning.
2. Imperial County Planning and Development Services. (2008). Imperial County General Plan 2008 Update. El Centro, CA.
3. Imperial Irrigation District. Website: [Equitable Distribution](#).
4. Imperial Irrigation District Website: [Water Conservation Plan](#). (2008). Imperial Irrigation District 2007 Water Conservation Plan. Imperial, CA.
5. Imperial Irrigation District. (2004). IID [Interactive GIS Water Service Area Map](#). Imperial, CA.
6. Imperial Irrigation District. (2009). [Interim Water Supply Policy for Non-Agricultural Projects](#). Imperial, CA
7. Imperial Irrigation District. (2012). [Temporary Land Conversion Following Policy \(TLFCP\) for Water Conservation Yield](#) Water conservation yield attributable to land removed from agricultural production and temporarily fallowed. Updated March 27, 2018.
8. Imperial Irrigation District Water Department. (2013). [Colorado River Water Accounting and Conservation Commitments Update](#). Tina Anderholt Shields, PE. Colorado River Resources Manager Imperial, CA.
9. Imperial Irrigation District. (2017). [2016 QSA Water Conservation & Transfer Agreement Annual Implementation Report](#), Imperial, CA
10. Imperial Irrigation District. (2017). Consultation with Anisa J Divine, Ph.D., Senior Planner. Imperial, CA.
11. Imperial Irrigation District. (2017). [Temporary Land Following Conversion Policy. \(TLFCP\)](#).
12. Imperial Irrigation District. (2018). [2017 IID SWRCB Report](#).

13. United States Bureau of Reclamation Lower Colorado Region Website: [Boulder Canyon Operations Office – Programs and Activities](#), Lower Colorado River Water Accounting, Water Accounting Reports (1964 - 2015). Compilation of Records in Accordance with Article V of the Decree of the Supreme Court of the United States in Arizona v. California Dated March 9, 1964: Calendar Years 1964 - 2015 Boulder City, NV.

Attachments

Attachment A: IID Interim Water Supply Policy for Non-Agricultural Projects

Attachment B: Colorado Water Delivery Agreement

(This page intentionally left blank)

17 Attachment A: IID Interim Water Supply Policy for Non-Agricultural Projects³³

1.0 Purpose.

Imperial Irrigation District (the District) is developing an Integrated Water Resources Management Plan (IWRMP)³⁴ that will identify and recommend potential programs and projects to develop new water supplies and new storage, enhance the reliability of existing supplies, and provide more flexibility for District water department operations, all in order to maintain service levels within the District's existing water service area. The first phase of the IWRMP is scheduled to be completed by the end of 2009 and will identify potential projects, implementation strategies and funding sources. Pending development of the IWRMP, the District is adopting this Interim Water Supply Policy (IWSP) for Non-Agricultural Projects, as defined below, in order to address proposed projects that will rely upon a water supply from the District during the time that the IWRMP is still under development. It is anticipated that this IWSP will be modified and/or superseded to take into consideration policies and data developed by the IWRMP.

2.0 Background.

The IWRMP will enable the District to more effectively manage existing water supplies and to maximize the District's ability to store or create water when the available water supplies exceed the demand for such water. The stored water can be made available for later use when there is a higher water demand. Based upon known pending requests to the District for water supply assessments/verifications and pending applications to the County of Imperial for various Non-Agricultural Projects, the District currently estimates that up to 50,000 acre feet per year (AFY) of water could potentially be requested for Non-Agricultural Projects over the next ten to twenty years. Under the IWRMP the District shall evaluate the projected water demand of such projects and the potential means of supplying that amount of water. This IWSP currently designates up to 25,000 AFY of water for potential Non-Agricultural Projects within IID's water service area. Proposed Non-Agricultural projects may be required to pay a Reservation Fee, further described below. The reserved water shall be available for other users until such Non-Agricultural projects are implemented and require the reserved water supply. This IWSP shall remain in effect pending the approval of further policies that will be adopted in association with the IWRMP.

³³ IID Board Resolution 31-2009. Interim Water Supply Policy for New Non-Agricultural Projects. September 29, 2009. <[IID Interim Water Supply Policy for Non-Agricultural Projects](#)>

³⁴ The 2009 Draft IID IWRMP has been superseded by the October 2012 Imperial IRWMP, which incorporates the conditions of the IWSP by reference.

3.0 Terms and Definitions.

3.1 Agricultural Use. Uses of water for irrigation, crop production and leaching.

3.2 Connection Fee. A fee established by the District to physically connect a new Water User to the District water system.

3.3 Industrial Use. Uses of water that are not Agricultural or Municipal, as defined herein, such as manufacturing, mining, cooling water supply, energy generation, hydraulic conveyance, gravel washing, fire protection, oil well re-pressurization and industrial process water.

3.4 Municipal Use. Uses of water for commercial, institutional, community, military, or public water systems, whether in municipalities or in unincorporated areas of Imperial County.

3.5 Mixed Use. Uses of water that involve a combination of Municipal Use and Industrial Use.

3.6 Non-Agricultural Project. Any project which has a water use other than Agricultural Use, as defined herein.

3.7 Processing Fee. A fee charged by the District Water Department to reimburse the District for staff time required to process a request for water supply for a Non-Agricultural Project.

3.8 Reservation Fee. A non-refundable fee charged by the District when an application for water supply for a Non-Agricultural Project is deemed complete and approved. This fee is intended to offset the cost of setting aside the projected water supply for the project during the period commencing from the completion of the application to start-up of construction of the proposed project and/or execution of a water supply agreement. The initial payment of the Reservation Fee will reserve the projected water supply for up to two years. The Reservations Fee is renewable for up to two additional two-year periods upon payment of an additional fee for each renewal.

3.9 Water Supply Development Fee. An annual fee charged to some Non-Agricultural Projects by the District, as further described in Section 5.2 herein. Such fees shall assist in funding IWRMP or related water supply projects,

3.10 Water User. A person or entity that orders or receives water service from the District.

4.0. CEQA Compliance.

4.1 The responsibility for CEQA compliance for new development projects within the unincorporated area of the County of Imperial attaches to the County of Imperial or, if the project is within the

boundaries of a municipality, the particular municipality, or if the project is subject to the jurisdiction of another agency, such as the California Energy Commission, the particular agency. The District will coordinate with the County of Imperial, relevant municipality, or other agency to help ensure that the water supply component of their respective general plans is comprehensive and based upon current information. Among other things, the general plans should assess the direct, indirect and cumulative potential impacts on the environment of using currently available water supplies for new industrial, municipal, commercial and/or institutional uses instead of the historical use of that water for agriculture. Such a change in land use, and the associated water use, could potentially impact land uses, various aquatic and terrestrial species, water quality, air quality and the conditions of drains, rivers and the Salton Sea.

4.2 When determining whether to approve a water supply agreement for any Non-Agricultural Project pursuant to this IWSP, the District will consider whether potential environmental and water supply impacts of such proposed projects have been adequately assessed, appropriate mitigation has been developed and appropriate conditions have been adopted by the relevant land use permitting/approving agencies, before the District approves any water supply agreement for such project.

5.0. Applicability of Fees for Non-Agricultural Projects.³⁵

5.1 Pursuant to this Interim Water Supply Policy, applicants for water supply for a Non-Agricultural Project shall be required to pay a Processing Fee and may be required to pay a Reservation Fee as shown in Table A. All Water Users shall also pay the applicable Connection Fee, if necessary, and regular water service fees according to the District water rate schedules, as modified from time to time.

5.2 A Non-Agricultural Project may also be subject to an annual Water Supply Development Fee, depending upon the nature, complexity, and water demands of the proposed project. The District will determine whether a proposed Non-Agricultural Project is subject to the Water Supply Development Fee for water supplied pursuant to this IWSP as follows:

5.2.1. A proposed project that will require water for a Municipal Use shall be subject to an annual Water Supply Development Fee as set forth in Table B if the projected water demand for the project is in excess of the project's estimated population multiplied by the District-wide per capita usage. Municipal Use projects without an appreciable residential component will be analyzed under sub-section 5.2.3.

5.2.2. A proposed project that will require water for an Industrial Use located in an unincorporated area of the County of Imperial shall be subject to an annual Water Supply Development Fee as set forth in Table B.

³⁵ The most recent fee schedules can be found in a link at IID/Water/ Municipal, Industrial and Commercial Customers; or visit by URL at [Imperial Irrigation District : Water Rate Schedules](#)

5.2.3. The applicability of the Water Supply Development Fee set forth in Table B to Mixed Use projects, Industrial Use projects located within a municipality, or Municipal Use projects without an appreciable residential component, will be determined by the District on a case-by-case basis, depending upon the proportion of types of land uses and the water demand proposed for the project.

5.3. A proposed Water User for a Non-Agricultural Projects may elect to provide some or all of the required water supply by paying for and implementing some other means of providing water in a manner approved by the District, such as conservation projects, water storage projects and/or use of an alternative source of supply, such as recycled water or some source of water other than from the District water supply. Such election shall require consultation with the District regarding the details of such alternatives and a determination by the District, in its reasonable discretion, concerning how much credit, if any, should be given for such alternative water supply as against the project's water demand for purposes of determining the annual Water Supply Development Fee for such project.

5.4 The District Board shall have the right to modify the fees shown on Tables A and B from time to time.

6. Water Supply Development Fees collected by the District under this IWSP shall be accounted for independently, including reasonable accrued interest, and such fees shall only be used to help fund IWRMP or related District water supply projects.

7. Any request for water service for a proposed Non-Agricultural Project that meets the criteria for a water supply assessment pursuant to Water Code Sections 10910-10915 or a water supply verification pursuant to Government Code Section 66473.7 shall include all information required by Water Code Sections 10910 –10915 or Government Code Section 66473.7 to enable the District to prepare the water supply assessment or verification. All submittals should include sufficient detail and analysis regarding the project's water demands, including types of land use and per capita water usage, necessary to make the determinations outlined in Section 5.2.

8. Any request for water service for a proposed Non-Agricultural Project that does not meet the criteria for a water supply assessment pursuant to Water Code Section 10910-10915 or water supply verification pursuant to Government Code Section 66473.7 shall include a complete project description with a detailed map or diagram depicting the footprint of the proposed project, the size of the footprint, projected water demand at full implementation of the project and a schedule for implementing water service. All submittals should include sufficient detail and analysis regarding the project's water demands, including types of land use and per capita water usage, necessary to make the determinations outlined in Section 5.2.

9. All other District rules and policies regarding a project applicant or Water User's responsibility for paying connection fees, costs of capital improvements and reimbursing the District for costs of staff and consultant's time, engineering studies and administrative overhead required to process and implement projects remain in effect.

10. Municipal Use customers shall be required to follow appropriate water use efficiency best management practices (BMPs), including, but not limited to those established by the California Urban Water Conservation Council BMP's (see <http://www.cuwcc.org/mou/exhibit-1-bmp-definitions-schedules-requirements.aspx>), or other water use efficiency standards, adopted by the District or local government agencies.

11. Industrial Use customers shall be required to follow appropriate water use efficiency BMP's, including but not limited to those established by the California Urban Water Conservation Council and California Energy Commission, as well as other water use efficiency standards, adopted by the District or local government agencies.

12. The District may prescribe additional or different BMPs for certain categories of Municipal and Industrial Water Users.

**California Environmental Quality Act Findings
 (Public Resource Code §21081, CEQA Guidelines §15091)
 Final Environmental Impact Report for the
 Westside Canal Battery Storage Project
 (SCH No. 2020040122)**

1.0 INTRODUCTION

The following Findings are made for the Environmental Impact Report SCH No. 2020040122 (the “EIR”) for the proposed Westside Canal Battery Storage Project (herein referred to as the Project). The EIR analyzes the significant and potentially significant environmental impacts, which may occur as a result of the Project.

Table 1.1, Agency Permit and Environmental Review Requirements, lists the anticipated permits potentially required for the Project

Table 1.1 Agency Permit and Environmental Review Requirements

Agency	Permits and Other Approvals
Imperial County	General Plan Amendment Zone Change Conditional Use Permit Development Agreement Grading Permit Conceptual Drainage Plan Domestic Wastewater/Septic System Permit Fire Suppression Plan Transportation Permits Mechanical Permits Electrical Permits Structural/Foundation Permits Haul Route Plan Rule 310 Dust Control Plan & Rule 801 Compliance National Pollutant Discharge Elimination System (NPDES) Construction General Permit NPDES General Permit for MS4 Compliance AB 52 Consultation
Imperial Irrigation District	Generator Interconnection Agreement
California Independent System Operator	Generator Interconnection Agreement
United States Army Corps of Engineers	Clean Water Act Section 404
Regional Water Quality Control Board	Clean Water Act Section 401
California Department of Fish and Wildlife	California Fish and Game Code 1600
Imperial County Air Pollution Control District	Dust Control Plan



The Project Site encompasses approximately 163 acres of land located approximately eight miles southwest of the City of El Centro and approximately five miles north of the U.S.-Mexico border in the unincorporated Mount Signal area of Imperial County (County), as shown on EIR Figure 1.2-1. The Project Site is located on land owned by the Consolidated Edison Development (CED; Applicant), Bureau of Land Management, Imperial Irrigation District (IID), and a private landowner.

The Project would store energy generated from the electrical grid, and optimally discharge that energy back into the grid upon demand. The Project would be constructed in multiple phases over a 10-year period with each phase ranging from approximately 25 Megawatts (MW) to 400 MW. The Project would be comprised of lithium-ion (Li-ion) and/or flow battery energy storage system facilities, a behind-the-meter solar energy component, a new on-site 230-kilowatt (kW) loop-in switching station, a 34.5 kV to 230 kV Project substation, underground electrical cables, and permanent vehicular access to and from the Project Site over a proposed clear-span bridge spanning IID's Westside Main Canal. The proposed loop-in switching station would connect the Project to the existing IID Campo Verde Imperial Valley (IV) 230 kV radial gen-tie line, which connects to the Imperial Valley Substation and California Independent System Operator (CAISO), approximately one-third mile south of the Project Site.

Additional Project details is further described and depicted in DEIR Chapter 2.0.

1.1 PURPOSE OF CEQA FINDINGS; TERMINOLOGY

California Environmental Quality Act (CEQA) Findings play an important role in the consideration of projects for which an EIR is prepared. Under Public Resources Code §21081 and CEQA Guidelines §15091 above, where a final EIR identifies one or more significant environmental effects, a project may not be approved until the public agency makes written findings supported by substantial evidence in the administrative record regarding each of the significant effects. In turn. The three possible findings specified in CEQA Guidelines §15091 are:

1. Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effect as identified in the final EIR.
2. Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such other agency.
3. Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the final EIR.

CEQA Guideline §15092(b) provides that no agency shall approve a project for which an EIR was prepared unless either:

1. The project approved will not have a significant effect on the environment, or
2. The agency has:



- a. Eliminated or substantially lessened all significant effect were feasible as shown in the findings under Section 15091, and
- b. Determined that any remaining significant effects on the environment found to be unavoidable under Section 15091 are acceptable due to overriding concerns as described in Section 15093.

1.2 ENVIRONMENTAL IMPACT REPORT PROCESS

After the County reviewed the application for the proposed Project, it was concluded that the Project could have a significant impact on the environment and that preparation of an EIR was determined to be the appropriate CEQA environmental document. The County issued a Notice of Preparation (NOP) on April 13, 2020 and made the NOP available for review and comment for a 35-day period ending on May 18, 2020. The NOP was distributed to City, County, state and federal agencies, other public agencies, and various interested private organizations and individuals. The NOP was subsequently published on the County's website. Five comment letters were received during the NOP review period. A copy of the NOP is included in Appendix A of the Draft EIR.

Based upon comments the County received in response to the NOP, it was determined that the Draft EIR should analyze Project-related environmental impacts relative to the following eleven substantive potential impact areas in the Environmental Analysis section:

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Geology and Soils
- Greenhouse Gases
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Tribal Cultural Resources
- Utilities and Service Systems

Additionally, the Draft EIR was required to include other CEQA substantive sections, including an Executive Summary, Introduction, Environmental Setting, Project Description, Cumulative Impacts, Effects Not Significant, and Alternatives.

The Draft EIR was circulated for a 50-day public review period, starting on April 7, 2021, and ending on May 27, 2021. Three letters were received during the comment period and are responded to in the responses to comments section of the Final EIR.

2.0 PROJECT DESCRIPTION

The Project involves the development, design, operation, maintenance, and eventually decommissioning of a utility-scale energy storage complex with the capacity of up to 2,000 MW at full build-out. The Project would store energy generated from the electrical grid, and optimally discharge that energy back into the grid as a firm, dispatchable resource. The Project would be constructed multiple phases over a 10-year



period with each phase ranging from approximately 25 MW to 400 MW. For the purposes of this analysis, Project construction is assumed to occur over three to five phases. Given the approximately 10-year development of the Project, the expected end date of the Project life cycle would be 30 years from the construction of the final phase, or no more than 40 years after the effective date of the Conditional Use Permit.

The Project would be comprised of Li-ion and/or flow battery energy storage system (BESS) facilities, a behind-the-meter solar energy facility, a new on-site 230 kilovolt (kV) loop-in switching station, a 34.5 kV to 230 kV Project substation, underground electrical cables, and permanent vehicular access to and from the Project Site over a proposed clear-span bridge spanning IID's Westside Main Canal. The proposed loop-in switching station would connect the Project to the existing IID Campo Verde-Imperial Valley 230 kV radial gen-tie line, which connects to the Imperial Valley (IV) Substation and CAISO, approximately one-third mile south of the Project Site. CED has submitted the necessary Interconnection Request Applications to the CAISO and IID.

The Project complements both the existing operational renewable energy facilities, and those planned for future development in the County, and supports the broader Southern California's bulk electric transmission system by serving as a firm, dispatchable resource.

2.1 PROJECT OBJECTIVES

The Project would meet the following objectives:

- To construct and operate utility-scale energy storage technologies that are safe, efficient, and environmentally responsible
- To provide load-serving entities and system operators the ability to effectively manage intermittent renewable generation on the grid, thereby creating reliable, dispatchable generation as a firm, dispatchable resource
- To facilitate deployment of additional renewable energy resources in furtherance of the State of California Renewable Portfolio Standard
- To develop an up to 2,000 MW energy storage facility on previously disturbed land that is no longer used for agricultural production
- To promote local economic development by maximizing the utilization of the local workforce for a variety of trades and businesses

2.2 DISCRETIONARY ACTIONS/APPROVALS BY THE COUNTY OF IMPERIAL

The Imperial County Planning and Development Services (ICPDS) is the lead agency for this Project. The lead agency is defined as, "the public agency, which has the principal responsibility for carrying out or approving a project." The ICPDS must undertake the following discretionary actions and approvals for the project:

- **General Plan Amendment:** The Project proposes a General Plan Amendment to change the land use designation for the Project Site from Agriculture to Industry



- **Zone Change:** The Project proposes a Zone Change from Heavy Agriculture (A-3) to Medium Industrial (M-2)
- **Conditional Use Permit:** The use would be limited to Energy Production/Use and would require a Conditional Use Permit (CUP) to allow a utility-scale energy storage complex in an industrial zone
- **Development Agreement:** The applicant may pursue a Development Agreement with the County for the Project
- **Adoption and Certification of the Final EIR:** The Imperial County Board of Supervisors has authority to determine if the environmental document is adequate under CEQA
- **Approval of Project:** The Imperial County Board of Supervisors would consider approval of the Project

Other local approvals that may be required:

- Encroachment permits
- Parcel map
- Grading permits
- Building permits
- Decommissioning plan
- Other County approvals as necessary to develop the project

2.3 DISCRETIONARY ACTIONS/APPROVALS BY OTHER AGENCIES

Responsible Agencies are those agencies that have discretionary approval over one or more actions involved with development of a project. Trustee Agencies are state agencies that have discretionary approval or jurisdiction by law over natural resources affect by a project. These agencies may include but are not limited to the following:

- **California Department of Fish and Wildlife (Trustee Agency):** State Endangered Species Act compliance, California Native Plant Protection Act, Streambed Alteration Permit
- **California Regional Water Quality Control Board, Colorado River Basin, Region 7:** Section 401 Water Quality Certification, General Construction Activity Storm Water Permit
- **California Air Resources Board:** Review of EIR
- **California Energy Commission:** Review of EIR
- **California Public Utilities Commission:** Review of EIR
- **California Department of Toxic Substances Control:** Review of EIR
- **Imperial County Air Pollution Control District:** Rule 801 compliance
- **Imperial County Fire Department:** Review of the Site Plan and approval of the proposed fire system
- **United States Army Corps of Engineers:** The Project may impact jurisdictional waters and therefore, a Section 404 Permit may be required from the Corps

3.0 PROJECT LOCATION

The Project Site is in the unincorporated Mount Signal area of the County, approximately eight miles southwest of the City of El Centro and approximately five miles north of the U.S.-Mexico border.

Infrastructure within the Project Site includes the Westside Main Canal; a 230 kV single-circuit IID transmission line, a IID distribution line, and the Campo Verde 230 kV radial gen-tie line along with their associated easements and maintenance roads; and Liebert Road, which is a County road. Within the



Project Site, all infrastructure associated with the previous agriculture operations south of the Westside Main Canal has been removed or is deteriorated and non-functional.

Current activities on the Project Site are minimal and largely limited to the land north of the Westside Main Canal. These activities comprise IID, Customs and Border Protection (CBP), agricultural operations, and occasional fishing activity along the Canal. Vehicle travel in the Project area is limited along the Canal roads (including Mandrapa Road) and Liebert Road. Infrequent vehicle activity associated with the active agriculture occurs on Liebert Road and Mandrapa Road, north of the Canal. Some vehicular activity may also occur from CBP monitoring.

4.0 ISSUES ADDRESS IN THE EIR

Based on the analysis presented in the NOP, Initial Study (IS), and the information provided in the comments to the NOP, the following environmental topics were analyzed in the EIR.

- Aesthetics
- Agriculture and Forestry Resources
- Air Quality
- Biological Resources
- Geology and Soils
- Greenhouse Gases
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Tribal Cultural Resources
- Utilities and Service Systems

5.0 MITIGATION MONITORING AND REPORTING PROGRAM

Pursuant to PRC §21081.6, the County has adopted a detailed mitigation monitoring and reporting program prepared under the County's direction. The program is designed to ensure that all mitigation measures as hereafter required are in fact implemented on a timely basis as the Project is implemented.

6.0 RECORD OF PROCEEDINGS

For all purposes of CEQA compliance, including these Findings of Fact, the administrative record of all County proceedings and decisions regarding the environmental analysis of the Project include but are not limited to:

- The Draft and Final EIR for the Project, together with all appendices and technical reports referred to therein, whether separately bound or not, or on a CD/portable drive;
- All reports, letters, applications, memoranda, maps, or other planning and engineering documents prepared by the County, its planning consultant and environmental consultant, the Applicant or others and presented to or before the decision-makers or staff;
- All minutes of any public workshops, meetings or hearings, and any recorded or verbatim transcripts or videotapes thereof;
- Any letters, reports, or other documents or evidence submitted into the record at any public workshops, meetings or hearings; and



- Matters of common general knowledge to the County, which it may consider, including applicable state or local laws, ordinances and policies, the General Plan and all applicable planning programs and policies of the County.

Documents or other materials that constitute the record of proceedings upon which Findings are made are located at the Imperial County Department of Planning and Development Services, 801 Main Street, El Centro, CA 92243.

7.0 FINDINGS OF SIGNIFICANT IMPACTS, REQUIRED MITIGATION MEASURES AND SUPPORTING FACTS

The County, having reviewed and considered the information contained in the EIR and the entire administrative record, including but not limited to the expert opinions of the County's professional planning staff and independent consultants familiar with the environmental conditions of the County and the facts and circumstances of the Project who prepared the EIR, finds pursuant to Public Resources Code §21081(a)(1) and Guidelines §15091(a)(1) that changes or alterations have been required in, or incorporated into, the Project which would mitigate, avoid, or substantially lessen to below a level of significance. The following potentially significant environmental effects identified in the EIR.

7.1 AGRICULTURAL AND FORESTRY RESOURCES

7.1.1 Conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use

- A. **Potential Impact.** The Project would result in the conversion of approximately 148 acres of agricultural land, as identified as Farmland of Local Importance, to a non-agricultural use. The loss of agricultural land designated Prime Farmland and Farmland of Statewide Importance is typically considered a significant impact under CEQA.
- B. **Finding.** Pursuant to CEQA Guidelines §15091(a)(1), changes or alteration have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
- C. **Facts in Support of Finding.** Based on the analysis provided in Section 3.2.3.4 of the EIR, the Project's potentially significant impact would be mitigation to below a level of significance with the implementation of Mitigation Measure (MM) AG-1 of the Draft EIR, as identified below. To verify farmland designation, the LESA model was used with the results provided in Section 3.2.3.4(a) of the EIR. Based on this evaluation, the final LESA score for the Project Site is 59.2. A final LESA score between 40 to 59 points is considered significant if both the Land Evaluation and Site Assessment subscores are greater than or equal to 20 points. In the case of the Project, both the Land Evaluation and Site Assessment scores are greater than 20 points. As such, the Project is considered to have a significant impact on agricultural resources. However, incorporation of MM AG-1, which would require the Project Applicant to minimize the impacts associated with the permanent loss of valuable Farmland through either provision of an agricultural conservation



easement, payment into the County agricultural fee program, or entering into a public benefit agreement, and would reduce impacts to a less than significant level.

The following mitigation measure is required for the Project:

MM AG-1: Payment of Agricultural and Other Benefit Fees

One of the following options included below is to be implemented prior to the issuance of a grading permit or building permit for the Project:

Mitigation for Non-Prime Farmland

- Option 1: Provide Agricultural Conservation Easement(s). The Permittee shall procure Agricultural Conservation Easements on a “1 on 1” basis on land of equal size, of equal quality farmland, outside the path of development. The conservation easement shall meet Department of Conservation regulations and shall be recorded prior to issuance of any grading or building permits; or
- Option 2: Pay Agricultural In-Lieu Mitigation Fee. The Permittee shall pay an “Agricultural In-Lieu Mitigation Fee” in the amount of 20 percent of the fair market value per acre for the total acres of the proposed site based on five comparable sales of land used for agricultural purposes as of the effective date of the permit, including program costs on a cost recovery/time and material basis. The Agricultural In-Lieu Mitigation Fee, will be placed in a trust account administered by the Imperial County Agricultural Commissioner’s office and will be used for such purposes as the acquisition, stewardship, preservation, and enhancement of agricultural lands within Imperial County; or,
- Option 3: Public Benefit Agreement. The Permittee and County shall voluntarily enter into an enforceable Public Benefit Agreement or Development Agreement that includes an Agricultural Benefit Fee payment that is 1) consistent with Board Resolution 2012-005; 2) the Agricultural Benefit Fee must be held by the County in a restricted account to be used by the County only for such purposes as the stewardship, preservation and enhancement of agricultural lands within Imperial County and to implement the goals and objectives of the Agricultural Benefit program, as specified in the Development Agreement, including addressing the mitigation of agricultural job loss on the local economy.

7.1.2 Conflict with Existing Zoning for Agricultural use, or a Williamson Act contract

- A. **Potential Impact.** Construction and operation of the Project would conflict with the existing zoning for agricultural use, due to the change in land use designation and zoning. The Project Site currently has a general plan land use designation of Agriculture with a corresponding zoning of A-3. The Project includes the rezoning of the Project Site from A-3 to M-2 to accommodate the proposed battery storage use of the Site. Although operation of the Project would conflict with the current zoning, it provides other economic and energy benefits, which justify the loss of this agricultural use.



- B. **Finding.** Pursuant to CEQA Guidelines §15091(a)(1), changes or alteration have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
- C. **Facts in Support of Finding.** Based on the analysis provided in Section 3.2.3.4(b) of the EIR, the Project's potentially significant impact would be mitigated to below a level significance with the implementation of MM AG-1 of the Draft EIR. Objective 1.8 of the County's Agricultural Element would allow conversion of agricultural land to non-agricultural uses, including renewable energy, only where a clear and immediate need can be demonstrated, based on economic benefits, population projections and lack of other available land (including land within incorporated cities) for such nonagricultural uses. The Jobs Impact Analysis (JIA) prepared for the Project determined that the Project, at full build-out, would generate the equivalent of 1,549 full-time one-year equivalent jobs of the construction period. These are considered as new jobs with a significant economic benefit, as the Project Site has been unused for agriculture or any other uses for over 15 years. As such, the benefits of the Project, due to construction-related activities, outweigh the loss due to the conversion of agricultural uses, and this impact would be less than significant. Furthermore, the Project would implement MM AG-1, which would further reduce potential impacts caused by the rezoning of agricultural land to non-agricultural uses.

The JIA additionally estimated that over the lifespan of the Project, at full build out, 20 entirely new full-time equivalent permanent jobs would be generated as a result of Project operation. As such, based on the JIA, the Project is consistent with Objective 1.8 of the County General Plan Agricultural Element.

An Economic Impact Analysis (EIA) was prepared for the Project, in order to evaluate consistency with Objective 1.8 of the County General Plan Agricultural Element. The EIA calculates the predicted impact to a community or region as a result of a project or activity. It gives an understanding of the quantity of dollars that will flow through an economy as a result of a project. In the case of an energy battery storage project, this includes such items as labor, construction materials, local purchases, and operations. This includes all known direct (and indirect) expenditures, as a result of both construction and operation for the projected life of a project. The economic benefits to the County and region, due to Project operation, would be approximately \$165 million over the lifespan of the Project, at full build-out, not including governmental revenues from taxes and fees. As such, based on the EIA, the Project is consistent with Objective 1.8 of the County General Plan Agricultural Element.

A Fiscal Impact Analysis (FIA) was prepared for the Project, in order to complete the assessment of economic benefits attributed to the Project and evaluate consistency with Objective 1.8 of the County General Plan Agricultural Element. The FIA calculates the amount of revenue that a governmental agency is expected to receive and calculates the projected costs they will incur to provide appropriate services to both the Project and the additional population/employment generated as a result of the Project. A comparison is undertaken to determine if the Project would generate either economic benefit or cost to the government agency.



The following mitigation measure is required for the Project:

MM AG-1

7.1.3 Conversion of Farmland, to non-agricultural use or conservation of forest land to non-forest use

- A. **Potential Impact.** The Project would convert land currently designated as Agricultural to Industry and would result in the conversion of Farmland to a non-agricultural use.
- B. **Finding.** Pursuant to CEQA Guidelines §15091(a)(1), changes or alteration have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
- C. **Facts in Support of Finding.** Based on the analysis provided in Section 3.2.3.4(c) of the EIR, the Project's potentially significant impact would be mitigated to below a level of significance with the implementation of MM AG-1 of the Final EIR. Construction of the Project would result in the conversion of Farmland to a non-agricultural use. Other than the Project Site, no other agricultural land would be converted to a non-agricultural use. Due to the location of the Project Site, no "leapfrogging" or "spot zoning" of agricultural land would occur, as the Project Site is not located in the middle of other agricultural areas which would be cut off or otherwise negatively impacted by development of the Project. As described above, per Objective 1.8 of the County General Plan Agricultural Element, agricultural land may be converted to non-agricultural uses including renewable energy only where a clear and immediate need can be demonstrated based on economic benefits, population projections and lack of other available land (including land within incorporated cities) for such non-agricultural uses. As demonstrated by the EIA, JIA, and FIA, rezoning the land to be utilized for the Project would show a significant overall fiscal benefit.

Based on the evaluations above, the economic benefits of Project operations would outweigh the loss caused by the conversion of Farmland, in accordance with Objective 1.8 of the County General Plan Agricultural Element

At the end of the Project's lifespan, the Project components would be disassembled and removed from the Project Site. All battery module components, hazardous materials, and solar PV panels would be disassembled and transported off-site for proper disposal. Although the Project components would be removed from the Project Site, the Project Site itself would not revert back to its Agriculture land use designation and pre-Project condition. The Project would develop new access roads which may have the potential to attract or encourage new development of adjacent farmlands. All structural and infrastructure improvements included as part of the Project (e.g., Westside Main Canal bridge, access roads, O&M building, and buildings housing battery energy storage systems) would remain on-site after decommissioning of the Project. The Project Site would retain its Industry land use designation and M-2 zoning.

The following mitigation measure is required for the Project:

MM AG-1



7.2 AIR QUALITY

7.2.1 Cumulative Net Increase of Any Criteria Pollutants for which the Project Region is Non-Attainment under and Applicable Federal or State Ambient Air Quality Standard

- A. **Potential Impact.** Construction and operation of the Project would result in a cumulative increase in emissions of criteria pollutants and fugitive dust associated with the use of off-road diesel equipment and vehicle trips. The Project would result in emissions of criteria pollutants for which the region is nonattainment.
- B. **Finding.** Pursuant to CEQA Guidelines §15091(a)(1), changes or alteration have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
- C. **Facts in Support of Finding.** Based on the analysis provided in Section 3.3.3.4(b) of the EIR, the Project's potentially significant impact would be mitigation to below a level of significance with the implementation of MM AIR-1, MM AIR-2, and MM AIR-3 of the EIR.

Phase 1 construction would include multiple construction activities as compared to later phases and would represent the worst-case daily emissions scenario for the Project. The maximum daily emissions are predicted values for the worst-case day and do not represent the emissions that would occur for every day of construction. Table 3.3-7 shows the maximum daily construction emissions for Phase 1 of the Project. As shown in Table 3.3-7, the maximum daily construction emissions would be below all Imperial County Air Pollution Control District (ICAPCD) significance thresholds.

Prior to construction, the construction contractor will perform recordkeeping of a construction equipment list. The equipment list will include the make, model, horsepower, and actual hours of usage for off-road equipment. The equipment list(s) will be submitted periodically to the IAPCD to perform a nitrogen oxides (NOx) analysis.

Operational emissions would occur over the lifetime of the Project generating emissions from vehicle trips and area sources such as landscaping equipment. Table 3.3-6 of the EIR shows the maximum daily operational emissions.

At the end of the Project's useful operational life, the Applicant may determine that the Project Site should be decommissioned and deconstructed, or it may seek an extension of its CUP. The emissions associated with decommissioning of the Project are not quantitatively estimated, as the extent of activities and emissions factors for equipment and vehicles at the time of decommissioning are unknown. The overall activity would be anticipated to be somewhat less than Project construction, and the emissions from off-road and on-road equipment are expected to be much lower than those for the Project construction. However, without changes in fugitive dust control methods it is likely that fugitive dust emissions would be closer to those estimated for construction.



The following mitigation measures are required for the Project:

MM AIR-1: Regulation VIII (Fugitive Dust Control Measures)

All construction sites, regardless of size, must comply with the requirements contained within Regulation VIII.

Standard Mitigation Measures for Fugitive Dust (PM10) Control

- a) All disturbed areas, including Bulk Material storage which is not being actively utilized, shall be effectively stabilized and visible emissions shall be limited to no greater than 20 percent opacity for dust emissions by using water, chemical stabilizers, dust suppressants, tarps, or other suitable material such as vegetative ground cover.
- b) All on-site and off-site unpaved roads would be effectively stabilized, and visible emissions shall be limited to no greater than 20 percent opacity for dust emissions by paving, chemical stabilizers, dust suppressants and/or watering.
- c) All unpaved traffic areas 1 acre or more with 75 or more average vehicle trips per day would be effectively stabilized and visible emission shall be limited to no greater than 20 percent opacity for dust emissions by paving, chemical stabilizers, dust suppressants and/or watering.
- d) The transport of Bulk Materials shall be completely covered unless 6 inches of freeboard space from the top of the container is maintained with no spillage and loss of Bulk Material. In addition, the cargo compartment of all Haul Trucks is to be cleaned and/or washed at delivery site after removal of Bulk Material.
- e) All Track-Out or Carry-Out would be cleaned at the end of each workday or immediately when mud or dirt extends a cumulative distance of 50 linear feet or more onto a paved road within an urban area.
- f) Movement of Bulk Material handling or transfer shall be stabilized prior to handling or at points of transfer with application of sufficient amounts of water, chemical stabilizers or by sheltering or enclosing the operation and transfer line.
- g) The construction of any new unpaved road is prohibited within any area with a population of 500 or more unless the road meets the definition of a temporary unpaved road. Any temporary unpaved road shall be effectively stabilized, and visible emissions shall be limited to no greater than 20 opacity for dust emission by paving, chemical stabilizers, dust suppressants and/or watering.

MM AIR-2: Construction Equipment Control Measures

Standard Mitigation Measures for Equipment Exhaust Emissions Control

- a) Use of equipment with alternative fueled or catalyst-equipped diesel engine, including for all off-road and portable diesel-powered equipment.



- b) Minimize idling time either by shutting equipment off when not in use or limit the idling time to a maximum of 5 minutes.
- c) Limit, to the extent feasible, the hours of operation of heavy-duty equipment and/or the number of equipment in use.
- d) Replace fossil fueled equipment with electrically driven equivalents (provided they are not run via a portable generator set).

Required Mitigation for Construction Equipment Mobilization

- a) The 1.2-mile portion of the access road from the IV Substation to the Project Site shall be covered with construction mats.
- b) No more than eight pieces of construction equipment shall be delivered to the Project Site in one day.
- c) A speed limit of 15 mph on the access road shall be enforced.

Required Mitigation for Construction activities

- a) The 1.2-mile portion of the southern access road from the IV Substation to the Project Site shall be covered with construction mats.
- b) A material delivery speed limit of 15 mph on the access road shall be enforced.
- c) For material deliveries from the south, one of the following dust suppressant measures would be required for the 4.4-mile service road:
- d) A water truck shall apply water every 3 hours, or as deliveries occur; or
- e) A chemical dust suppressant shall be applied.
- f) For the 0.3-mile portion of the northern access route that is unpaved (south of Wixom Road to the worker parking area) one of the following dust suppressant measures would be required:
 - A water truck shall apply water every 3 hours, or as worker access occurs; or
 - A chemical dust suppressant shall be applied.
 - A water truck shall apply water to all active on-site grading areas every 3 hours.

Enhanced Mitigation Measures for Construction Equipment

To help provide a greater degree of reduction of PM emissions from construction combustion equipment, ICAPCD recommends the following enhanced measures:

- a) Curtail construction during periods of high ambient pollutant concentrations; this may include ceasing of construction activity during the peak hour of vehicular traffic on adjacent roadways.



- b) Implement activity management (e.g., rescheduling activities to reduce short-term impacts).

MM AIR-3: Operational Dust Control Plan

To help reduce fugitive dust emissions from on-site unpaved roads and accumulation of small dunes during operations, an Operational Dust Control Plan (ODCP) would be prepared. The ODCP would include strategies for how dust emissions would be controlled and maintained during Project operations. The ODCP would be submitted to the ICAPCD for approval prior to the issuance of a Certificate of Occupancy.

7.2.2 Expose Sensitive Receptors to Substantial Pollutant Concentrations

- A. **Potential Impact.** Construction of the Project may result in temporary increases in emissions of Toxic Air Contaminants.
- B. **Finding.** Pursuant to CEQA Guidelines §15091(a)(1), changes or alteration have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
- C. **Facts in Support of Finding.** Based on the analysis provided in Section 3.3.3.4(c) of the EIR, the Project's potentially significant impact would be mitigated to below a level of significance with the implementation of MM AIR-1, MM AIR-2 and MM-AIR-3 of the EIR. Construction of the Project may result in temporary increases in emissions of toxic air contaminants (TACs), mainly diesel particulate matter (DPM) from off-road diesel equipment and vehicle trips. Particle matter (PM) exhaust from diesel-fueled engines were identified as a toxic air contaminant by the California Air Resources Board (CARB) in 1998. Due to the limited intensity of construction and the distance to the nearest sensitive receptor (4,000 feet), DPM generated by Project construction activities is not expected to create conditions where the incremental cancer risk exceeds the ICAPCD's ten in one million significance threshold or non-cancer hazard index thresholds.

Localized carbon monoxide (CO) concentration is a direct function of motor vehicle activity at signalized intersections (e.g., idling time and traffic flow conditions), particularly during peak commute hours and meteorological conditions. Under specific meteorological conditions (e.g., stable conditions that result in poor dispersion), CO concentrations may reach unhealthy levels with respect to local sensitive land uses. CO hotspots due to traffic almost exclusively occur at signalized intersections that operate at a level of service (LOS) E or below. Projects may result in or contribute to a CO hotspot if they worsen traffic flow at signalized intersections operating at LOS E or F. The Project Site is in a rural environment with no signalized traffic intersections within several miles of the Project Site.

The following mitigation measure are required for the Project:

MM AIR-1

MM AIR-2



MM AIR-3

7.3 BIOLOGICAL RESOURCES

7.3.1 Loss of Foraging Habitat for Common and/or Special-Status Wildlife

- A. **Potential Impact.** Implementation of the Project would cause the loss of foraging habitat for common and/or special-status species.
- B. **Finding.** Pursuant to CEQA Guidelines §15091(a)(1), changes or alteration have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
- C. **Facts in Support of Finding.** Based on the analysis provided in Section 3.4.4.4(a) of the EIR, the Project's potentially significant impact would be mitigated to below a level of significance with the implementation of MM BR-1 and MM BR-2 of the EIR. Although the Project occurs within an area supporting large areas of open space not all these areas support the same types of habitat as the Project area and support different land use practices (i.e., agriculture, etc.). The Project would permanently impact approximately 144.51 acres and temporarily impact approximately 18.81 acres of native and non-native vegetation communities and land cover types. Therefore, while the overall loss of foraging habitat compared to available habitat in the region is low, Project-related impacts to foraging habitat for wildlife are considered significant without mitigation.

The primary mechanism for reducing impacts from habitat loss is the acquisition and preservation of mitigation lands and the reduction of indirect impacts such as the spread of weeds or degradation of habitat by fugitive dust or erosion. The measures presented in MM BR-1 include acquisition and preservation of mitigation lands and provisions that educate workers regarding the sensitivity of wildlife and how to minimize impacts to these species through Best Management Practices (BMPs), reduced vehicle speeds, and restoration of temporarily disturbed areas. Impacts would be less than significant with mitigation.

The following mitigation measures are required for the Project:

MM BR-1: Compensation for Permanent and Temporary Impacts to Vegetative Communities

To compensate for permanent and temporary impacts to on-site vegetative communities, within the Project Site, habitat (which may include preservation areas within portions of the Project Site not impacted by construction or mitigation lands outside of the main Project Site) that contains the same quality of vegetative communities impacted by the Project and that is not already public land shall be preserved and managed in perpetuity at the following ratios – temporary impacts to native vegetation communities shall be mitigated at a 1:1 mitigation ratio (one acre preserved/restored for each acre impacted) and permanent impacts shall be mitigated at a ratio of 2:1. Impacts to CDFW listed sensitive or riparian communities shall be mitigated at a ratio of 3:1. Land acquired/dedicated for impacts to native vegetation communities must be with lands occupied by habitat of a similar type and quality.



Prior to the disturbance of vegetation, the Applicant shall obtain County approval of preserved and/or mitigation lands as well as documentation of a recorded conservation easement. The compensation for the loss of habitats may be achieved either by a) on-site habitat creation or enhancement habitats with similar species composition to those present prior to construction, b) off-site creation or enhancement of, or c) participation in an established mitigation bank program.

Prior to the removal of native vegetation, if on- or off-site mitigation is required, a Habitat Restoration Plan (HRP) shall be prepared that will guide all restoration and monitoring activities (refer to MM BR-2 for details on the plan requirements).

MM BR-2: Develop a Habitat Restoration Plan

The Applicant shall restore temporarily disturbed areas to pre-construction conditions or better prior to the issuance of a grading permit and removal of any vegetation and/or wetland habitat. To this end, the Applicant shall retain a County qualified biologist, knowledgeable in the area(s) of annual grassland and wetland habitat restoration, to prepare a Habitat Restoration Plan (HRP). The Applicant shall submit the HRP to the County for approval (in consultation with CDFW and USFWS). The biologist will also be responsible for monitoring the implementation of the plan as well as the progress on achieving the established success criteria.

The HRP shall expressly identify the process by which all disturbed areas shall be restored to pre-construction conditions or better. The plan will address restoration and revegetation related to disturbance from construction. It will also address restoration and revegetation required after decommissioning of the Project should this be required. The decommissioning plan shall include, at a minimum, the following items:

- a) Figures depicting areas proposed for temporary disturbance/mitigation lands – The HRP shall include detailed figures indicating the locations and vegetation types of areas proposed for temporary disturbance. These figures shall be updated, as necessary, to reflect current Site conditions should they change.
- b) Proposed species for restoration/revegetation – The species palette proposed for restoration/revegetation shall include a combination of native annual and perennial species known to currently occur on the Project Site and in adjacent habitats.
- c) Seed source and collection guidelines – Seeds shall first be collected from the stock of native plants occurring on the Project Site, during the appropriate collection period (late spring through the summer, depending on the species) and prior to disturbance from construction activities. Additional seed may be collected from stock within a 25-mile radius will be collected to maintain local genetic integrity. If seed collection from these areas is not possible then a seed source must be obtained from a local seed supplier familiar with native species. Seed will be limited to the species and quantity specified in the seed mix palette prepared for the Project. All seed will originate from the Project region, within +/- 1000 feet elevation of the Project Site. The seed supplier chosen will provide a list of three references with the bid proposal. The references will include year, contact names, and telephone numbers. Seeds will be tested for percent purity,



percent germination, number of pure live seeds per pound, and weed seed content. Seed testing will be the responsibility of the seed supplier.

- d) Planting methodology – A description of the preferred methods proposed for container plant installation or seeding shall be provided (e.g., hydroseeding, drill seeding, broadcast seeding, etc.). Additionally, a discussion on timing of seeding, type of irrigation system proposed, potential need of irrigation, type and duration of irrigation, and erosion controls proposed for revegetation activities shall be included.
- e) Invasive, non-native vegetation Control – A comprehensive discussion on weed control for the Project Site will be developed and included in the HRP. This will serve to prevent the type conversion of natural habitats to those dominated by invasive species known to occur in the area.
- f) Monitoring program – Areas subject to restoration/revegetation shall be monitored to assess conditions and to make recommendations for successful habitat establishment. Monitoring will be performed by a County qualified biologist(s), knowledgeable in the area of annual grassland habitat restoration. Monitoring should include, at a minimum, the following:
 - 1. Qualitative Monitoring – Qualitative monitoring surveys will be performed monthly in all restored/revegetated areas for the first year following planting in any phase of the Project. Qualitative monitoring will be on a quarterly schedule thereafter, until final completion approval of each restoration/revegetation area. Qualitative surveys will assess native plant species performance, including growth and survival, germination success, reproduction, plant fitness and health as well as pest or invasive plant problems. A County qualified wildlife biologist will assist in monitoring surveys and will actively search for mammal and other wildlife use.
 - 2. Quantitative Monitoring – Quantitative monitoring will occur annually for years one to five or until the success criteria are met. Within each revegetation area, as shown figures referenced above, the biologist will collect data in a series of 1 m² quadrats to estimate cover and density of each plant species within the revegetated areas. Data will be used to measure native species growth performance, to estimate native and non-native species coverage, seed mix germination, native species recruitment and reproduction, and species diversity. Additionally, within wetland habitat restoration areas, the biologist shall conduct sampling events to document the presence of hydric soil characteristics/indicators (if present). Based on these results, the biologist will make recommendations for maintenance or remedial work on the Site and for adjustments to the approved seed mix.
- g) Success criteria – Criteria for successful restoration/revegetation of disturbed areas shall be provided.
- h) Reporting – Reporting will include progress reports summarizing Site status and recommended remedial measures that will be submitted by the biologist to the County quarterly, with the exception of the Site visits immediately preceding the development of each annual status report



(see below). Each progress report will list estimated species coverage and diversity, species health and overall vigor, the establishment of volunteer native species, topographical/soils conditions, problem weed species, the use of the Site by wildlife species, significant drought stress, and any recommended remedial measures deemed necessary to help ensure compliance with specified performance criteria.

One annual Site status report that summarizes Site conditions will be forwarded by the biologist to the County, the USFWS and the CDFW at the end of each year following implementation of this plan until the established success criteria have been met. Each annual report will list species coverage and diversity measured during yearly quantitative surveys, compliance/non-compliance with required performance standards, species health and overall vigor, the establishment of volunteer native species, hydrological and topographical conditions, the use of the Site by wildlife species, and the presence of invasive weed species. In the event of substantial non-compliance with the required performance criteria, the reports will include remedial measures deemed necessary to help ensure future compliance with specified performance criteria. Each annual report will include, at the minimum:

1. The name, title, and company of all persons involved in restoration monitoring and report preparation
2. Maps or aerials showing restoration areas, transect locations, and photo documentation locations
3. An explanation of the methods used to perform the work, including the number of acres treated for removal of non-native plants
4. An assessment of the treatment success.

7.3.2 Disturbance to Wildlife May Result in Wildlife Mortality

- A. **Potential Impact.** Implementation of the Project would result in disturbance to wildlife and may result in wildlife mortality.
- B. **Finding.** Pursuant to CEQA Guidelines §15091(a)(1), changes or alteration have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
- C. **Facts in Support of Finding.** Based on the analysis provided in Section 3.4.4.4(a) of the EIR, the Project's potentially significant impact would be mitigated to below a level of significance with the implementation of MM BR-3, MM BR-4, MM BR-5, MM BR-6 and MM BR-7 of the EIR. The Project Site supports a suite of common and sensitive wildlife species. Direct impacts to wildlife associated with construction of the Project could include mortality from trampling or crushing; increased noise levels due to heavy equipment use; light impacts from construction during low-light periods; increased vehicular and human presence along existing access roads; displacement due to habitat modifications, including vegetation removal, alterations of existing soil conditions; fugitive dust; and increased erosion and sediment transport. Operational impacts



to wildlife would include mortality from vehicle strikes, disturbance from vegetation management activities, potential disruption of nest sites, noise from transformer or facility operations and lighting, human disturbance, and the spread of noxious weeds from maintenance personnel. For avian species, lighting plays a significant role in collision risk with poles and/or towers because lights can attract nocturnal migrant songbirds.

Construction-related impacts on common wildlife are typically not considered significant under CEQA; impacts to some common wildlife (e.g., nesting birds) are considered significant may have regulatory implications under the Federal and State Endangered Species Acts. However, the large scale of the construction, multi-year schedule, and size of the land use conversion would result in potentially significant impacts on common species in the Project area. Implementation of MMs BR-1 through BR-7 would provide for the protection of common wildlife by educating workers on the avoidance mechanisms in place to avoid impacts to common and sensitive species or their habitat, restoring temporarily disturbed areas post construction, and acquiring off-site habitat. The measures would also include directives that educate workers regarding reduced vehicle speeds and general work practices that reduce conflicts with native species. Implementation of mitigation measures would reduce potential impacts on wildlife mortality to less-than-significant levels.

The following mitigation measures are required for the Project:

MM BR-3: Implement a Worker Environmental Education Program

Prior to any Project activities on the Site (i.e., surveying, mobilization, fencing, grading, or construction), a Worker Environmental Education Program (WEEP) shall be prepared and implemented by a qualified biologist(s). The WEEP shall be submitted to the County for review and approval prior to issuance of construction permits and implemented throughout the duration of the construction activities. The WEEP shall be put into action prior to the beginning of any Site related activities, including but not limited to those activities listed above, and implemented throughout the duration of Project construction. The WEEP, shall include, at a minimum, the following items:

- a) Training materials and briefings shall include, but not be limited to: a discussion of the Federal and State Endangered Species Acts, BGEPA, and the MBTA; the consequences of non-compliance with these acts; identification and values of plant and wildlife species and significant natural plant community habitats; hazardous substance spill prevention and containment measures; a contact person and phone number in the event of the discovery of dead or injured wildlife; and a review of mitigation requirements.
- b) A discussion of measures to be implemented for avoidance of the sensitive resources discussed above and the identification of an on-site contact in the event of the discovery of sensitive species on the Site.
- c) Protocols to be followed when roadkill is encountered in the work area or along access roads to minimize potential for additional mortality of scavengers, including listed species such as the California condor and the identification of an on-site representative to whom the roadkill will be reported. Roadkill shall be reported to the appropriate local animal control agency within 24 hours.



- d) Maps showing the known locations of special-status wildlife, populations of rare plants and sensitive vegetative communities, seasonal depressions and known waterbodies, wetland habitat, exclusion areas, and other construction limitations (e.g., limited operating periods, etc.). These features shall be included on the Project's plans and specifications drawings.
- e) Literature and photographs or illustrations of potentially occurring special-status plant and/or wildlife species will be provided to all Project contractors and heavy equipment operators.
- f) The Applicant shall provide to the County evidence that all on-site construction and security personnel have completed the WEEP prior to the start of Site mobilization. A special hardhat sticker or wallet size card shall be issued to all personnel completing the training, which shall be carried with the trained personnel at all times while on the Project Site. All new personnel shall receive this training and may work in the field for no more than five days without participating in the WEEP. A log of all personnel who have completed the WEEP training shall be kept on Site.
- g) A weather protected bulletin board or binder shall be centrally placed or kept on-site (e.g., in the break room, construction foreman's vehicle, construction trailer, etc.) for the duration of the construction. This board or binder will provide key provisions of regulations or Project conditions as they relate to biological resources or as they apply to grading activities. This information shall be easily accessible for personnel in all active work areas.
- h) Develop a standalone version of the WEEP, that covers all previously discussed items above, and that can be used as a reference for maintenance personnel during Project operations.

MM BR-4: Implementation of Best Management Practices

BMPs will be implemented as standard operating procedures during all ground disturbance, construction, and operation related activities to avoid or minimize Project impacts on biological resources. These BMPs will include but are not limited to the following:

- a) Compliance with BMPs will be documented and provided to the County in a written report on an annual basis. The report shall include a summary of the construction activities completed, a review of the sensitive plants and wildlife encountered, a list of compliance actions and any remedial actions taken to correct the actions, and the status of ongoing mitigation efforts.
- b) Prior to ground disturbance of any kind the Project work areas shall be clearly delineated by stakes, flags, or other clearly identifiable system.
- c) Vehicles and equipment shall be parked on pavement, existing roads, and previously disturbed areas to the extent practicable.
- d) Speed limit signs, imposing a speed limit of 15 miles per hour, will be installed throughout the Project Site prior to initiation of Site disturbance and/or construction. To minimize disturbance of areas outside of the construction zone, all Project-related vehicle traffic shall be restricted to established roads, construction areas, and other designated areas. These areas will be included in preconstruction surveys and to the extent possible, should be established in locations disturbed by previous activities to prevent further impacts. Off-road traffic outside of designated Project areas will be prohibited.
- e) No vehicles or equipment shall be refueled within 100 feet of an ephemeral drainage or wetland unless a bermed and lined refueling area is constructed. Spill kits shall be maintained on-site in sufficient quantity to accommodate at least three complete vehicle tank failures of 50 gallons each.



Any vehicles driven and/or operated within or adjacent to drainages or wetlands shall be checked and maintained daily to prevent leaks of materials.

- f) All general trash, food-related trash items (e.g., wrappers, cans, bottles, food scraps, cigarettes, etc.) and other human-generated debris will be stored in animal proof containers and/or removed from the Site each day. No deliberate feeding of wildlife will be allowed.
- g) All pipes and culverts with a diameter of greater than 4 inches shall be capped or taped closed. Prior to capping or taping the pipe/culvert shall be inspected for the presence of wildlife. If encountered the wildlife shall be allowed to escape unimpeded.
- h) No firearms will be allowed on the Project Site, unless otherwise approved for security personnel.
- i) To prevent harassment or mortality of listed, special-status species and common wildlife, or destruction of their habitats no domesticated animals of any kind shall be permitted in any Project area.
- j) Use of chemicals, fuels, lubricants, or biocides will be in compliance with all local, state, and federal regulations. All uses of such compounds shall observe label and other restrictions mandated by the U.S. EPA, California Department of Food and Agriculture, and other state and federal legislation, as well as additional Project-related restrictions deemed necessary by the USFWS and CDFW. Use of rodenticides is restricted.
- k) Any contractor or employee that inadvertently kills or injures a special-status animal, or finds one either dead, injured, or entrapped, will immediately report the incident to the on-site representative identified in the WEEP. The representative will contact the USFWS, CDFW, and County by telephone by the end of the day, or at the beginning of the next working day if the agency office is closed. In addition, formal notification shall be provided in writing within three working days of the incident or finding. Notification will include the date, time, location, and circumstances of the incident. Any threatened or endangered species found dead or injured will be turned over immediately to CDFW for care, analysis, or disposition.
- l) During the Site disturbance and/or construction phase, grading and construction activities before dawn and after dusk, is prohibited.
- m) Avoidance and minimization of vegetation removal within active construction areas, including the flagging of sensitive vegetative communities or plants.
- n) Avoidance and minimization of construction activities resulting in impacts to wetlands, streambeds, and banks of any ephemeral drainage unless permitted to do so.
- o) All excavation, steep-walled holes, or trenches in excess of 6 inches in depth will be covered at the close of each working day by plywood or similar materials or provided with one or more escape ramps constructed of earth dirt fill or wooden planks. Trenches will also be inspected for entrapped wildlife each morning prior to onset of construction activities and immediately prior to covering with plywood at the end of each working day. Before such holes or trenches are filled, they will be thoroughly inspected for entrapped wildlife. Any wildlife discovered will be allowed to escape before construction activities are allowed to resume or removed from the trench or hole by a qualified biologist holding the appropriate permits (if required).
- p) New light sources will be minimized, and lighting will be designed (e.g., using down- cast lights) to limit the lighted area to the minimum necessary.



MM BR-5: Wildlife Pre-Construction Surveys and Biological Monitoring

Prior to ground disturbance or vegetation clearing within the Project Site, a qualified biologist shall conduct surveys for wildlife (no more than 72 hours prior to Site disturbing activities) where suitable habitat is present and directly impacted by construction activities. Wildlife found within the Project Site or in areas potentially affected by the Project will be relocated to the nearest suitable habitat that will not be affected by the Project prior to the start of construction. Special-status species found within a Project impact area shall be relocated by an authorized biologist to suitable habitat outside the impact area.

MM BR-6: Implement Biological Construction Monitoring

Prior to the commencement of ground disturbance or Site mobilization activities the Applicant shall retain a qualified biologist(s), for the duration of Project construction, with demonstrated expertise with listed and/or special-status plants, terrestrial mammals, and reptiles to monitor(s), on a daily basis, all construction activities. The qualified biologist(s) shall be present at all times during ground-disturbing activities immediately adjacent to, or within, habitat that supports populations of the listed or special-status species identified within the Project boundaries. Any listed or special-status plants shall be flagged for avoidance. Any special-status terrestrial species found within a Project impact area shall be relocated by the authorized biologist and relocated to suitable habitat outside the impact area. If the installation of exclusion fencing is deemed necessary by the authorized biologist, the authorized biologist shall direct the installation of the fence. Clearance surveys for special-status species shall be conducted by the authorized biologist prior to the initiation of construction each day.

If the biological monitor observes a dead or injured listed or special-status wildlife species on the construction Site during construction, a written report shall be sent to the County, CDFW and/or USFWS within five calendar days. The report will include the date, time of the finding or incident (if known), and location of the carcass and circumstances of its death (if known). The biological monitor shall, immediately upon finding the remains, coordinate with the on-site construction foreman to discuss the events that caused the mortality (in known), and implement measures to prevent future incidents. Details of these measures shall be included with the report. Species remains shall be collected and frozen as soon as possible, and CDFW and/or USFWS shall be contacted regarding ultimate disposal of the remains.

MM BR-7: Conduct Pre-construction Surveys for Nesting and Breeding Birds and Implementation of Avoidance Measures

Prior to any Site disturbance (i.e., mobilization, staging, grading or construction), the Applicant shall retain a qualified biologist(s) to conduct pre-construction surveys for nesting birds within the recognized breeding season (generally February 15 – September 15 but may start earlier for some raptor species) in all areas within 500 feet of Project components (staging areas, substation sites, battery facility structures including, solar arrays, and access road locations). The initial survey event must be completed no more than three days prior to vegetation removal or ground disturbing activities. The required survey dates may be modified based on local conditions, as determined by the qualified biologist(s), with the approval of the County, in consultation with the USFWS and/or CDFW. Measures intended to exclude nesting birds shall not be implemented without prior approval by the County in consultation with USFWS and/or CDFW and shall not exceed County noise standards.



If breeding birds with active nests are found prior to or during construction, a biological monitor shall establish a 300-foot buffer around the nest for ground-based construction activities and no activities will be allowed within the buffer(s) until the young have fledged from the nest or the nest fails.

The prescribed buffers may be adjusted to reflect existing conditions including ambient noise, topography, and disturbance with the approval of the County, CDFW and USFWS as appropriate. The biological monitor(s) shall conduct regular monitoring of the nest to determine success/failure and to help ensure that Project activities are not conducted within the buffer(s) until the nesting cycle is complete or the nest fails. The biological monitor(s) shall be responsible for documenting the results of the surveys and ongoing monitoring and will provide a copy of the monitoring reports for impact areas to the respective agencies.

If for any reason a bird nest must be removed during the nesting season, the Applicant shall provide written documentation providing concurrence from the USFWS and CDFW authorizing the nest relocation. Additionally, the Applicant shall provide a written report documenting the relocation efforts. The report shall include what actions were taken to avoid moving the nest, the location of the nest, what species is being relocated, the number and condition of the eggs taken from the nest, the location of where the eggs are incubated, the survival rate, the location of the nests where the chicks are relocated, and whether the birds were accepted by the adopted parent.

Surveys shall be conducted to include all structural components, related structures, as well as all construction equipment. If birds are found to be nesting in battery facility structures, buffers as described above shall be implemented. If birds are found to be nesting in construction equipment, that equipment shall not be used until the young have fledged the nest or, if no young are present, until after the breeding season has passed.

If trees are to be removed as part of Project-related construction activities, they will be done so outside of the nesting season to avoid additional impacts to nesting raptors. If removal during the nesting season cannot be avoided, the biological monitor must confirm that the nest is vacant prior to its removal. If nests are found within these structures and contain eggs or young, the biological monitor shall allow no activities within a 300-foot buffer for nesting birds and/or a 500-foot buffer for raptors until the young have fledged the nest.

7.3.3 Loss of Nesting Birds or Raptors

- A. **Potential Impact.** Project construction and operation could result in the loss of nesting birds or raptors.
- B. **Finding.** Pursuant to CEQA Guidelines §15091(a)(1), changes or alteration have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
- C. **Facts in Support of Finding.** Based on the analysis provided in Section 3.4.4.4(a) of the EIR, the Project's potentially significant impact would be mitigated to below a level of significance with the implementation of MM BR-3, MM BR-4, MM BR-5, MM BR-6 and MM BR-8 of the EIR. Direct



impacts to nesting birds include ground-disturbing activities associated with construction of the Project, including battery facility structures, solar array footing preparation, construction and grading of new access roads, increased noise levels from heavy equipment, increased human presence, and exposure to fugitive dust. Indirect impacts to nesting birds include facility maintenance, human disturbance, the spread of noxious weeds and disruption of breeding or foraging activity due to facility maintenance. Weed abatement and maintenance of the retention basins could also affect nesting. Operational impacts to nesting birds pose a substantial concern for the Project. In the Project region and other ecosystems where nest substrate is often a limiting factor, birds will nest in a variety of manmade substrates including vehicles, debris piles, and other fixed structures. Some species of birds would likely nest in the Project Site during construction and operation of the facility.

Implementation of mitigation measures would provide for the protection of nesting birds through worker education, pre-construction surveys for nesting birds, avoidance of active nest sites, construction monitoring, and the control of fugitive dust. These measures would also provide for the restoration of areas subject to temporary disturbance and manage the Site for noxious weeds. These measures would be effective, are typical of those required for other construction projects and would provide for compliance with the Migratory Bird Treaty Act (MBTA). Implementation of mitigation measures would reduce potential impacts on wildlife disturbance to less-than-significant levels.

The following mitigation measures are required for the Project:

MM BR-3

MM BR-4

MM BR-5

MM BR-6

MM BR-8: Implement Avian Power Line Interaction Committee Guidelines

The Applicant will be required to construct all transmission facilities, towers, poles, and lines in accordance with and comply with all policies set forth in the *Suggested Practices for Raptor Protection on Power Lines: The State of the Art in 2006* and *Reducing Avian Collisions with Power Lines: The State of the Art in 2012* (APLIC), to minimize avian electrocutions as a result of the construction of the Project. Details of design components shall be indicated on all construction plans and measures to comply with Avian Power Line Interaction Committee (APLIC) policies and guidelines shall be detailed in a separate attachment, all of which will be submitted with the construction permit application. The Applicant shall be required to monitor for new versions of the APLIC guidelines and update designs or implement new measures as needed during Project construction, provided these actions do not require the purchase of previously ordered transmission line structures. A review of compliance with submitted materials will be conducted prior to the final County inspection.



7.3.4 Disturbance of Endangered, Threatened, Proposed, Petitioned or Candidate Plant Species or Their Habitat

- A. **Potential Impact.** The Project could disturb endangered, threatened, proposed, petition or candidate plant species of their habitat.
- B. **Finding.** Pursuant to CEQA Guidelines §15091(a)(1), changes or alteration have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
- C. **Facts in Support of Finding.** Based on the analysis provided in Section 3.4.4.4(a) of the EIR, the Project's potentially significant impact would be mitigated to below a level of significance with the implementation of MM BR-3, MM BR-4, MM BR-5, MM BR-6, MM BR-9 and MM BR-10 of the EIR. The most effective mechanism for reducing impacts to sensitive plant species is to avoid or minimize on-site impacts. Currently, listed plant species have not been identified on the Project Site. However, because the expression of listed plants can be varied even in a good rain year it is possible that listed plants may be detected during the multi-year construction period. Therefore, the key mitigation strategy is to require the Applicant to conduct surveys and avoid populations of listed plants if detected. If the plants cannot be avoided the Applicant would be required to mitigate through the acquisition and protection of listed plant populations on private lands. This strategy would necessitate botanical surveys of proposed lands acquired as mitigation for various wildlife species if these lands are intended to serve mitigation sites for listed plants. The Applicant could also protect on-site populations provided they are protected through a conservation easement. The Applicant would be required to prepare and implement a habitat management plan to help ensure long-term conservation of these species. The goal of the surveys would be to identify at minimum the number of occurrences of each special-status species on off-site compensation lands as would be impacted by the Project. To the extent that off-site surveys document listed plant occurrences on lands to be set aside by the Applicant in perpetuity as habitat mitigation for sensitive wildlife species, then on-site mitigation requirements may be reduced. These measures coupled with general avoidance and worker education would provide an effective mitigation strategy to reduce impacts to listed plant species.

To reduce impacts of the Project on endangered, threatened, proposed, petitioned or candidate plant species or their habitat, mitigation measures have been identified and are listed above. Implementation of mitigation measures would reduce potential impacts on plant species to less-than-significant levels.

The following mitigation measures are required for the Project:

MM BR-3

MM BR-4

MM BR-5

MM BR-6



MM BR-9: Conduct Pre-construction Surveys for State and Federally Threatened, Endangered, Proposed, Petitioned, and Candidate Plants and Implementation of Avoidance Measures

Prior to initial ground disturbance and for undisturbed areas in subsequent construction years, the Applicant shall conduct pre-construction surveys for State and federally listed Threatened and Endangered, Proposed, Petitioned, and Candidate plants in all areas subject to ground-disturbing activity, including, but not limited to, battery facility structures including, access roads, poles/towers, solar array footing preparation, construction areas, and assembly yards. The surveys shall be conducted during the appropriate blooming period(s) by a qualified plant ecologist/biologist according to protocols established by the USFWS, CDFW, and CNPS. All listed plant species found shall be marked and avoided. Any populations of special-status plants found during surveys will be fully described, mapped, and a CNPS Field Survey Form or written equivalent shall be prepared.

These surveys must be accomplished during a year in which rainfall totals are at least 80 percent of average and in which the temporal distribution of rainfall is not highly abnormal (e.g., with most rainfall occurring very early or late in the season) to be reasonably certain of the presence/absence of rare plant species, unless surveys of reference populations document that precipitation conditions would not have adversely affected the ability to detect the species. This condition may be waived with the approval of the County after consultation with the CDFW and USFWS. If a listed plant species cannot be avoided, consultation with USFWS and CDFW will occur.

Prior to Site grading or vegetation removal, any populations of listed plant species identified during the surveys within the Project limits and beyond, shall be protected and a buffer zone placed around each population. The buffer zone shall be established around these areas and shall be of sufficient size to eliminate potential disturbance to the plants from human activity and any other potential sources of disturbance including human trampling, erosion, and dust. The size of the buffer depends upon the proposed use of the immediately adjacent lands and includes consideration of the plant's ecological requirements (e.g., sunlight, moisture, shade tolerance, physical and chemical characteristics of soils) that are identified by a qualified plant ecologist and/or botanist. The buffer for herbaceous and shrub species shall be, at minimum, 50 feet from the perimeter of the population or the individual. A smaller buffer may be established, provided there are adequate measures in place to avoid the take of the species, with the approval of the USFWS, CDFW, and County.

Where impacts to listed plants are determined to be unavoidable, the USFWS and/or CDFW shall be consulted for authorization. Additional mitigation measures to protect or restore listed plant species or their habitat, including but not limited to a salvage plan including seed collection and replanting, may be required by the USFWS or CDFW before impacts are authorized, whichever is appropriate.

MM BR-10: Compensate for Impacts to State and Federally Threatened, Endangered, Proposed, Petitioned, and Candidate Plants

To compensate for permanent impacts to State and Federally Threatened, Endangered, Proposed, Petitioned and Candidate plants, habitat (which may include preservation areas within the undisturbed areas of the Project footprint, mitigation lands outside of the main Project Site or a combination of both) that is not already public land shall be preserved and managed in perpetuity at a 1:1 mitigation ratio (one



acre preserved for each acre impacted). Prior to the disturbance of habitat for or take of listed plant species the Applicant will be required to obtain County approval of preserved and/or mitigation lands as well as provide documentation of a recorded conservation easement(s). Compensation for temporary impacts shall include land acquisition and/or preservation at a 0.5:1 ratio. The preserved habitat for a significantly impacted plant species shall be of equal or greater habitat quality to the impacted areas in terms of soil features, extent of disturbance, vegetation structure, and will contain verified extant populations, of the same size or greater, of the State or Federally listed plants that are impacted.

Habitat shall be preserved through the use of permanent open space easements. Mitigation lands cannot be located on land that is currently held publicly. Mitigation lands may include (depending on the habitat requirements of particular species):

- Areas outside the Project boundary, but within the general Project region.
- Preservation areas within portions of the Project Site that are at least 100 feet from Project components and are either (1) not permanently impacted by construction and operation of the Project, or (2) temporarily disturbed and then restored according to the requirements in Mitigation Measure BR-2; and
- Degraded areas (e.g., areas that have been actively dry-farmed) that are restored to high quality habitat through the implementation of a County-approved restoration plan.

Criteria for appropriate mitigation land are species-specific; the following factors must be considered in assessing the quality of potential mitigation habitat: (1) Current land use; (2) Location (e.g., habitat corridor, part of a large block of existing habitat, adjacency to source populations, proximity to Project facilities or other potential sources of disturbance); (3) Vegetation composition and structure; (4) Slope; (5) Soil composition and drainage; and (6) Level of occupancy or use by relevant species.

The Applicant shall either provide open space easements or provide funds for the acquisition of such easements to a “qualified easement holder” (defined below). The CDFW is a qualified easement holder. To qualify as a “qualified easement holder” a private land trust must have the following:

- Substantial experience managing open space easements that are created to meet mitigation requirements for impacts to sensitive species
- Adopted the Land Trust Alliance’s *Standards and Practices*
- A stewardship endowment fund to pay for its perpetual stewardship obligations

The County shall determine whether a proposed easement holder meets these requirements.

The Applicant shall also be responsible for donating to the conservation easement holder fees sufficient to cover: (1) Administrative costs incurred in the creation of the conservation easement (appraisal, documenting baseline conditions, etc.) and (2) Funds in the form of a non-wasting endowment to cover the cost of monitoring and enforcing the terms of the conservation easement in perpetuity. The amount of these administrative and stewardship fees shall be determined by the conservation easement holder in consultation with the County.



Open space easement(s) shall also be subject to the following conditions:

- The locations of acceptable easement(s) shall be developed with approval of CDFW and USFWS.
- The primary purpose of the easement(s) shall be conservation of impacted species and habitats, but the conservation easement(s) shall also allow livestock grazing when and where it is deemed beneficial for the habitat needs of impacted species.

Open space easement(s) shall:

- Be held in perpetuity by a qualified easement holder (defined above).
- Be subject to a legally binding agreement that shall: (1) Be recorded with the County Recorder(s); and (2) Name CDFW or another organization to which the easement(s) will be conveyed if the original holder is dissolved.
- Be subject to the management requirements outlined in Mitigation Measure BR-2.

However, if lands acquired or protected for the compensation of permanent impacts to wildlife and/or vegetative communities (discussed above) contain similar sized populations of the impacted listed plant species, no further mitigation would be required.

7.3.5 Electrocution of State and/or Federally Protected Birds

- A. **Potential Impact.** The Project could result in electrocution of State and/or federally protected birds.
- B. **Finding.** Pursuant to CEQA Guidelines §15091(a)(1), changes or alteration have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
- C. **Facts in Support of Finding.** Based on the analysis provided in Section 3.4.4.4(a) of the EIR, the Project's potentially significant impact would be mitigated to below a level of significance with the implementation of MM BR-8 of the EIR. Coopers hawks, ferruginous hawk, northern harrier, prairie falcon, and other large aerial perching birds would be susceptible to electrocution from the Project's electric power lines (i.e., distribution/collector) because of their size, presence in the Project area, and tendency to perch on tall structures that offer views of potential prey. To reduce potential effects of the Project, mitigation will require that all transmission facilities be designed to be raptor-safe in accordance with the *Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006* and *Reducing Avian Collisions with Power Lines: The State of the Art in 2012* (APLIC). This includes placing bird flight diverters on small structures to reduce the potential for birds to perch on the poles. Implementation of MM BR-8 would reduce potential impacts on Federally or State listed avian species to less-than-significant levels.

The following mitigation measure is required for the Project:

MM BR-8



7.3.6 Collision with Overhead Wires by State and/or Federally Protected Birds

- A. **Potential Impact.** The Project could result in collision with overhead wires by State and/or federally protected birds.
- B. **Finding.** Pursuant to CEQA Guidelines §15091(a)(1), changes or alteration have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
- C. **Facts in Support of Finding.** Based on the analysis provided in Section 3.4.4.4(a) of the EIR, the Project's potentially significant impact would be mitigated to below a level of significance with the implementation of MM BR-8 of the EIR. Construction of the Project would require the placement of structures that would support the support conductors or collector lines that transport electricity to the substation. These features would pose a potential collision risk for birds. Birds are known to collide with communications towers, transmission lines, and other elevated structures. Based on the known distribution of the species in the Project area and observations made during reconnaissance surveys, it is generally expected that collision mortality would occur to some degree. To reduce potential adverse effects to State and/or federally protected birds from collision with overhead wires, the Applicant would be required to construct the facility consistent with protection measures identified in APLIC guidelines. Because it is possible that the collector lines associated with the Project result in an increased collision risk the Applicant would construct in compliance with APLIC guidelines additional mitigation is warranted to monitor, identify, and correct facility components causing significant avian mortality. Impacts to Federally or State listed avian species from collision with overhead wires would be considered significant without mitigation. Implementation of MM BR-8 would reduce potential impacts on Federally or State listed avian species to less-than-significant levels.

The following mitigation measure is required for the Project:

MM BR-8

7.3.7 Glare from the Reflection of Sunlight off Solar Modules could Contribute to the Risk of Avian Collision

- A. **Potential Impact.** Glare from the reflection of sunlight off the solar modules could contribute to the risk of avian collision on the Project Site.
- B. **Finding.** Pursuant to CEQA Guidelines §15091(a)(1), changes or alteration have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
- C. **Facts in Support of Finding.** Based on the analysis provided in Section 3.4.4.4(a) of the EIR, the Project's potentially significant impact would be mitigated to below a level of significance with the implementation of MM BR-8 of the EIR. Solar facilities present a new and relatively un-



researched risk for bird collisions. Though not physically imposing structures, the proposed solar arrays may pose some collision risk to birds if they are mounted on the rooftop. Depending on the time of day, use of the Site by various species, glare, or polarized light it is possible that birds will collide with the arrays. Operation of the solar modules could also cause an increase in Polarized Light Pollution (PLP), which occurs from light reflecting off dark colored anthropogenic structures. Arrays of solar panel occupying large open areas are not proposed as part of the Project. Solar panels would either be ground-mounted or installed on the rooftops. Therefore, impacts to Federally or State listed avian species from collisions with solar modules would be considered less than significant with implementation of MM BR-8, which would reduce potential impacts on Federally or State listed avian species to less-than-significant levels.

The following mitigation measure is required for the Project:

MM BR-8

7.3.8 Potential Loss of Special-Status Plant Species

- A. **Potential Impact.** The Project would result in the loss of special-status plant species.
- B. **Finding.** Pursuant to CEQA Guidelines §15091(a)(1), changes or alteration have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
- C. **Facts in Support of Finding.** Based on the analysis provided in Section 3.4.4.4(a) of the EIR, the Project's potentially significant impact would be mitigated to below a level of significance with the implementation of MM BR-3, MM BR-4, MM BR-5, MM BR-6, MM BR-11 and MM BR-12 of the EIR. No special-status plant species were observed during the focused rare plant surveys or other biological surveys conducted in 2018 and 2019 in support of the Project. Direct, indirect, and operational impacts to Special-status plant species, should they occur, would be the same as described for listed plant species (see Impact BR-5). These impacts include but are not limited to the direct removal of plants during the course of construction, the creation of conditions favorable to invasion of weedy exotic species, altered light and hydrologic regimes, and vegetation management. Due to the lack of presence within the Project Site and the low potential for only a few species of special-status plants to occur, impacts of the Project (if they were to occur) are considered adverse but not significant and do not reach the threshold for significance under CEQA. Although impacts to these plants are not considered significant mitigation for other species including the acquisition of lands for impacts to wildlife species will reduce impacts to these species should they occur on the acquired parcels.

The most effective mechanism for reducing impacts to special-status plant species is to avoid or minimize on-site impacts; no special-status species have been observed in the Project Site to date. If special-status plants were to occur, and avoidance was not possible, the key mitigation strategy that would be employed is to require the Applicant to mitigate through the acquisition and protection of special-status plant populations on acquired lands. The acquisition and protection of special-status plant occurrences at a minimum 1:1 ratio for permanent and a 0.5:1 ratio for



temporary impacts would be a viable strategy to mitigate the Project's impacts to special-status plants.

Implementation of this strategy would necessitate botanical surveys of lands acquired as mitigation for wildlife species if these lands are intended to serve mitigation sites for special-status plants. The Applicant could also protect on-site populations provided they are protected through a conservation easement and provided with adequate buffers. The Applicant would also be required to prepare and implement a habitat management plan to help ensure long-term conservation of these species. The goal of the surveys would be to identify at minimum the number of occurrences of each special-status species on off-site compensation lands as would be impacted by the Project (as documented previously by the Applicant and by future pre-construction surveys). These measures coupled with general avoidance and worker education would provide an effective mitigation strategy to reduce impacts to sensitive plant species. Implementation of mitigation measures would reduce potential impacts on special-status plant species to less-than-significant levels.

The following mitigation measures are required for the Project:

MM BR-3

MM BR-4

MM BR-5

MM BR-6

MM BR-11: Conduct Pre-Construction Surveys for Special-Status Plants and Implement Avoidance Measures

Prior to initial ground disturbance and for undisturbed areas in subsequent construction years, the Applicant shall conduct pre-construction surveys for special-status plant species in all areas subject to ground-disturbing activity, including, but not limited to, battery facility structures including, access roads, poles/towers, solar array footing preparation, construction areas, and assembly yards. The surveys shall be conducted during the appropriate blooming period(s) by a qualified plant ecologist/biologist according to protocols established by the USFWS, CDFW, and CNPS. All listed plant species found shall be marked and avoided. Any populations of special-status plants found during surveys will be fully described, mapped, and a CNPS Field Survey Form or written equivalent shall be prepared.

These surveys must be accomplished during a year in which rainfall totals are at least 80 percent of average and in which the temporal distribution of rainfall is not highly abnormal (e.g., with most of the rainfall occurring very early or late in the season) to be reasonably certain of the presence/absence of rare plant species, unless surveys of reference populations document that precipitation conditions would not have adversely affected the detectability of the species.

Prior to Site grading, any populations of special-status plant species identified during the surveys shall be protected by a buffer zone. The buffer zone shall be established around these areas and shall be of



sufficient size to eliminate potential disturbance to the plants from human activity and any other potential sources of disturbance including human trampling, erosion, and dust. The size of the buffer depends upon the proposed use of the immediately adjacent lands and includes consideration of the plant's ecological requirements (e.g., sunlight, moisture, shade tolerance, physical and chemical characteristics of soils) that are identified by a qualified plant ecologist and/or botanist. The buffer for herbaceous and shrub species shall be, at minimum, 50 feet from the perimeter of the population or the individual. A smaller buffer may be established, provided there are adequate measures in place to avoid the take of the species, with the approval of the USFWS, CDFW, and County. Highly visible flagging shall be placed along the buffer area and remain in good working order during the duration of any construction activities in the area. If Project related impacts result in the loss of more than 10 percent of the on-site population of any Special-Status plant species, compensatory mitigation will be required as described below.

MM BR-12: Compensate for Impacts to Special-Status Plant Special

If Project related impacts result in the loss of more than 10 percent of the on-site population of any Special-Status plant species, compensatory mitigation will be required. Prior to the disturbance of habitat for or take of Special-Status plants/populations, the Applicant must receive County approval of preserved and/or mitigation lands as well as present documentation of a recorded conservation easement(s). Compensation will be required for all impacts that exceed the 10 percent threshold (e.g., impacts to 15 percent of a population will only require compensation for 5 percent or the amount of impacts that exceed the 10 percent threshold). To compensate for permanent impacts to special-status plant species, habitat (which may include preservation of areas within the undisturbed areas of the Project footprint, mitigation lands outside of the main Project Site or a combination of both) that is not already public land shall be preserved and managed in perpetuity at a 1:1 mitigation ratio (one acre preserved for each acre impacted). Compensation for temporary impacts shall include land acquisition and/or preservation at a 0.5:1 ratio. The preserved habitat for a significantly impacted plant species shall be of equal or greater habitat quality to the impacted areas in terms of soil features, extent of disturbance, vegetation structure, and will contain verified extant populations, of the same size or greater, of the special-status plants that are impacted. Impacts could include direct impacts resulting from loss of habitat or indirect impacts if a significant population or portion thereof is unable to be avoided.

Habitat shall be preserved by using permanent open space easements. Mitigation lands cannot be located on land that is currently publicly held. Mitigation lands may include (depending on the habitat requirements of particular species) the following:

- Areas outside the Project boundary, but within the County
- Preservation areas within portions of the Project Site that are at least 100 feet from Project facilities and are either (1) not permanently impacted by construction and operation of the Project, or (2) are temporarily disturbed and then restored according to the requirements in Mitigation Measure BR-2
- Criteria for appropriate mitigation land are species-specific; however, the following factors must be considered in assessing the quality of potential mitigation habitat: (1) Current land use; (2) Location (e.g., habitat corridor, part of a large block of existing habitat, adjacency to source populations, proximity to Project facilities or other potential sources of disturbance); (3) Vegetation composition



and structure; (4) Slope; (5) Soil composition and drainage; and (6) Level of occupancy or use by relevant species

The Applicant shall either provide open space easements or provide funds for the acquisition of open space easements to a “qualified easement holder” (defined below). CDFW is a qualified easement holder. To qualify as a “qualified easement holder” a private land trust must have the following:

- Substantial experience managing open space easements that are created to meet mitigation requirements for impacts to special status species
- Adopted the Land Trust Alliance’s *Standards and Practices*
- A stewardship endowment fund to pay for its perpetual stewardship obligations

The County shall determine whether a proposed easement holder meets these requirements.

The Applicant shall also be responsible for donating to the easement holder fees sufficient to cover: (1) Administrative costs incurred in the creation of the easement (appraisal, documenting baseline conditions, etc.) and (2) Funds in the form of a non-wasting endowment to cover the cost of monitoring and enforcing the terms of the easement in perpetuity. The amount of these administrative and stewardship fees shall be determined by the easement holder in consultation with the County.

Open space easement(s) shall also be subject to the following conditions:

- The locations of acceptable easement(s) shall be developed with approval of CDFW and USFWS
- The primary purpose of the easement(s) shall be conservation of impacted species and habitats, but the easement(s) shall also allow livestock grazing when and where it is deemed beneficial for the habitat needs of impacted species

Open space easement(s) shall:

- Be held in perpetuity by a qualified easement holder (defined above)
- Be subject to a legally binding agreement that shall: (1) Be recorded with the County Recorder(s); and (2) Name CDFW or another organization to which the easement(s) will be conveyed if the original holder is dissolved
- Be subject to the management requirements outlined in Mitigation Measure BR-2

If lands acquired or protected for the compensation of permanent impacts to wildlife and/or vegetative communities contain similar sized populations of the impacted special-status plant species, of equal or greater habitat value, these mitigation lands may be used to achieve the required compensation ratios for special-status plant species.

7.3.9 Potential Loss of American Badger

- A. **Potential Impact.** The Project would result in the loss of American badger.



- B. **Finding.** Pursuant to CEQA Guidelines §15091(a)(1), changes or alteration have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
- C. **Facts in Support of Finding.** Based on the analysis provided in Section 3.4.4.4(a) of the EIR, the Project's potentially significant impact would be mitigated to below a level of significance with the implementation of MM BR-3, MM BR-4, MM BR-5, MM BR-6, and MM BR-13 of the EIR. American badgers were observed adjacent to the Project Site and badger tracks were observed within the Project Site itself; the Project area supports suitable foraging and denning habitat for this species. Direct impacts to American badger include mechanical crushing of individuals or burrows by vehicles and construction equipment, noise, dust, and loss of habitat. Construction activities could also result in the disturbance of badger maternity dens during the pup-rearing season (15 February to 1 July). Because of the large size of the Project, numerous badgers may be affected.

Implementation of mitigation measures would reduce impacts to badgers through worker education, pre-construction surveys and avoidance of maternity dens, construction monitoring, and the control of fugitive dust. When required for construction the Applicant will passively relocate badgers out of the work area to reduce the potential for mortality. This includes monitoring active dens and collapsing the dens once the animal leaves the Site. However, badgers often retreat to burrows when alarmed and without active monitoring of a den it is difficult to ascertain the status of individual burrows. The proposed mitigation would require multiple days of monitoring and the use of cameras or a tracking medium to reduce the potential for entombment. These measures would also provide for the restoration of areas subject to temporary disturbance and manage the Site for noxious weeds. In addition, although not required for this species the acquisition of mitigation lands for other species would provide for the long-term conservation of habitat used by American badgers. Implementation of mitigation measures would reduce potential impacts on American badgers to less than significant levels.

The following mitigation measures are required for the Project:

MM BR-3

MM BR-4

MM BR-5

MM BR-6

MM BR-13: Complete Focused Pre-Construction Surveys for American Badger and Desert Kit Fox Surveys and Implementation of Avoidance Measures

No more than 30 days prior to the commencement of construction activities, the Applicant shall retain a qualified biologist to conduct pre-construction surveys for American badger and desert kit fox within suitable habitat on the Project Site. If present, occupied dens shall be flagged and ground-disturbing activities avoided within 50 feet of the occupied den. Maternity dens shall be avoided during pup-rearing



season (15 February through 1 July) and a minimum 200-foot buffer established. The extent of buffers shall be flagged in the field utilizing a method highly visible by construction crews. Buffers may be modified with the concurrence of the CDFW. Maternity dens shall be flagged for avoidance, identified on construction maps, and a biological monitor shall be present during construction to monitor for adequate protection of all identified dens and to help ensure that all flagging is kept in good working order.

If avoidance of a non-maternity den (impacts to maternity dens is not allowed) is not feasible, badgers or foxes shall be relocated by slowly excavating the burrow (either by hand or mechanized equipment under the direct supervision of the biologist, removing no more than 4 inches at a time) before or after the rearing season (15 February through 1 July). Any passive relocation of badgers or foxes shall occur only after consultation with the CDFW and the biological monitor.

Prior to the final County inspection or occupancy, whichever comes first, a written report documenting all badger related activities (e.g., den flagging, monitoring, badger removal, etc.) shall be provided to the County. A copy of the report will also be provided to the CDFW.

7.3.10 Potential Loss of Flat-Tailed Horned Lizard

- A. **Potential Impact.** The Project would result in the loss of the flat-tailed horned lizard.
- B. **Finding.** Pursuant to CEQA Guidelines §15091(a)(1), changes or alteration have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
- C. **Facts in Support of Finding.** Based on the analysis provided in Section 3.4.4.4(a) of the EIR, the Project's potentially significant impact would be mitigated to below a level of significance with the implementation of MM BR-2, MM BR-3, MM BR-4, MM BR-5, MM BR-6, MM BR-14, MM BR-15, and MM BR-16 of the EIR. Many occurrences of flat-tailed horned lizard have been reported in the undeveloped desert areas immediately west and south of the Project Site (CDFW 2019a), and horned lizard tracks were observed during 2018 surveys in the western portion of the Project Site, south of the Westside Main Canal. Given the cryptic nature and resulting difficulty of detection without focused surveys, these historical records are sufficient to assume this species is present in the creosote bush scrub and fourwing saltbush scrub within and adjacent to the Project Site. Temporary and permanent habitat loss and the loss of individual animals would be considered significant without mitigation.

These small, sometimes difficult to detect species are often overlooked unless weather conditions are favorable. The implementation of these mitigation measures would provide for the protection of these species by educating workers as to the natural history of these species, identifying areas where construction would be avoided, conducting pre-construction surveys, and relocating detected species to pre-selected off-site locations, monitoring during construction to salvage wildlife, and restoring temporarily disturbed areas post construction. Although not proposed nor required as mitigation for impacts to these species, the acquisition of off-site habitat will help conserve lands where these species would be expected to occur. Implementation of mitigation measures would reduce impacts to the flat-tailed horned lizard to less-than-significant levels.



The following mitigation measures are required for the Project:

MM BR-2

MM BR-3

MM BR-4

MM BR-5

MM BR-6

MM BR-14: Pre-Construction Surveys and Avoidance/Relocation Measures for Flat-Tailed Horned Lizard

Focused pre-construction surveys shall be conducted for flat-tailed horned lizard. During construction, areas of active surface disturbance shall be surveyed periodically, at least hourly, when surface temperatures exceed 29°C (85°F) for the presence of flat-tailed horned lizard. Flat-tailed horned lizards would be removed from harm's way during construction activities by the on-site biological monitor(s). To the extent feasible, methods to find flat-tailed horned lizards would be designed to achieve a maximal capture rate and would include, but not be limited to using strip transects, tracking, and raking around shrubs. During construction, the minimum survey effort would be 30 minutes per 0.40 hectare (one acre). Persons that handle flat-tailed horned lizards would first obtain all necessary permits and authorization from the CDFW. A Horned Lizard Observation Data Sheet and a Project Reporting Form, per Appendix 8 of the Rangewide Management Strategy, would also need to be completed. During construction, quarterly reports describing flat-tailed horned lizards removal activity would be submitted to the USFWS, CDFW, and the County.

The removal of flat-tailed horned lizard out of harm's way would include relocation to nearby suitable habitat in low-impact areas of the Yuba Management Area, which is located to the west and south of the Project Site. Relocated flat-tailed horned lizards would be placed in the shade of a large shrub in undisturbed habitat. If surface temperatures in the sun are less than 24°C (75°F) or exceed 38°C (100°F), a qualified biologist, if authorized, would hold the flat-tailed horned lizard for later release. Initially, captured flat-tailed horned lizards would be held in a cloth bag, cooler, or other appropriate clean, dry container from which the lizard cannot escape. Lizards would be held at temperatures between 75°F and 90°F and would not be exposed to direct sunlight. Release would occur as soon as possible after capture and during daylight hours. The qualified biologist would be allowed some judgment and discretion when relocating lizards to maximize survival of flat-tailed horned lizards found in the Project area.

- To the maximum extent practicable, grading in flat-tailed horned lizard habitat would be conducted during the active season, which is defined as March 1 through September 30, or when ground temperatures are between 24°C (75°F) and 38°C (100°F). If grading cannot be conducted during this time, any flat-tailed horned lizards found would be removed to low-impact areas (see above) where suitable burrowing habitat exists, (e.g., sandy substrates and shrub cover).



MM BR-15: Compensation for Impacts to Flat-Tailed Horned Lizard

Pursuant to Title 43 CFR and the Federal Land Policy and Management Act of 1976, federal land management agencies may permit actions that result in flat-tailed horned lizard habitat loss on their lands; however, for losses both within and outside the Management Areas, compensation is charged if residual effects would occur after all reasonable on-site mitigation has been applied. The goal of compensation is to prevent the net loss of flat-tailed horned lizard habitat and make the net effect of a project neutral or positive to flat-tailed horned lizards by maintaining a habitat base for flat-tailed horned lizards. To achieve this goal, compensation will be based on the acreage of flat-tailed horned lizard habitat lost after all reasonable on-site mitigation has been applied at a 1:1 ratio for habitat lost outside a flat-tailed horned lizard Management Area. For this Project, compensation will be required for a loss of approximately 54 acres of flat-tailed horned lizard habitat.

MM BR-16: Develop a Habitat Mitigation and Monitoring Plan

To help ensure the success of on-site preserved land and acquired mitigation lands, required for compensation of permanent impacts to vegetative communities and listed or special-status plants and wildlife, the Applicant shall retain a qualified biologist to prepare a Habitat Monitoring and Mitigation Plan (HMMP). The HMMP will be submitted to the County for approval, prior to the issuance of a construction permit. Prior to the final County inspection final impact acreages must be presented to the County and acquisition of off-site lands must be verified. The HMMP will include, at a minimum, the following information:

- a) Summary of anticipated habitat impacts and the proposed mitigation.
- b) Detailed description of the location and boundaries of undisturbed Project areas proposed for preservation, off-site mitigation lands and a description of existing site-wide conditions. The HMMP shall include detailed analysis showing that the mitigation lands meet the performance criteria outlined in MM BR-2 (Develop a Habitat Restoration Plan) and MM BR-15 (Compensate for Impacts to Flat-Tailed Horned Lizard).
- c) Discussion of measures to be undertaken to enhance (e.g., through focused management) the on-site preserved habitat and off-site mitigation lands for listed and special-status species.
- d) Description of management and maintenance measures (e.g., vegetation management, fencing maintenance, etc.).
- e) Discussion of habitat and species monitoring measures for on-site preservation areas and off-site mitigation lands, including specific objectives, performance criteria, monitoring methods, data analysis, reporting requirements, monitoring schedule, etc.
- f) Development of a monitoring strategy for the monitoring of indirect impacts to vegetation and wildlife from alteration to the solar and hydric regimes as a result of Project facilities.
- g) Development of a monitoring strategy, which shall serve to document the persistence of flat-tailed horned lizard populations within the Project Site and on mitigation lands. This monitoring will be conducted for a minimum of 5 years after the completion of construction activities. The strategy should include, at the minimum, the following:



1. Documentation of pre-Project population levels for the species noted above, based on results of focused pre-construction surveys and previously supplied Applicant data.
2. On-going monitoring of species populations upon completion of construction activities, while the Project is in operation, for a minimum of three years.
3. Monitoring of reference populations for this species in areas that contain undisturbed habitat, such as the Yuba Management Area.
4. An analysis of the comparison of percent changes in population levels at the Project and reference sites to be used in the determination of additional compensatory mitigation.
5. The applicant shall prepare a contingency plan for mitigation elements that do not meet performance or final success criteria within 5 years. This plan will include specific triggers for remediation if performance criteria are not being met and a description of the process by which remediation of problems with the mitigation site (e.g., presence of noxious weeds) will occur.

7.3.11 Potential Loss of Burrowing Owl

- A. **Potential Impact.** The Project would result in the loss of the burrowing owl.
- B. **Finding.** Pursuant to CEQA Guidelines §15091(a)(1), changes or alteration have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
- C. **Facts in Support of Finding.** Based on the analysis provided in Section 3.4.4.4(a) of the EIR, the Project's potentially significant impact would be mitigated to below a level of significance with the implementation of MM BR-2, MM BR-3, MM BR-4, MM BR-5, MM BR-6, MM BR-16, MM BR-17 and MM BR-18 of the EIR. No burrowing owls were observed on the Project Site during the 2018 breeding season surveys, but four burrowing owl observations were recorded within the Project Site during the 2018-2019 non-breeding season surveys. These observations indicate that at least two, but likely three, individuals, appear to use the Project Site and surrounding areas as a wintering site or for migration and dispersal, but do not currently use the Site as breeding habitat.

To avoid potential impacts to burrowing owls that might be nesting or residing within burrows in the Project impact area, the proposed measures include the completion of pre-construction surveys of the Site using established protocols. Because Project construction would occur over multiple years and result in the land use conversion of approximately 145 acres of habitat; passive relocation may result in the repeated harassment of resident owls. While construction of replacement burrows in off-site areas and the acquisition of mitigation lands would reduce impacts and be considered to mitigate Project impacts to the species, it is likely that owls would occupy areas close to known territories. Because of the extended construction schedule this could require multiple passive relocation events for the same owls. Each of these events stresses the bird and exposes the owls to predation, thermal stress, and potential territorial disputes. Implementation of mitigation measures would reduce impacts to the burrowing owl to less-than-significant levels.



The following mitigation measures are required for the Project:

MM BR-2

MM BR-3

MM BR-4

MM BR-5

MM BR-6

MM BR-16

MM BR-17: Burrowing Owl Protection Measures

The following measures shall be implemented during Project construction, operation, and decommissioning with respect to burrowing owls:

- A qualified biologist(s) shall be on-site during all construction activities in suitable burrowing owl habitat. A qualified biologist (i.e., a biologist with previous burrowing owl survey experience) shall conduct pre-construction clearance surveys of the permanent and temporary impact areas to locate active breeding or wintering burrowing owl burrows no more than 14 days prior to construction. The survey methodology shall be consistent with the methods outlined in the CDFG Staff Report (CDFG 2012). Copies of the survey results shall be submitted to CDFW and the County.
- If no burrowing owls are detected, no further mitigation is necessary. If burrowing owls are detected, no ground-disturbing activities, such as road construction or facility construction, shall be permitted except in accordance with the staff report or by written authorization of CDFW staff. Burrowing owls shall not be excluded from burrows unless or until a Burrowing Owl Exclusion Plan is developed by the lead biologist and approved by the applicable local CDFW office and submitted to the County. The plan shall adhere to the requirements set forth in the Burrowing Owl Mitigation Staff Report (CDFW 2012).
- In accordance with the Burrowing Owl Exclusion Plan, a qualified biologist shall excavate burrows using hand tools. Sections of flexible plastic pipe or burlap bag shall be inserted into the tunnels during excavation to maintain an escape route for any animals inside the burrow. One-way doors shall be installed at the entrance to the active burrow and other potentially active burrows within 160 feet of the active burrow. Forty-eight hours after the installation of the one-way doors, the doors can be removed, and ground-disturbing activities can proceed. Alternatively, burrows can be filled to prevent reoccupation.
- During construction activities, monthly and final compliance reports shall be provided to CDFW, the County, and other applicable resource agencies documenting the effectiveness of mitigation measures and the level of burrowing owl take associated with the Project.



MM BR-18: Compensation for Impacts to Burrowing Owl

Should burrowing owls be found on-site, compensatory mitigation for lost breeding or wintering habitat shall be implemented on-site or off-site in accordance with Burrowing Owl Mitigation Staff Report guidance and in consultation with CDFW. At a minimum, the following recommendations shall be implemented:

- Temporarily disturbed habitat shall be restored, if feasible, to pre-Project conditions, including decompaction soil and revegetating.
- Permanent impacts to nesting, occupied and satellite burrows, and burrowing owl habitat shall be mitigated such that the habitat acreage, number of burrows, and burrowing owl impacted are replaced at a 1:1 ratio based on a site-specific analysis that shall include the following:
- Permanent conservation of similar vegetation communities to provide for burrowing owl nesting, foraging, wintering, and dispersal (i.e., during breeding and nonbreeding seasons) comparable to or better than that of the impact area, and with sufficiently large acreage, and presence of fossorial mammals.
- Permanently protect mitigation lands through a conservation easement deeded to a nonprofit conservation organization or public agency with a conservation mission. If the Project is located within the service area of a CDFW-approved burrowing owl conservation bank, the applicant may purchase available burrowing owl conservation bank.
- If the acquired lands or mitigation credits for other wildlife species or vegetation communities can be managed to support burrowing owl, the proposed mitigation lands could be aggregated so that the purchase of mitigation lands for one species could cover all or a portion of the mitigation requirements for the remaining species. Mitigation lands shall not already be public land.

7.3.12 Project Impacts to Any Riparian Habitat or Other Sensitive Natural Community Identified in Local or Regional Plans, Policies, Regulations or by CDFW and USFWS

- Potential Impact.** The Project's construction and operational activities would result in temporary and permanent losses of sensitive vegetation communities and riparian habitat.
- Finding.** Pursuant to CEQA Guidelines §15091(a)(1), changes or alteration have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
- Facts in Support of Finding.** Based on the analysis provided in Section 3.4.4.4(b) of the EIR, the Project's potentially significant impact would be mitigated to below a level of significance with the implementation of MM BR-2, MM BR-3, MM BR-4, MM BR-5, MM BR-6, and MM BR-16 of the EIR. Construction and implementation of the Project would result in direct and indirect impacts to native and non-native vegetation communities and other land cover types. Direct impacts to native and non-native vegetation communities, including one CDFW listed sensitive riparian community and four other riparian communities, would occur as a result of grading during construction activities and construction of permanent Project facilities. Indirect impacts could



include alterations in existing light, topography, and hydrology regimes, sedimentation and erosion, soil compaction, the accumulation of fugitive dust, disruptions to native seed banks from ground disturbance, and the colonization of non-native, invasive plant species. These actions may result in reduced habitat quality for native plants. In addition, the removal of vegetation and the disruption of soil crusts create possibilities for erosion, dust, and weed invasion that can affect habitat in adjacent areas. Operational impacts would also occur during routine inspection and maintenance of Project facilities. These impacts would include, but are not limited to, trampling or crushing of native vegetation by vehicular or foot traffic, alterations in topography and hydrology, increased erosion and sedimentation, and the introduction of non-native, invasive plants due to increased human presence.

Because of the functional role that the on-site native plant communities play in the ecology of listed species, construction activities that result in the loss of these communities would be considered significant without mitigation. Restoration of temporarily disturbed areas and acquisition of off-site habitat are the primary mechanisms for reducing impacts to vegetation communities, including sensitive communities. The preservation and management of off-site habitats would functionally replace lost habitat values from Project development. Implementation of mitigation measures would reduce impacts to riparian habitat to less-than-significant levels.

The following mitigation measures are required for the Project:

MM BR-2

MM BR-3

MM BR-4

MM BR-5

MM BR-6

MM BR-16

7.3.13 Project Impacts to State or Federally Protected Wetlands through Direct Removal, Filling, Hydrological Interruption, or Other Means

- A. **Potential Impact.** The Project would result in the loss of jurisdictional wetland habitats.
- B. **Finding.** Pursuant to CEQA Guidelines §15091(a)(1), changes or alteration have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
- C. **Facts in Support of Finding.** Based on the analysis provided in Section 3.4.4.4(c) of the EIR, the Project's potentially significant impact would be mitigated to below a level of significance with



the implementation of MM BR-2, MM BR-3, MM BR-4, MM BR-5, MM BR-6, and MM BR-16 of the EIR.

A routine jurisdictional waters/wetland delineation was performed by the applicant to gather field data at locations with potential jurisdictional waters in the Project area and within a 100-foot buffer. The Project would impact all delineated jurisdictional waters mapped within the Site. A total of 6.75 acres would be permanently impacted and 2.68 acres would be temporarily impacted. Direct impacts to jurisdictional habitats could include the removal of native vegetation, the discharge of fill, degradation of water quality, and increased erosion and sediment transport. Because the area is generally dry for most of the year (not including the canals) and potential water quality impacts would be attenuated. Most of these impacts would occur during the use of access roads by heavy equipment and vehicle passage, where jurisdictional waters traverse access roads. Indirect impacts could include alterations to the existing topographical and hydrological conditions and the introduction of non-native, invasive plant species. Temporary and permanent impacts to State and federal jurisdictional waters would be considered significant without mitigation.

As required by law the Applicant would comply with the regulations regarding conducting Project activities in waterbodies under the jurisdiction of the State and federal government. As such, the applicant would obtain required permits pursuant to Section 401 and 404 of the CWA and the State Porter-Cologne Act and CDFG Code 1602. In accordance with the CWA, there would be no net loss of wetlands from the implementation of the Project. As such, mitigation would include restoration, enhancement, and/or compensation, as appropriate. These measures would help ensure that impacts from erosion and sedimentation that could occur during road construction upslope of a jurisdictional waterway would be minimized and would also help ensure that the applicant obtain all appropriate permits. Where avoidance of impacts is not feasible, the applicant shall mitigate through the restoration, enhancement, and/or preservation of existing wetlands. Implementation of mitigation measures would reduce impacts to the wetland habitats to less-than-significant levels.

The following mitigation measures are required for the Project:

MM BR-2

MM BR-3

MM BR-4

MM BR-5

MM BR-6

MM BR-16



7.4 GEOLOGY AND SOILS

7.4.1 Substantial Soil Erosion or Loss of Topsoil

- A. **Potential Impact.** During construction, soil erosion could result in association with grading and earthmoving activities. The Project Site soils have a slight potential for erosion and would be located on a relatively flat topography and would not involve grading steep slopes; however, earthmoving and construction activities would loosen soil and could contribute to soil loss and erosion by wind and stormwater runoff.
- B. **Finding.** Pursuant to CEQA Guidelines §15091(a)(1), changes or alteration have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
- C. **Facts in Support of Finding.** Based on the analysis provided in Section 3.5.3.4(a) of the EIR, the Project's potentially significant impact would be mitigated to below a level of significance with implementation of MM HYD-1. In compliance with federal Clean Water Act and regulations of the SWRCB, the Project would require implementation of a construction Stormwater Pollution Prevention Plan (SWPPP), including site-specific BMPs for erosion and sediment control as noted in mitigation measure HYD-1. The SWPPP would require BMPs be adopted for the specific conditions at the Project Site and would minimize any risk for substantial erosion during construction. Therefore, with implementation of MM HYD-1, impacts from construction-related erosion would be reduced to a less than significant level.

The following mitigation measure is required for the Project:

MM HYD-1: Prepare Stormwater Pollution Prevent Plan and Implement Best Management Practices

See Section 7.5 Hydrology and Water Quality for details.

7.4.2 Directly or Indirectly Destroy a Unique Paleontological Resource or Unique Geological Feature

- A. **Potential Impact.** Project construction could potentially undercover in-situ fossils during earthwork. If the Quaternary-aged alluvial deposits and Cahuilla Beds of the existing, onsite geologic features are underlain by Pleistocene alluvium, the potential for encountering fossils is high. The potential to encounter paleontological resources remains, and the Project could directly or indirectly destroy unique paleontological resources resulting in a potentially significant impact.
- B. **Finding.** Pursuant to CEQA Guidelines §15091(a)(1), changes or alteration have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
- C. **Facts in Support of Finding.** Based on the analysis provided in Section 3.5.3.4(e) of the EIR, the Project's potentially significant impact would be mitigated to below a level of significance with



the implementation of MM GEO-1. MM GEO-1 requires the presence of a paleontologist to assess the scientific significance of the find and the halting of all work within 50 feet of the discovery. The Project would require earthwork, including both rough and final grading and trenching. As part of these activities, the existing Site surface would need to be modified and would require earthwork activities. It is anticipated that the proposed excavation depths would not be deep enough to encounter Pleistocene alluvium, thereby reducing the potential for encountering on-site fossils. Nevertheless, the potential to encounter paleontological resources remains. As such, the Project could directly or indirectly destroy a unique paleontological resource; however, Project construction would not be expected to affect a unique geological feature, since none are known to occur. With implementation of Mitigation Measure GEO-1, which provides measures to be taken in the case of inadvertent discovery of a paleontological resource, potential construction-related impacts to undiscovered paleontological resources would be less than significant.

The following mitigation measure is required for the Project:

MM GEO-1 Inadvertent Discovery

In the event that unanticipated paleontological resources or unique geologic resources are encountered during ground-disturbing activities, work must cease within 50 feet of the discovery and a paleontologist shall be hired to assess the scientific significance of the find. The consulting paleontologist shall have knowledge of local paleontology and the minimum levels of experience and expertise as defined by the Society of Vertebrate Paleontology's Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources. If any paleontological resources or unique geologic features are found within the Project Site, the consulting paleontologist shall prepare a paleontological Treatment and Monitoring Plan to include the methods that will be used to protect paleontological resources that may exist within the Site, as well as procedures for monitoring, fossil preparation and identification, curation of specimens into an accredited repository, and preparation of a report at the conclusion of the monitoring program.

7.5 HYDROLOGY AND WATER QUALITY

7.5.1 Violate Water Quality Standard or Waste Discharge Requirements or Substantially Degrade Surface or Groundwater Quality

- A. **Potential Impact.** There are multiple construction related activities that could have potential to direct or indirect impacts on the water quality of local surface water features and shallow groundwater resources, including; sedimentation, erosion, and handling hazardous materials. Additionally, there are operational related activities that could have potential to impact water quality, including; hazardous materials handling and increase in impervious surfaces. Contamination associated with industrial non-point source pollution (e.g., grease, oils, sediment, and heavy metals) could impact surface water quality as a result of construction or operational activities, thus could result in significant direct or indirect impacts to water quality.



- B. **Finding.** Pursuant to CEQA Guidelines §15091(a)(1), changes or alteration have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
- C. **Facts in Support of Finding.** Based on the analysis provided in Section 3.8.3.4(a) of the EIR, the Project's potentially significant impact would be mitigated to below a level of significance with the implementation of MM HYD-1 and MM HYD-2. These measures include the preparation of a Stormwater Pollution Prevention Plan, implementation of BMPs, and preparation of a Final Project Drainage Plan. Since construction of the Project would result in disturbance of an area greater than one acre, the Project Applicant would be required to enroll for coverage under the Storm Water Construction General Permit for the NPDES program. The Storm Water Construction General Permit requires the submittal of Permit Registration Documents to the SWRCB prior to the start of construction and a NOI, risk assessment, site map, annual fee, signed certification statement, SWPPP, and post-construction water balance calculations would be included in the submittal. A Project-specific SWPPP would be prepared and BMPs would be implemented during construction. During operation, Approval of an On-Site Wastewater Treatment System permit from the County for the septic system would require compliance with requirements identified in the LAMP and reduce potential impacts on water quality standards, waste discharge, or degradation of surface or groundwater quality to a less than significant level.

The following mitigation measures are required for the Project:

MM HYD-1: Prepare Stormwater Pollution Prevention Plan and Implement Best Management Practices

Prior to issuance of any grading permit, the Applicant or its contractor shall prepare a Project-specific SWPPP and be responsible for securing coverage under SWRCB's NPDES stormwater permit for general construction activity (Order 2009-0009-DWQ). The SWPPP shall detail the treatment measures and BMPs to control pollutants that shall be implemented and complied with during both the construction and decommissioning of the Project. Example BMPs may include but are not limited to the following practices:

- Designation of restricted-entry zones
- Sediment tracking control measures (e.g., crushed stone or riffle metal plate at construction entrance)
- Truck washdown areas
- Diversion of runoff away from disturbed areas
- Protective measures for sensitive areas, outlet protection
- Provision mulching for soil stabilization during construction, and provision for revegetation upon completion of construction within a given area



- Treatment measures to trap sediment once it has been mobilized, such as straw bale barriers, straw mulching, fiber rolls and wattles, silt fencing, and siltation or sediment ponds

MM HYD-2: Final Project Drainage Plan

Prior to issuance of any grading permit, the applicant shall submit a Final Project Drainage Plan. The Drainage Plan shall adhere to the County's Engineering Guidelines Manual, IID "Draft" Hydrology Manual, or other recognized source with approval by the County Engineer to control and manage the discharge of stormwater to the proposed retention basins. Retention basins shall be integrated into the Drainage Plan to the maximum extent practical. The Drainage Plan shall provide both short- and long-term drainage solutions to ensure the proper sequencing of drainage facilities and management of runoff generated from the Project's impervious surfaces, as necessary.

7.5.2 Alter Existing Drainage Pattern that Would Result in Substantial Erosion or Siltation On- or Off-Site or Result in Flooding On- or Off-Site

- Potential Impact.** Construction of the Project would disturb more than one acre of land and result in grading and soil exposure at the Project site increasing the potential for erosion. Additional construction activities would result in ground disturbance, excavation, and grading increasing the potential for flooding. The increased soil exposure and ground disturbance could result in significant direct and indirect impacts to erosion or flooding on- or off-site.
- Finding.** Pursuant to CEQA Guidelines §15091(a)(1), changes or alteration have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
- Fact in Support of Finding.** Based on the analysis provide in Section 3.8.3.4(b) of the EIR, the Project's potentially significant impact would be mitigation to below a level of significance with implementation of MM HYD-1 and MM HYD-2 of the EIR. The Project Site experiences very low annual rainfall (on average three inches per) and is in a minimal flood hazard area, and as a result, the soils are rarely saturated to the point that any measurable runoff can be generated. Furthermore, most of the rainwater that would run off the impervious Project facilities (e.g., concrete pads or other impervious improvements) would run off onto the proposed retention basin and infiltrate into the ground. Although on-site drainage patterns would be altered the Project would not result in the alteration of a stream or river since none exist on-site. Implementation of mitigation measures would reduce potential impacts on drainage patterns to less-than-significant levels. These measures include the preparation of a Stormwater Pollution Prevention Plan, implementation of BMPs, and preparation of a Final Project Drainage Plan.

The following mitigation measures are required for the Project:

MM HYD-1

MM HYD-2



7.6 TRIBAL CULTURAL RESOURCES

7.6.1 Adverse Change in the Significance of a Tribal Cultural Resource Defined by Public Resources Code Section 21074

- A. **Potential Impact.** Although there were no listed tribal cultural resources identified by the NAHC or through AB 52 consultation efforts, the San Pasqual Band of Mission Indians requested continued consultation with Imperial County. The potential to encounter tribal cultural resources remains, and the Project could directly or indirectly destroy unique cultural resources resulting in a potentially significant impact.
- B. **Findings.** Pursuant to CEQA Guidelines §15091(a)(1), changes or alteration have been required in, or incorporated into, the Project which avoid or substantially lessen the significant environmental effect as identified in the Final EIR.
- C. **Facts in Support of Finding.** Based on the analysis provided in Section 3.10.3.4(b) of the Final EIR, the Project's potentially significant impact would be mitigation to below a level of significance with implementation of MM CULT-1 and MM CULT-2 of the Final EIR. These measures include an environmental awareness program and continued consultation with the San Pasqual Band of Mission Indians. There were no listed TCRs identified by the NAHC received by RECON August 27, 2018, or through AB 52 consultation efforts; however, the San Pasqual Band of Mission Indians requested continued consultation with Imperial County, if the Campo Band of Diegueno Mission Indians did not respond. The Campo Band of Diegueno Mission Indians have not requested consultation, and correspondence between the County and the San Pasqual Band of Mission Indians is ongoing. MM CULT-1 requires a process to be implemented if unexpected archaeological resources or human remains are encountered and in the event that those remains are determined to be Native American. MM CULT-2 addresses the request by the San Pasqual Band of Mission Indians to continue consultation. With implementation of MM CULT-1 and MM CULT-2, impacts to TCRs will be reduced to a less-than-significant level.

The following mitigation measures are required for the Project:

MM CULT-1: Workers Environmental Awareness Program

A qualified archaeologist shall be retained to prepare a cultural resource focused Workers Environmental Awareness Program (WEAP) training that shall be given to all ground disturbing construction personnel to minimize harm to undiscovered archaeological resources or potential tribal resources that may be discovered during construction. All Site workers shall be required to complete WEAP Training with a focus on cultural resources, including education on the consequences of unauthorized collection of artifacts and that reviews discovery protocol. WEAP training shall also explain the protocol for notification, and requirements to retain a qualified archaeologist to evaluate any unexpected finds, as well as protocols regarding notification of tribal representatives.



MM CULT-2: Continued Consultation with the San Pasqual Band of Mission Indians

If no other responses to Imperial County's invitation to consult on the Project are received, prior to construction, the County shall continue consultation with the San Pasqual Band of Mission Indians (San Pasqual). If the County, as the lead agency, determines through continued consultation that there is substantial evidence the Project may adversely impact a yet unidentified Tribal Cultural Resource that meets criteria established in Public Resources Code Section 5024.1, the County shall determine if measures are needed to minimize potential impacts to TCRs including:

- Requirements for Native American Monitoring of Project Ground Disturbing Activities
- Development of an Unexpected Discovery Plan for Archaeological Resources
- Development of a Treatment Plan for Artifacts Considered to be Tribal Cultural Resources

