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# Response to Post-Workshop Informal Data Request Set 4

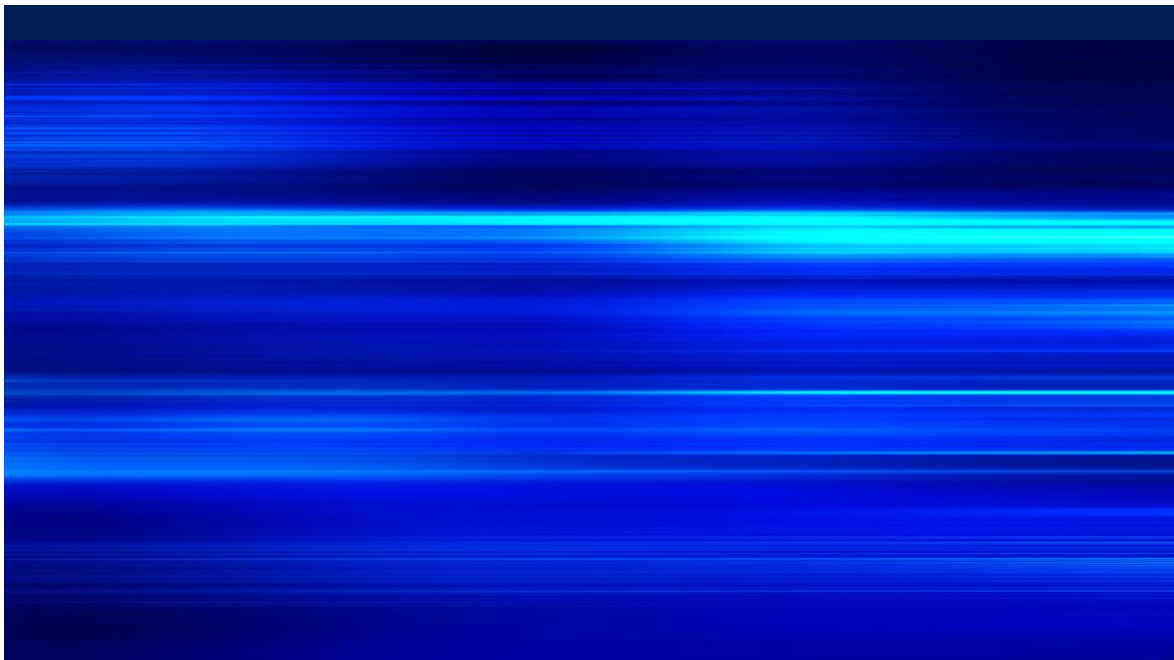
*Submitted to*  
California Energy Commission

*Prepared by*  
Morton Bay Geothermal LLC

With assistance from  
**Jacobs**

**Morton Bay Geothermal Project (23-AFC-01)**

December 13, 2024



## Introduction

Attached are the responses from Morton Bay Geothermal LLC to the California Energy Commission (CEC) Staff's *Post-Workshop Informal Data Request Set 4*, regarding the Application for Certification (AFC) for the Morton Bay Geothermal Project (MBGP; 23-AFC-01).

New or revised graphics or tables are numbered in reference to the Informal Data Request number. For example, the first table used in response to Informal Data Request 28 would be numbered Table IDR28-1. The first figure used in response to Informal Data Request 28 would be Figure IDR28-1, and so on. Figures or tables from the MBGP AFC that have been revised have a "R" following the original number, indicating a revision.

Additional tables, figures, or documents submitted in response to an informal data request (for example, supporting data, stand-alone documents such as plans, folding graphics, etc.) are found at the end of each discipline specific section and are not sequentially page numbered consistently with the remainder of the document, though they may have their own internal page numbering system.

## Contents

Introduction .....	i
Acronyms and Abbreviations.....	iii
1. Biological Resources.....	1
Background: .....	1

## Figure

IDRR-1 Yuma Ridgway's Rail Observed Locations .....	4
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## Acronyms and Abbreviations

AFC	Application for Certification
BRGP	Black Rock Geothermal Project
CDFW	California department of Fish and Wildlife
CEC	California Energy Commission
CESA	California Endangered Species Act
ENGP	Elmore North Geothermal Project
EPA	Environmental Protection Agency
FESA	Federal Endangered Species Act
IDR	Informal Data Request
IID	Imperial Irrigation District
IPaC	Information for Planning and Consultation
ITP	Incidental Take Permit
MBGP	Morton Bay Geothermal Project
USACE	U.S. Army Corps of Engineers

## 1. Biological Resources

### Background:

*With the recent candidate for listing under CESA for burrowing owl, an Incidental Take Permit (ITP) is required for impacts that may result in "take" of burrowing owl. Passive exclusion of owls from burrows would be defined as "take." As part of the MOU between CEC and CDFW, the information for an ITP for burrowing owl will be included in the FSA. Mitigation for impacts to burrowing owls would include things such as tagging owls, monitoring movements, and creation of burrows outside the area of impact. Compensatory mitigation is also required as part of the ITP process, which includes conserving burrowing owl habitat in perpetuity.*

*CDFW has stated that there are no currently approved mitigation banks that could provide mitigation credits for burrowing owl impacts. Credits through the Mojave Desert Tortoise Conservation Bank Site 8 are therefore not approved. The number of acres needed for compensatory mitigation would be based on habitat impacted, including the following: a) the habitat value of the land impacted by the project, and b) the location of land preservation that provides suitable burrowing owl habitat (i.e., how close conserved land is in relation to the impacts). Compensatory mitigation for burrowing owls could be addressed through conservation easements on agricultural lands, which preserves such lands for burrowing owls in perpetuity and allows the continuation of agriculture use.*

### Informal Data Request:

- 1. Please provide information on lands available for compensatory mitigation that would provide habitat for burrowing owl and be preserved in perpetuity, for the proposed MBGP, ENGP, and BRGP geothermal projects.*

**Response:** This response takes into account the best scientific information currently available on the western burrowing owl, paying special consideration to the recent (March 2024) California Endangered Species Act (CESA) petition to list the western burrowing owl as threatened or endangered (Center for Biological Diversity et al. 2024), which was accepted for consideration by the California Fish and Game Commission in October 2024.

The petition states that not all regional populations of western burrowing owls in California may warrant listing. The petition further states, "The petitioners are not requesting a separate listing for the Imperial Valley or Coachella Valley populations." However, the petition also suggests that listing the entire California state population as threatened may be warranted due to statewide declines (Center for Biological Diversity et al. 2024).

The Applicant concurs that CDFW-approved credits for western burrowing owl do not appear to be currently available from any mitigation banks with service areas covering the Morton Bay Geothermal Project (MBGP) area. The Applicant will continue to monitor if any new mitigation banks are established in the service area.

The Applicant intends to avoid impacts to occupied burrowing owl burrows to the extent feasible, and construction is not anticipated to begin until early 2028. The Applicant anticipates that CDFW-approved credits for western burrowing owl may become available from mitigation banks by 2028. Moreover, assuming the western burrowing owl advances from candidate species to threatened or endangered

status, the Applicant anticipates that the Fish and Wildlife Commission decision on listing and the follow on processes between now and 2028 will provide greater clarity.

Further, the Applicant has significant land holdings in the MBGP vicinity that may be available for compensatory mitigation via the establishment of a conservation easement and is open to acquiring land for mitigation, assuming conservation easements and the development of criteria for creation of mitigation banks by 2028, and that land's ability to qualify for such easements and banking status. Figure 5.2-1 in the Application for Certification (TN 249723) show the Biological Survey Area which includes properties adjacent to the MBGP. If allowable under the then-applicable rules at time of construction, establishment of a conservation easement on land adjacent to the site of the proposed project may be feasible.

Preliminary Staff Assessment Condition of Certification BIO 15/Mitigation Measure BIO-15 requires the Applicant to submit the Burrowing Owl Exclusion Plan 14 days prior to implementation (TN 257470). This Plan will be informed by the developments between listing and the anticipated 2028 commencement of construction.

**Informal Data Request:**

- 2. In data response TN254014 the Applicant states that they would be preparing a "Burrowing Owl Artificial Burrow and Exclusion Plan" that outline impact criteria, burrow ratios, exclusion methods, lands that could serve as receptor sites for evicted burrowing owls, management practices, methods for replacement burrows, and success criteria. Please provide the status of said Burrowing Owl Artificial Burrow and Exclusion Plan, schedule for completion, and availability to staff.*

**Response:** The Applicant intends to avoid impacts to occupied burrowing owl burrows to the extent feasible. MBGP construction is not anticipated to begin until early 2028. Due to potential for burrowing owls use of burrows to change over time, take avoidance surveys will be conducted closer to the anticipated construction start date. The take avoidance surveys will provide more accurate locations of occupied burrowing owl burrow that will inform the Burrowing Owl Exclusion Plan. As stated in the Preliminary Staff Assessment Condition of Certification BIO 15/Mitigation Measure BIO-15, the Applicant is required to submit the Burrowing Owl Exclusion Plan 14 days prior to implementation (TN 257470).

**Informal Data Request:**

- 3. During the September 19, 2024, workshop, the Applicant stated it would provide an assessment on agricultural return flows to drains and canals feeding the Salton Sea, including potential impacts to rail and desert pupfish habitat. Please provide a status update on the assessment, schedule for completion, and availability to Staff.*

**Response:** The Applicant is working with Imperial Irrigation District (IID) to finalize data collection for the Salton Sea Impact Assessment. Once data collection is finalized, the Applicant will expand and update the draft impact assessment and submit the results to IID for review and comment. After IID concurs with the methodology and conclusions of the assessment, the Applicant will docket the resulting assessment. The Applicant believes this assessment can be completed by early 2025.

**Informal Data Request:**

4. *During the September 19, 2024, workshop, the Applicant stated it was preparing a Biological Assessment (BA) for Yuma Ridgway's Rail for Morton Bay. Please provide a status update on the BA, schedule for completion, and availability to Staff.*

**Response:** The Applicant will submit the Biological Assessment (as part of the Clean Water Act Section 404 permit) to the U.S. Army Corps of Engineers (USACE) in the first quarter of 2025.

**Informal Data Request:**

5. *Staff have spoken with USFWS regarding the preparation of a Biological Assessment (BA) for Yuma Ridgway's Rail. USFWS is not aware of any communication with Service staff or other lead federal action agencies regarding the preparation of the BA for the Morton Bay project. Please provide details on who the lead federal action agency is for Federal Endangered Species Act (FESA) Section 7 consultation, or if the Applicant is proposing Section 10 consultation, for impacts to Yuma Ridgway's Rail. If FESA Section 7 consultation is anticipated, please provide details on correspondence with the lead federal action agency and the timeline for submitting the BA for consultation.*

**Response:** The agency contacts and records of conversation were provided during the Applicant's Data Adequacy response (TN 250679). The USACE is the lead agency for Endangered Species Act Section 7 Consultation. Although the Data Adequacy stated that Kyle Dahl/USACE will be the project agency contact, the current USACE project manager is L. Kasey Sirkin.

Vincent James is the USFWS contact for permitting all three geothermal sites. Mr. James indicated that three other USFWS staff, Felicia Sirchia, Kent Kowalski, and Stephanie Menjivar, would be leads for each respective project. The Applicant's Data Adequacy response includes records of conversation from two conference calls, held on May 22 and June 7, 2023, and several email correspondences. On August 16, 2023, Vincent James and Felicia Sirchia attended an in-person tour of the geothermal sites.

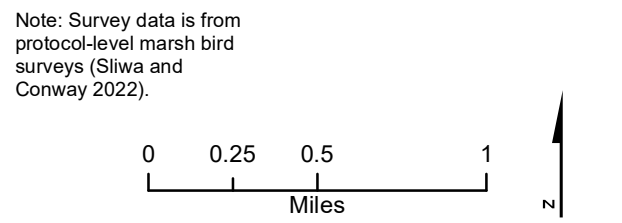
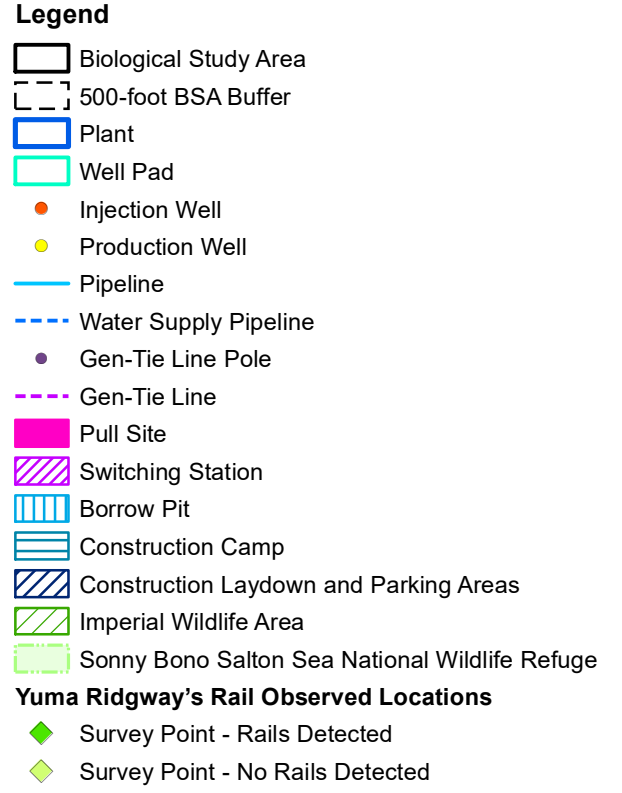
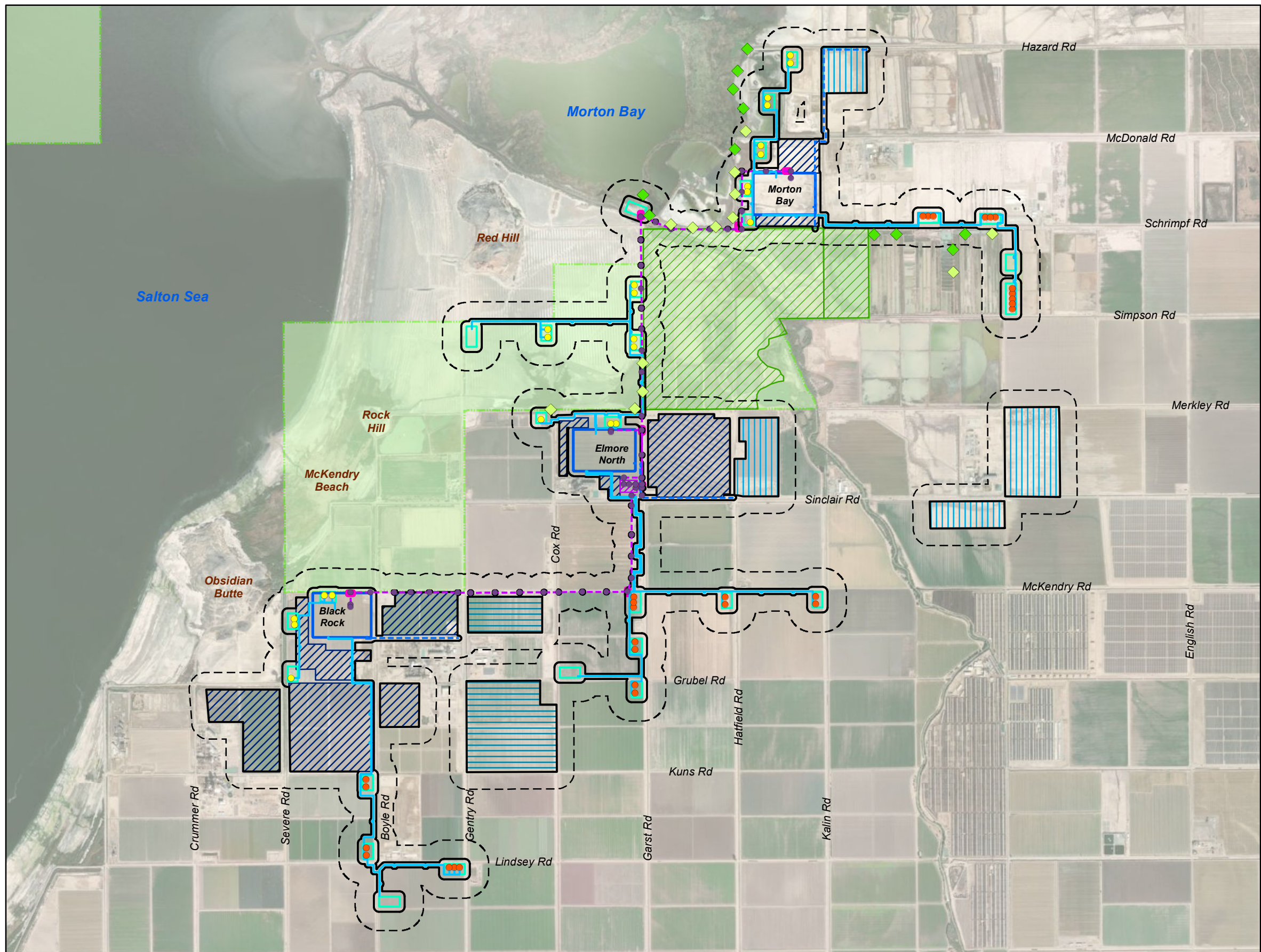
The official Information for Planning and Consultation (IPaC) list was queried on March 28, 2023 (Project Code: 2023-0061597, Project Name: Morton Bay Geothermal, LLC). The IPaC official query was updated on October 23, 2024 (Project Code: 2025-0009918, Morton Bay Geothermal Program). The October 2024 IPaC will be submitted as an Appendix to the Biological Assessment submitted in the first quarter of 2025.

**Informal Data Request:**

6. *In the Response to Workshop Follow Up Informal Data Request Set 1 for Morton Bay (TN259789), the applicant mentions Figure IDRR-1 which shows the location of the Imperial Wildlife Area, Hazard Tract in proximity to BRGP, ENGP, and MBGP. The figure was not included in the docketed material. Please provide Figure IDRR-1.*

**Response:** Figure IDRR-1 is provided below.





**Figure IDRR-1**  
**Yuma Ridgway's Rail Observed Locations**  
**Black Rock Geothermal Project**  
**Elmore North Geothermal Project**  
**Morton Bay Geothermal Project**  
 Imperial County, California