

**DOCKETED**

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# **Laurelwood Data Center (19-SPPE-01)**

## **Testimony, Declaration, and Resume Package**

Submitted to  
California Energy Commission

Prepared by  
MECP1 Santa Clara 1, LLC

with technical assistance from

**JACOBS®**

October 2019



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### Appendix A: Resumes

# Laurelwood Data Center (19-SPPE-01) Testimony

## Testimony Sponsors

Section	Title	Preparer	Affiliation
1.0	Introduction	Jerry Salamy	Jacobs
2.0	Project Description	Jerry Salamy, Matt Muell	Jacobs & MECP1 Santa Clara 1, LLC
3.1	Aesthetics	Brenda Eells, Sarah Madams	Jacobs
3.2	Agriculture and Forestry	Sarah Madams	Jacobs
3.3	Air Quality and Public Health	Elyse Engel, Jerry Salamy	Jacobs
3.4	Biological Resources	Kevin Fisher, Dave Rasmussen, Jerry Salamy	Jacobs
3.5	Cultural Resources	Christina Alonso, Jerry Salamy	PaleoWest & Jacobs
3.6	Energy	Sarah Madams, Jerry Salamy	Jacobs
3.7	Geology and Soils	Megan Sebra, Sarah Madams	Jacobs
3.8	Greenhouse Gas	Elyse Engel, Jerry Salamy	Jacobs
3.9	Hazards and Hazardous Materials	Sarah Madams, Jerry Salamy	Jacobs
3.10	Hydrology and Water Quality	Matt Franck, Jerry Salamy	Jacobs
3.11	Land Use and Planning	Brenda Eells, Sarah Madams	Jacobs
3.12	Mineral Resources	Megan Sebra, Sarah Madams	Jacobs
3.13	Noise	Mark Bastasch, Jerry Salamy	Jacobs
3.14	Population and Housing	Sarah Madams	Jacobs
3.15	Public Services	Sarah Madams	Jacobs
3.16	Recreation	Sarah Madams	Jacobs
3.17	Transportation	Loren Bloomberg, Jerry Salamy	Jacobs
3.18	Tribal Cultural Resources	Christina Alonso, Jerry Salamy	PaleoWest & Jacobs
3.19	Utilities and Service Systems	Jerry Salamy, Sarah Madams	Jacobs
3.20	Wildfire	Sarah Madams	Jacobs
3.21	Environmental Justice	Brenda Eells, Sarah Madams	Jacobs

# 1. Introduction

## I. Introduction

A. **Name:** Jerry Salamy

B. **Qualifications:** The panel's qualifications are as noted in their resumes contained in Appendix A.

C. **Prior Filings:** In addition to the statements herein, this testimony incorporates by reference the following documents submitted in this proceeding:

- Laurelwood SPPE Application (TN # 227273-1), 3/5/2019

The facts contained in this testimony (including all referenced documents and prior filings) are true and correct to the best of my knowledge and belief. To the extent this testimony contains opinions, such opinions reflect my best professional judgment. I make these statements and render these opinions freely and under oath for the purpose of constituting sworn testimony in this proceeding.

## II. Summary of Testimony

With implementation of the project design features described in the *Small Power Plant Exemption Application for the Laurelwood Data Center* docketed on March 5, 2019 and other filings described in Section I.C, and as further described in the *Initial Study and Proposed Mitigated Negative Declaration* docketed on August 28, 2019, the project's potential impacts on Introduction, including potential cumulative impacts, will be less than significant. I also conclude that with implementation of the project design features the project complies with all applicable laws, ordinances, regulations and standards.

## 2. Project Description

### I. Introduction

#### A. Names: Jerry Salamy and Matt Muell

**B. Qualifications:** The panel's qualifications are as noted in their resumes contained in Appendix A.

**C. Prior Filings:** In addition to the statements herein, this testimony incorporates by reference the following documents submitted in this proceeding:

- Laurelwood Data Center Application Cover Letter and Affidavit (TN # 227192), 2/28/2019
- Laurelwood SPPE Application (TN # 227273-1), 3/5/2019
- LDC Responses to Formal and Informal Data Requests Data Response Set 1A - (Responses to Data Requests 1 to 65, Staff Queries 1 to 17) (TN # 227626), 4/11/2019
- Laurelwood Data Center Updated SPPE Project Description (TN # 228748), 6/13/2019
- Laurelwood Data Center Updated SPPE Project Description (TN # 228823), 6/21/2019
- Laurelwood Data Center Initial Study-Mitigated Negative Declaration Comments (TN # 229957), 10/03/2019

The facts contained in this testimony (including all referenced documents and prior filings) are true and correct to the best of our knowledge and belief. To the extent this testimony contains opinions, such opinions reflect our best professional judgment. We make these statements and render these opinions freely and under oath for the purpose of constituting sworn testimony in this proceeding.

### II. Summary of Testimony

With implementation of the project design features described in the *Small Power Plant Exemption Application for the Laurelwood Data Center* docketed on March 5, 2019 and other filings described in Section I.C, and as further described in the *Initial Study and Proposed Mitigated Negative Declaration* docketed on August 28, 2019, the project's potential impacts on Project Description, including potential cumulative impacts, will be less than significant. We also conclude that with implementation of the project design features the project complies with all applicable laws, ordinances, regulations and standards.

### 3. Environmental Information

#### 3.1 Aesthetics

##### I. Introduction

**A. Names: Brenda Eells and Sarah Madams**

**B. Qualifications:** The panel's qualifications are as noted in their resumes contained in Appendix A.

**C. Prior Filings:** In addition to the statements herein, this testimony incorporates by reference the following documents submitted in this proceeding:

- Laurelwood SPPE Application (TN # 227273-1), 3/5/2019
- Laurelwood Data Center Initial Study-Mitigated Negative Declaration Comments (TN # 229957), 10/03/2019

The facts contained in this testimony (including all referenced documents and prior filings) are true and correct to the best of our knowledge and belief. To the extent this testimony contains opinions, such opinions reflect our best professional judgment. We make these statements and render these opinions freely and under oath for the purpose of constituting sworn testimony in this proceeding.

##### II. Summary of Testimony

With implementation of the project design features described in the *Small Power Plant Exemption Application for the Laurelwood Data Center* docketed on March 5, 2019 and other filings described in Section I.C, and as further described in the *Initial Study and Proposed Mitigated Negative Declaration* docketed on August 28, 2019, the project's potential impacts on Aesthetics, including potential cumulative impacts, will be less than significant. We also conclude that with implementation of the project design features the project complies with all applicable laws, ordinances, regulations and standards.

## 3.2 Agriculture and Forestry

### I. Introduction

- A. **Name:** Sarah Madams
- B. **Qualifications:** The panel's qualifications are as noted in their resumes contained in Appendix A.
- C. **Prior Filings:** In addition to the statements herein, this testimony incorporates by reference the following documents submitted in this proceeding:
  - Laurelwood SPPE Application (TN # 227273-1), 3/5/2019

The facts contained in this testimony (including all referenced documents and prior filings) are true and correct to the best of my knowledge and belief. To the extent this testimony contains opinions, such opinions reflect my best professional judgment. I make these statements and render these opinions freely and under oath for the purpose of constituting sworn testimony in this proceeding.

### II. Summary of Testimony

With implementation of the project design features described in the *Small Power Plant Exemption Application for the Laurelwood Data Center* docketed on March 5, 2019 and other filings described in Section I.C, and as further described in the *Initial Study and Proposed Mitigated Negative Declaration* docketed on August 28, 2019, the project's potential impacts on Agriculture and Forestry, including potential cumulative impacts, will be less than significant. I also conclude that with implementation of the project design features the project complies with all applicable laws, ordinances, regulations and standards.

### 3.3 Air Quality and Public Health

#### I. Introduction

**A. Names: Elyse Engel and Jerry Salamy**

**B. Qualifications:** The panel's qualifications are as noted in their resumes contained in Appendix A.

**C. Prior Filings:** In addition to the statements herein, this testimony incorporates by reference the following documents submitted in this proceeding:

- Laurelwood SPPE Application (TN # 227273-1), 3/5/2019
- Laurelwood SPPE Application Appendices (TN # 227273-2), 3/5/2019
- LDC Responses to Formal and Informal Data Requests Data Response Set 1A - (Responses to Data Requests 1 to 65, Staff Queries 1 to 17) (TN # 227626), 4/11/2019
- Laurelwood Data Center (19-SPPE-01) Response to Informal Data Requests (TN # 228822), 6/21/2019
- LDC Data Request Response Set 1B (TN # 228854), 6/27/2019
- Laurelwood Data Center (19-SPPE-01) Revised Construction Emission Estimates (TN # 228913), 7/8/2019
- Laurelwood Data Center Bay Area AQMD Policy Compliance Letter (TN # 229116), 7/29/2019
- LDC Chiller GHG and HRA Data Request Responses (TN # 229274), 8/8/2019

The facts contained in this testimony (including all referenced documents and prior filings) are true and correct to the best of our knowledge and belief. To the extent this testimony contains opinions, such opinions reflect our best professional judgment. We make these statements and render these opinions freely and under oath for the purpose of constituting sworn testimony in this proceeding.

#### II. Summary of Testimony

With implementation of the project design features described in the *Small Power Plant Exemption Application for the Laurelwood Data Center* docketed on March 5, 2019 and other filings described in Section I.C, and as further described in the *Initial Study and Proposed Mitigated Negative Declaration* docketed on August 28, 2019, the project's potential impacts on Air Quality, including potential cumulative impacts, will be less than significant. We also conclude that, with implementation of the project design features, the project complies with all applicable laws, ordinances, regulations and standards.

## 3.4 Biological Resources

### I. Introduction

- A. Names: Kevin Fisher, Dave Rasmussen and Jerry Salamy**
- B. Qualifications:** The panel's qualifications are as noted in their resumes contained in Appendix A.
- C. Prior Filings:** In addition to the statements herein, this testimony incorporates by reference the following documents submitted in this proceeding:
- Laurelwood SPPE Application (TN # 227273-1), 3/5/2019
  - Laurelwood SPPE Application Appendices (TN # 227273-2), 3/5/2019
  - LDC Responses to Formal and Informal Data Requests Data Response Set 1A - (Responses to Data Requests 1 to 65, Staff Queries 1 to 17) (TN # 227626), 4/11/2019
  - Laurelwood Data Center Comments on Staff's Draft Mitigation Measure (TN # 229508), 8/22/2019
  - Laurelwood Data Center Initial Study-Mitigated Negative Declaration Comments (TN # 229957), 10/03/2019

The facts contained in this testimony (including all referenced documents and prior filings) are true and correct to the best of our knowledge and belief. To the extent this testimony contains opinions, such opinions reflect our best professional judgment. We make these statements and render these opinions freely and under oath for the purpose of constituting sworn testimony in this proceeding.

### II. Summary of Testimony

With implementation of the project design features described in the *Small Power Plant Exemption Application for the Laurelwood Data Center* docketed on March 5, 2019 and other filings described in Section I.C, and as further described in the *Initial Study and Proposed Mitigated Negative Declaration* docketed on August 28, 2019, the project's potential impacts on Biological Resources, including potential cumulative impacts, will be less than significant. We also conclude that with implementation of the project design features the project complies with all applicable laws, ordinances, regulations and standards.

## 3.5 Cultural Resources

### I. Introduction

#### A. Names: Christina Alonso and Jerry Salamy

**B. Qualifications:** The panel's qualifications are as noted in their resumes contained in Appendix A.

**C. Prior Filings:** In addition to the statements herein, this testimony incorporates by reference the following documents submitted in this proceeding:

- Laurelwood SPPE Application (TN # 227273-1), 3/5/2019
- Laurelwood SPPE Application Appendices (TN # 227273-2), 3/5/2019
- LDC Responses to Formal and Informal Data Requests Data Response Set 1A - (Responses to Data Requests 1 to 65, Staff Queries 1 to 17) (TN # 227626), 4/11/2019
- Laurelwood Data Center Comments on Staff's Draft Mitigation Measures (TN # 229508), 8/22/2019
- Confidential Cultural Filings (TN # 227910 through TN # 228009 and TN# 228011 through TN# 220825), 3/25/2019

The facts contained in this testimony (including all referenced documents and prior filings) are true and correct to the best of our knowledge and belief. To the extent this testimony contains opinions, such opinions reflect our best professional judgment. We make these statements and render these opinions freely and under oath for the purpose of constituting sworn testimony in this proceeding.

### II. Summary of Testimony

With implementation of the project design features described in the *Small Power Plant Exemption Application for the Laurelwood Data Center* docketed on March 5, 2019 and other filings described in Section I.C, and as further described in the *Initial Study and Proposed Mitigated Negative Declaration* docketed on August 28, 2019, the project's potential impacts on Cultural Resources, including potential cumulative impacts, will be less than significant. We also conclude that with implementation of the project design features the project complies with all applicable laws, ordinances, regulations and standards.

## 3.6 Energy

### I. Introduction

- A. **Names: Sarah Madams and Jerry Salamy**
- B. **Qualifications:** The panel's qualifications are as noted in their resumes contained in Appendix A.
- C. **Prior Filings:** In addition to the statements herein, this testimony incorporates by reference the following documents submitted in this proceeding:
  - Laurelwood SPPE Application (TN # 227273-1), 3/5/2019

The facts contained in this testimony (including all referenced documents and prior filings) are true and correct to the best of our knowledge and belief. To the extent this testimony contains opinions, such opinions reflect our best professional judgment. We make these statements and render these opinions freely and under oath for the purpose of constituting sworn testimony in this proceeding.

### II. Summary of Testimony

With implementation of the project design features described in the *Small Power Plant Exemption Application for the Laurelwood Data Center* docketed on March 5, 2019 and other filings described in Section I.C, and as further described in the *Initial Study and Proposed Mitigated Negative Declaration* docketed on August 28, 2019, the project's potential impacts on Energy, including potential cumulative impacts, will be less than significant. We also conclude that with implementation of the project design features the project complies with all applicable laws, ordinances, regulations and standards.

## 3.7 Geology and Soils

### I. Introduction

- A. Names: Megan Sebra and Sarah Madams**
- B. Qualifications:** The panel's qualifications are as noted in their resumes contained in Appendix A.
- C. Prior Filings:** In addition to the statements herein, this testimony incorporates by reference the following documents submitted in this proceeding:
- Laurelwood SPPE Application (TN # 227273-1), 3/5/2019
  - Laurelwood SPPE Application Appendices (TN # 227273-2), 3/5/2019
  - LDC Responses to Formal and Informal Data Requests Data Response Set 1A - (Responses to Data Requests 1 to 65, Staff Queries 1 to 17) (TN # 227626), 4/11/2019

The facts contained in this testimony (including all referenced documents and prior filings) are true and correct to the best of our knowledge and belief. To the extent this testimony contains opinions, such opinions reflect our best professional judgment. We make these statements and render these opinions freely and under oath for the purpose of constituting sworn testimony in this proceeding.

### II. Summary of Testimony

With implementation of the project design features described in the *Small Power Plant Exemption Application for the Laurelwood Data Center* docketed on March 5, 2019 and other filings described in Section I.C, and as further described in the *Initial Study and Proposed Mitigated Negative Declaration* docketed on August 28, 2019, the project's potential impacts on Geology and Soils, including potential cumulative impacts, will be less than significant. We also conclude that with implementation of the project design features the project complies with all applicable laws, ordinances, regulations and standards.

## 3.8 Greenhouse Gas

### I. Introduction

#### A. Names: Elyse Engel and Jerry Salamy

**B. Qualifications:** The panel's qualifications are as noted in their resumes contained in Appendix A.

**C. Prior Filings:** In addition to the statements herein, this testimony incorporates by reference the following documents submitted in this proceeding:

- Laurelwood SPPE Application (TN # 227273-1), 3/5/2019
- Laurelwood SPPE Application Appendices (TN # 227273-2), 3/5/2019
- LDC Responses to Formal and Informal Data Requests Data Response Set 1A - (Responses to Data Requests 1 to 65, Staff Queries 1 to 17) (TN # 227626), 4/11/2019
- Laurelwood Data Center (19-SPPE-01) Response to Informal Data Requests (TN # 228822), 6/21/2019
- LDC Data Request Response Set 1B (TN # 228854), 6/27/2019
- Laurelwood Data Center (19-SPPE-01) Revised Construction Emission Estimates (TN # 228913), 7/8/2019
- Laurelwood Data Center Bay Area AQMD Policy Compliance Letter (TN # 229116), 7/29/2019
- LDC Chiller GHG and HRA Data Request Responses (TN # 229274), 8/8/2019

The facts contained in this testimony (including all referenced documents and prior filings) are true and correct to the best of our knowledge and belief. To the extent this testimony contains opinions, such opinions reflect our best professional judgment. We make these statements and render these opinions freely and under oath for the purpose of constituting sworn testimony in this proceeding.

### II. Summary of Testimony

With implementation of the project design features described in the *Small Power Plant Exemption Application for the Laurelwood Data Center* docketed on March 5, 2019 and other filings described in Section I.C, and as further described in the *Initial Study and Proposed Mitigated Negative Declaration* docketed on August 28, 2019, the project's potential impacts on Greenhouse Gas, including potential cumulative impacts, will be less than significant. We also conclude that, with implementation of the project design features, the project complies with all applicable laws, ordinances, regulations and standards.

### 3.9 Hazards and Hazardous Materials

#### I. Introduction

**A. Names: Sarah Madams and Jerry Salamy**

**B. Qualifications:** The panel's qualifications are as noted in their resumes contained in Appendix A.

**C. Prior Filings:** In addition to the statements herein, this testimony incorporates by reference the following documents submitted in this proceeding:

- Laurelwood SPPE Application (TN # 227273-1), 3/5/2019
- Laurelwood SPPE Application Appendices (TN # 227273-2), 3/5/2019
- Laurelwood SPPE Application Continuation of Appendix 3.9 (TN # 227273-3), 3/5/2019
- Laurelwood Data Center Response to Data Request, Set 4 (TN # 229001), 7/16/2019
- Laurelwood Data Center Data Response, Set 5 (TN # 229160), 7/31/2019

The facts contained in this testimony (including all referenced documents and prior filings) are true and correct to the best of our knowledge and belief. To the extent this testimony contains opinions, such opinions reflect our best professional judgment. We make these statements and render these opinions freely and under oath for the purpose of constituting sworn testimony in this proceeding.

#### II. Summary of Testimony

With implementation of the project design features described in the *Small Power Plant Exemption Application for the Laurelwood Data Center* docketed on March 5, 2019 and other filings described in Section I.C, and as further described in the *Initial Study and Proposed Mitigated Negative Declaration* docketed on August 28, 2019, the project's potential impacts on Hazards and Hazardous Materials, including potential cumulative impacts, will be less than significant. We also conclude that with implementation of the project design features the project complies with all applicable laws, ordinances, regulations and standards.

### 3.10 Hydrology and Water Quality

#### I. Introduction

**A. Names: Matthew Franck and Jerry Salamy**

**B. Qualifications:** The panel's qualifications are as noted in their resumes contained in Appendix A.

**C. Prior Filings:** In addition to the statements herein, this testimony incorporates by reference the following documents submitted in this proceeding:

- Laurelwood SPPE Application (TN # 227273-1), 3/5/2019
- Laurelwood Data Center Response to Data Request, Set 4 (TN # 229001), 7/16/2019

The facts contained in this testimony (including all referenced documents and prior filings) are true and correct to the best of our knowledge and belief. To the extent this testimony contains opinions, such opinions reflect our best professional judgment. We make these statements and render these opinions freely and under oath for the purpose of constituting sworn testimony in this proceeding.

#### II. Summary of Testimony

With implementation of the project design features described in the *Small Power Plant Exemption Application for the Laurelwood Data Center* docketed on March 5, 2019 and other filings described in Section I.C, and as further described in the *Initial Study and Proposed Mitigated Negative Declaration* docketed on August 28, 2019, the project's potential impacts on Hydrology and Water Quality, including potential cumulative impacts, will be less than significant. We also conclude that with implementation of the project design features the project complies with all applicable laws, ordinances, regulations and standards.

### 3.11 Land Use and Planning

#### I. Introduction

**A. Names: Brenda Eells and Sarah Madams**

**B. Qualifications:** The panel's qualifications are as noted in their resumes contained in Appendix A.

**C. Prior Filings:** In addition to the statements herein, this testimony incorporates by reference the following documents submitted in this proceeding:

- Laurelwood SPPE Application (TN # 227273-1), 3/5/2019
- LDC Responses to Formal and Informal Data Requests Data Response Set 1A - (Responses to Data Requests 1 to 65, Staff Queries 1 to 17) (TN # 227626), 4/11/2019

The facts contained in this testimony (including all referenced documents and prior filings) are true and correct to the best of our knowledge and belief. To the extent this testimony contains opinions, such opinions reflect our best professional judgment. We make these statements and render these opinions freely and under oath for the purpose of constituting sworn testimony in this proceeding.

#### II. Summary of Testimony

With implementation of the project design features described in the *Small Power Plant Exemption Application for the Laurelwood Data Center* docketed on March 5, 2019 and other filings described in Section I.C, and as further described in the *Initial Study and Proposed Mitigated Negative Declaration* docketed on August 28, 2019, the project's potential impacts on Land use and Planning, including potential cumulative impacts, will be less than significant. We also conclude that with implementation of the project design features the project complies with all applicable laws, ordinances, regulations and standards.

## 3.12 Mineral Resources

### I. Introduction

- A. **Names: Megan Sebra and Sarah Madams**
- B. **Qualifications:** The panel's qualifications are as noted in their resumes contained in Appendix A.
- C. **Prior Filings:** In addition to the statements herein, this testimony incorporates by reference the following documents submitted in this proceeding:
  - Laurelwood SPPE Application (TN # 227273-1), 3/5/2019

The facts contained in this testimony (including all referenced documents and prior filings) are true and correct to the best of our knowledge and belief. To the extent this testimony contains opinions, such opinions reflect our best professional judgment. We make these statements and render these opinions freely and under oath for the purpose of constituting sworn testimony in this proceeding.

### II. Summary of Testimony

With implementation of the project design features described in the *Small Power Plant Exemption Application for the Laurelwood Data Center* docketed on March 5, 2019 and other filings described in Section I.C, and as further described in the *Initial Study and Proposed Mitigated Negative Declaration* docketed on August 28, 2019, the project's potential impacts on Mineral Resources, including potential cumulative impacts, will be less than significant. We also conclude that with implementation of the project design features the project complies with all applicable laws, ordinances, regulations and standards.

### 3.13 Noise

#### I. Introduction

- A. **Names: Mark Bastasch and Jerry Salamy**
- B. **Qualifications:** The panel's qualifications are as noted in their resumes contained in Appendix A.
- C. **Prior Filings:** In addition to the statements herein, this testimony incorporates by reference the following documents submitted in this proceeding:
  - Laurelwood SPPE Application (TN # 227273-1), 3/5/2019

The facts contained in this testimony (including all referenced documents and prior filings) are true and correct to the best of our knowledge and belief. To the extent this testimony contains opinions, such opinions reflect our best professional judgment. We make these statements and render these opinions freely and under oath for the purpose of constituting sworn testimony in this proceeding.

#### II. Summary of Testimony

With implementation of the project design features described in the *Small Power Plant Exemption Application for the Laurelwood Data Center* docketed on March 5, 2019 and other filings described in Section I.C, and as further described in the *Initial Study and Proposed Mitigated Negative Declaration* docketed on August 28, 2019, the project's potential impacts on Noise, including potential cumulative impacts, will be less than significant. We also conclude that with implementation of the project design features the project complies with all applicable laws, ordinances, regulations and standards.

### 3.14 Population and Housing

#### I. Introduction

**A. Name: Sarah Madams**

**B. Qualifications:** The panel's qualifications are as noted in their resumes contained in Appendix A.

**C. Prior Filings:** In addition to the statements herein, this testimony incorporates by reference the following documents submitted in this proceeding:

- Laurelwood SPPE Application (TN # 227273-1), 3/5/2019

The facts contained in this testimony (including all referenced documents and prior filings) are true and correct to the best of my knowledge and belief. To the extent this testimony contains opinions, such opinions reflect my best professional judgment. I make these statements and render these opinions freely and under oath for the purpose of constituting sworn testimony in this proceeding.

#### II. Summary of Testimony

With implementation of the project design features described in the *Small Power Plant Exemption Application for the Laurelwood Data Center* docketed on March 5, 2019 and other filings described in Section I.C, and as further described in the *Initial Study and Proposed Mitigated Negative Declaration* docketed on August 28, 2019, the project's potential impacts on Population and Housing, including potential cumulative impacts, will be less than significant. I also conclude that with implementation of the project design features the project complies with all applicable laws, ordinances, regulations and standards.

### 3.15 Public Services

#### I. Introduction

**A. Name: Sarah Madams**

**B. Qualifications:** The panel's qualifications are as noted in their resumes contained in Appendix A.

**C. Prior Filings:** In addition to the statements herein, this testimony incorporates by reference the following documents submitted in this proceeding:

- Laurelwood SPPE Application (TN # 227273-1), 3/5/2019

The facts contained in this testimony (including all referenced documents and prior filings) are true and correct to the best of my knowledge and belief. To the extent this testimony contains opinions, such opinions reflect my best professional judgment. I make these statements and render these opinions freely and under oath for the purpose of constituting sworn testimony in this proceeding.

#### II. Summary of Testimony

With implementation of the project design features described in the *Small Power Plant Exemption Application for the Laurelwood Data Center* docketed on March 5, 2019 and other filings described in Section I.C, and as further described in the *Initial Study and Proposed Mitigated Negative Declaration* docketed on August 28, 2019, the project's potential impacts on Public Services, including potential cumulative impacts, will be less than significant. I also conclude that with implementation of the project design features the project complies with all applicable laws, ordinances, regulations and standards.

## 3.16 Recreation

### I. Introduction

**A. Name: Sarah Madams**

**B. Qualifications:** The panel's qualifications are as noted in their resumes contained in Appendix A.

**C. Prior Filings:** In addition to the statements herein, this testimony incorporates by reference the following documents submitted in this proceeding:

- Laurelwood SPPE Application (TN # 227273-1), 3/5/2019

The facts contained in this testimony (including all referenced documents and prior filings) are true and correct to the best of my knowledge and belief. To the extent this testimony contains opinions, such opinions reflect my best professional judgment. I make these statements and render these opinions freely and under oath for the purpose of constituting sworn testimony in this proceeding.

### II. Summary of Testimony

With implementation of the project design features described in the *Small Power Plant Exemption Application for the Laurelwood Data Center* docketed on March 5, 2019 and other filings described in Section I.C, and as further described in the *Initial Study and Proposed Mitigated Negative Declaration* docketed on August 28, 2019, the project's potential impacts on Recreation, including potential cumulative impacts, will be less than significant. I also conclude that with implementation of the project design features the project complies with all applicable laws, ordinances, regulations and standards.

## 3.17 Transportation

### I. Introduction

**A. Names: Loren Bloomberg and Jerry Salamy**

**B. Qualifications:** The panel's qualifications are as noted in their resumes contained in Appendix A.

**C. Prior Filings:** In addition to the statements herein, this testimony incorporates by reference the following documents submitted in this proceeding:

- Laurelwood SPPE Application (TN # 227273-1), 3/5/2019
- LDC Responses to Formal and Informal Data Requests Data Response Set 1A - (Responses to Data Requests 1 to 65, Staff Queries 1 to 17) (TN # 227626), 4/11/2019
- Laurelwood Data Center Data Response, Set 5 (TN # 229160), 7/31/2019

The facts contained in this testimony (including all referenced documents and prior filings) are true and correct to the best of our knowledge and belief. To the extent this testimony contains opinions, such opinions reflect our best professional judgment. We make these statements and render these opinions freely and under oath for the purpose of constituting sworn testimony in this proceeding.

### II. Summary of Testimony

With implementation of the project design features described in the *Small Power Plant Exemption Application for the Laurelwood Data Center* docketed on March 5, 2019 and other filings described in Section I.C, and as further described in the *Initial Study and Proposed Mitigated Negative Declaration* docketed on August 28, 2019, the project's potential impacts on Transportation, including potential cumulative impacts, will be less than significant. We also conclude that with implementation of the project design features the project complies with all applicable laws, ordinances, regulations and standards.

### 3.18 Tribal Cultural Resources

#### I. Introduction

- A. Names: Christina Alonso and Jerry Salamy**
- B. Qualifications:** The panel's qualifications are as noted in their resumes contained in Appendix A.
- C. Prior Filings:** In addition to the statements herein, this testimony incorporates by reference the following documents submitted in this proceeding:
- Laurelwood SPPE Application (TN # 227273-1), 3/5/2019
  - LDC Responses to Formal and Informal Data Requests Data Response Set 1A - (Responses to Data Requests 1 to 65, Staff Queries 1 to 17) (TN # 227626), 4/11/2019

The facts contained in this testimony (including all referenced documents and prior filings) are true and correct to the best of our knowledge and belief. To the extent this testimony contains opinions, such opinions reflect our best professional judgment. We make these statements and render these opinions freely and under oath for the purpose of constituting sworn testimony in this proceeding.

#### II. Summary of Testimony

With implementation of the project design features described in the *Small Power Plant Exemption Application for the Laurelwood Data Center* docketed on March 5, 2019 and other filings described in Section I.C, and as further described in the *Initial Study and Proposed Mitigated Negative Declaration* docketed on August 28, 2019, the project's potential impacts on Tribal Cultural Resources, including potential cumulative impacts, will be less than significant. We also conclude that with implementation of the project design features the project complies with all applicable laws, ordinances, regulations and standards.

### 3.19 Utilities and Service Systems

#### I. Introduction

- A. Names: Jerry Salamy and Sarah Madams**
- B. Qualifications:** The panel's qualifications are as noted in their resumes contained in Appendix A.
- C. Prior Filings:** In addition to the statements herein, this testimony incorporates by reference the following documents submitted in this proceeding:
- Laurelwood SPPE Application (TN # 227273-1), 3/5/2019
  - LDC Responses to Formal and Informal Data Requests Data Response Set 1A - (Responses to Data Requests 1 to 65, Staff Queries 1 to 17) (TN # 227626), 4/11/2019

The facts contained in this testimony (including all referenced documents and prior filings) are true and correct to the best of our knowledge and belief. To the extent this testimony contains opinions, such opinions reflect our best professional judgment. We make these statements and render these opinions freely and under oath for the purpose of constituting sworn testimony in this proceeding.

#### II. Summary of Testimony

With implementation of the project design features described in the *Small Power Plant Exemption Application for the Laurelwood Data Center* docketed on March 5, 2019 and other filings described in Section I.C, and as further described in the *Initial Study and Proposed Mitigated Negative Declaration* docketed on August 28, 2019, the project's potential impacts on Utilities and Service Systems, including potential cumulative impacts, will be less than significant. We also conclude that with implementation of the project design features the project complies with all applicable laws, ordinances, regulations and standards.

## 3.20 Wildfire

### I. Introduction

- A. **Name:** Sarah Madams
- B. **Qualifications:** The panel's qualifications are as noted in their resumes contained in Appendix A.
- C. **Prior Filings:** In addition to the statements herein, this testimony incorporates by reference the following documents submitted in this proceeding:
  - Laurelwood SPPE Application (TN # 227273-1), 3/5/2019

The facts contained in this testimony (including all referenced documents and prior filings) are true and correct to the best of my knowledge and belief. To the extent this testimony contains opinions, such opinions reflect my best professional judgment. I make these statements and render these opinions freely and under oath for the purpose of constituting sworn testimony in this proceeding.

### II. Summary of Testimony

With implementation of the project design features described in the *Small Power Plant Exemption Application for the Laurelwood Data Center* docketed on March 5, 2019 and other filings described in Section I.C, and as further described in the *Initial Study and Proposed Mitigated Negative Declaration* docketed on August 28, 2019, the project's potential impacts on Wildfire, including potential cumulative impacts, will be less than significant. I also conclude that with implementation of the project design features the project complies with all applicable laws, ordinances, regulations and standards.

## 3.21 Environmental Justice

### I. Introduction

- A. **Names: Brenda Eells and Sarah Madams**
- B. **Qualifications:** The panel's qualifications are as noted in their resumes contained in Appendix A.
- C. **Prior Filings:** In addition to the statements herein, this testimony incorporates by reference the following documents submitted in this proceeding:
  - Laurelwood SPPE Application (TN # 227273-1), 3/5/2019

The facts contained in this testimony (including all referenced documents and prior filings) are true and correct to the best of our knowledge and belief. To the extent this testimony contains opinions, such opinions reflect our best professional judgment. We make these statements and render these opinions freely and under oath for the purpose of constituting sworn testimony in this proceeding.

### II. Summary of Testimony

With implementation of the project design features described in the *Small Power Plant Exemption Application for the Laurelwood Data Center* docketed on March 5, 2019 and other filings described in Section I.C, and as further described in the *Initial Study and Proposed Mitigated Negative Declaration* docketed on August 28, 2019, the project's potential impacts on Environmental Justice, including potential cumulative impacts, will be less than significant. We also conclude that with implementation of the project design features the project complies with all applicable laws, ordinances, regulations and standards.

# **Laurelwood Data Center (19-SPPE-01) Signed Declarations**

**DECLARATION OF  
JERRY SALAMY**

I, Jerry Salamy, declare as follows:

1. I am presently employed by Jacobs Engineering Inc. as Principal Project Manager.
2. A copy of my professional qualifications and experience are attached hereto and incorporated herein by reference.
3. The testimony on Introduction, Project Description, Air Quality, Biological Resources, Cultural Resources, Energy, Greenhouse Gas, Hazards and Hazardous Materials, Hydrology and Water Quality, Noise, Transportation, Tribal Cultural Resources, and Utilities and Service Systems for the Laurelwood Data Center (19-SPPE-01) was prepared either by me or under my supervision, and is based on my independent analysis, data from reliable sources, and my professional experience and knowledge.
4. It is my professional opinion that the prepared testimony is valid and accurate with respect to the issue(s) addressed herein.
5. I am personally familiar with the facts and conclusions presented in the testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct to the best of my knowledge and belief.

Dated: 10/3/19

Signed: 

**DECLARATION OF  
Matt Muell**

I, Matt Muell, declare as follows:

1. I am presently employed by EdgeCore Internet Real Estate as Senior Vice President, Investments.
2. A copy of my professional qualifications and experience are attached hereto and incorporated herein by reference.
3. The testimony on Project Description for the Laurelwood Data Center (19-SPPE-01) was prepared either by me or under my supervision, and is based on my independent analysis, data from reliable sources, and my professional experience and knowledge.
4. It is my professional opinion that the prepared testimony is valid and accurate with respect to the issue(s) addressed herein.
5. I am personally familiar with the facts and conclusions presented in the testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct to the best of my knowledge and belief.

Dated: 10-7-2019

Signed: 

**DECLARATION OF  
CHRISTINA ALONSO**

I, Christina Alonso, declare as follows:

1. I am presently employed by PaleoWest Archaeology as Senior Archaeologist.
2. A copy of my professional qualifications and experience are attached hereto and incorporated herein by reference.
3. The testimony on Cultural Resources and Tribal Cultural Resources for the Laurelwood Data Center (19-SPPE-01) was prepared either by me or under my supervision, and is based on my independent analysis, data from reliable sources, and my professional experience and knowledge.
4. It is my professional opinion that the prepared testimony is valid and accurate with respect to the issue(s) addressed herein.
5. I am personally familiar with the facts and conclusions presented in the testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct to the best of my knowledge and belief.

Dated: 10/7/19

Signed: 

**DECLARATION OF  
MARK BASTASCH**

I, Mark Bastasch, declare as follows:

1. I am presently employed by Jacobs Engineering Inc. as a Principal Acoustical Engineer.
2. A copy of my professional qualifications and experience are attached hereto and incorporated herein by reference.
3. The testimony on Noise for the Laurelwood Data Center (19-SPPE-01) was prepared either by me or under my supervision, and is based on my independent analysis, data from reliable sources, and my professional experience and knowledge.
4. It is my professional opinion that the prepared testimony is valid and accurate with respect to the issue(s) addressed herein.
5. I am personally familiar with the facts and conclusions presented in the testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct to the best of my knowledge and belief.

Dated: October 4, 2019

Signed: Mark Bastasch

**DECLARATION OF  
LOREN BLOOMBERG**

I, Loren Bloomberg, declare as follows:

1. I am presently employed by Jacobs Engineering Inc. as a Principal Technologist.
2. A copy of my professional qualifications and experience are attached hereto and incorporated herein by reference.
3. The testimony on Transportation for the Laurelwood Data Center (19-SPPE-01) was prepared either by me or under my supervision, and is based on my independent analysis, data from reliable sources, and my professional experience and knowledge.
4. It is my professional opinion that the prepared testimony is valid and accurate with respect to the issue(s) addressed herein.
5. I am personally familiar with the facts and conclusions presented in the testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct to the best of my knowledge and belief.

Dated: 10/4/19

Signed:



**DECLARATION OF  
BRENDA EELLS**

I, Brenda Eells, declare as follows:

1. I am presently employed by Jacobs Engineering Inc. as Senior Project Manager.
2. A copy of my professional qualifications and experience are attached hereto and incorporated herein by reference.
3. The testimony on Aesthetics, Land Use, and Planning and Environmental Justice for the Laurelwood Data Center (19-SPPE-01) was prepared either by me or under my supervision, and is based on my independent analysis, data from reliable sources, and my professional experience and knowledge.
4. It is my professional opinion that the prepared testimony is valid and accurate with respect to the issue(s) addressed herein.
5. I am personally familiar with the facts and conclusions presented in the testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct to the best of my knowledge and belief.

Dated: October 3, 2019

Signed:



**DECLARATION OF  
ELYSE ENGEL**

I, Elyse Engel, declare as follows:

1. I am presently employed by Jacobs Engineering Inc. as a Chemical Engineering Professional, specializing in Air Quality.
2. A copy of my professional qualifications and experience are attached hereto and incorporated herein by reference.
3. The testimony on Air Quality and Greenhouse Gas for the Laurelwood Data Center (19-SPPE-01) was prepared either by me or under my supervision, and is based on my independent analysis, data from reliable sources, and my professional experience and knowledge.
4. It is my professional opinion that the prepared testimony is valid and accurate with respect to the issue(s) addressed herein.
5. I am personally familiar with the facts and conclusions presented in the testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct to the best of my knowledge and belief.

Dated: 10/4/19

Signed: Elyse Jay Engel

**DECLARATION OF  
KEVIN FISHER**

I, Kevin Fisher, declare as follows:

1. I am presently employed by Jacobs Engineering Inc. as Principal Biologist.
2. A copy of my professional qualifications and experience are attached hereto and incorporated herein by reference.
3. The testimony on Biological Resources for the Laurelwood Data Center (19-SPPE-01) was prepared either by me or under my supervision, and is based on my independent analysis, data from reliable sources, and my professional experience and knowledge.
4. It is my professional opinion that the prepared testimony is valid and accurate with respect to the issue(s) addressed herein.
5. I am personally familiar with the facts and conclusions presented in the testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct to the best of my knowledge and belief.

Dated: 10/3/19

Signed:



**DECLARATION OF  
MATTHEW FRANCK**

I, Matthew Franck, declare as follows:

1. I am presently employed by Jacobs Engineering Inc. as a Project Manager.
2. A copy of my professional qualifications and experience are attached hereto and incorporated herein by reference.
3. The testimony on Hydrology and Water Quality for the Laurelwood Data Center (19-SPPE-01) was prepared either by me or under my supervision, and is based on my independent analysis, data from reliable sources, and my professional experience and knowledge.
4. It is my professional opinion that the prepared testimony is valid and accurate with respect to the issue(s) addressed herein.
5. I am personally familiar with the facts and conclusions presented in the testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct to the best of my knowledge and belief.

Dated: October 3, 2019

Signed:

*M Franck*

**DECLARATION OF  
SARAH MADAMS**

I, Sarah Madams, declare as follows:

1. I am presently employed by Jacobs Engineering Inc. as Senior Project Manager.
2. A copy of my professional qualifications and experience are attached hereto and incorporated herein by reference.
3. The testimony on Aesthetics, Agriculture and Forestry, Energy, Geology and Soils, Hazards and Hazardous Materials, Land Use and Planning, Mineral Resources, Population and Housing, Public Services, Recreation, Utilities and Service Systems, Wildfire, and Environmental Justice for the Laurelwood Data Center (19-SPPE-01) was prepared either by me or under my supervision, and is based on my independent analysis, data from reliable sources, and my professional experience and knowledge.
4. It is my professional opinion that the prepared testimony is valid and accurate with respect to the issue(s) addressed herein.
5. I am personally familiar with the facts and conclusions presented in the testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct to the best of my knowledge and belief.

Dated: 10/4/2019

Signed:



**DECLARATION OF  
DAVID RASMUSSEN**

I, David Rasmussen, declare as follows:

1. I am presently employed by Jacobs Engineering Inc. as a Biologist.
2. A copy of my professional qualifications and experience are attached hereto and incorporated herein by reference.
3. The testimony on Biological Resources for the Laurelwood Data Center (19-SPPE-01) was prepared either by me or under my supervision, and is based on my independent analysis, data from reliable sources, and my professional experience and knowledge.
4. It is my professional opinion that the prepared testimony is valid and accurate with respect to the issue(s) addressed herein.
5. I am personally familiar with the facts and conclusions presented in the testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct to the best of my knowledge and belief.

Dated: October 3, 2019

Signed: 

**DECLARATION OF  
MEGAN SEBRA**

I, Megan Sebra, declare as follows:

1. I am presently employed by Jacobs Engineering Inc. as Project Manager.
2. A copy of my professional qualifications and experience are attached hereto and incorporated herein by reference.
3. The testimony on Geology and Soils, and Mineral Resources for the Laurelwood Data Center (19-SPPE-01) was prepared either by me or under my supervision, and is based on my independent analysis, data from reliable sources, and my professional experience and knowledge.
4. It is my professional opinion that the prepared testimony is valid and accurate with respect to the issue(s) addressed herein.
5. I am personally familiar with the facts and conclusions presented in the testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct to the best of my knowledge and belief.

Dated: 10/3/19

Signed:  \_\_\_\_\_

## **Appendix A - Resumes**

## Jerry Salamy

### EDUCATION/QUALIFICATIONS

B.A., Chemistry, Holy Names College,  
Oakland

### PRINCIPAL PROJECT MANAGER

Mr. Salamy has 30 years of experience, including assignments as Project Manager for 19 Applications for Certification (AFC) before the California Energy Commission (CEC). Mr. Salamy has also been the Deputy Project Manager or Technical Lead on an additional 13 AFCs. He has assisted clients in satisfying the CEC construction compliance requirements for numerous projects, has prepared over 32 petitions to amend CEC licenses, and has prepared and provided expert witness testimony in CEC hearings.

### Relevant Project Experience

**Program Manager and Air Quality Lead; Application for Certification; Alamitos Energy Center; AES Southland Development LLC; Long Beach, CA.** Planned and executed the preparation of an AFC for a 1,040-MW repower of the existing Alamitos Beach Generating Station located within the coastal zone of Long Beach, CA. The project required the preparation of numerous studies and a Prevention of Significant Deterioration (PSD) permit application submitted to the South Coast Air Quality Management District. The AFC was required to demonstrate conformance with the City of Long Beach's Local Coastal Program. The Coastal Commission has been consulted by the CEC and has indicated they are not expecting to comment of the CEC's license for the project. The CEC issued the final decision for the project in May 2017.

**Program Manager and Air Quality Lead; Application for Certification; Redondo Beach Energy Project; AES Southland Development LLC; Redondo Beach, CA.** Managed the preparation of the air quality section of an AFC for a 546-MW combined cycle repower of the existing Redondo Beach Generating Station. The project required the preparation of numerous studies and a Prevention of Significant Deterioration (PSD) permit application submitted to the South Coast Air Quality Management District. Air permitting required extensive document preparation to demonstrate the project was employing the Best Available Control Technology to control greenhouse gas emissions. The project was actively opposed by several public groups and the City of Redondo Beach. Project permitting was suspended until a Power Purchase Agreement can be secured from the electric utility through the Request for Offer process.

**Program Manager and Air Quality Lead; Application for Certification; Huntington Beach Energy Project; AES Southland Development LLC; Huntington Beach, CA.** Planned and executed the preparation of the AFC for a 840-MW repower of the existing Huntington Beach Generating Station located within the coastal zone of Huntington Beach, CA. The AFC was required to demonstrate conformance with the City of Huntington Beach's Local Coastal Program (LCP). The Coastal Commission issued a report to the CEC defining areas where, in its opinion, the project did not conform to the LCP requirements. Mr. Salamy mobilized a team to prepare a rebuttal to the Coastal Commission's assertions, which was adopted by the CEC in its license. The CEC issued the final decision for the project in May 2017.

**Jerry Salamy**

PRINCIPAL PROJECT MANAGER

**Air Quality Lead, Application for Certification, Mariposa Energy Project, Diamond Generating Corporation, Tracy, CA.** Managed the preparation of the air quality section of an AFC for a 200-MW peaking power plant near Tracy, CA. The project required the preparation of numerous other studies and a permit application submitted to the Bay Area Air Quality Management District. Air permitting required extensive document preparation to demonstrate the project was employing the Best Available Control Technology to control air emissions. The project was highly contested with a significant level of public involvement.

**Application for Certification and Construction Compliance Support, Los Esteros Critical Energy Facility, Calpine C\*Power, San Jose, CA.** Managed the preparation of the AFC for a 180-MW power plant in San Jose. The project required the preparation of numerous other studies/documents to satisfy CEC staff requests. These studies/documents included the preparation of a General Plan amendment and planned development zoning applications, archaeological and paleontological survey reports, and biological resource protection permits, including a CDFW Section 1600 lake and streambed Alteration application, a Corp of Engineers Section 404 application, and Regional Water Quality Control Board Section 401 application.

Mr. Salamy also managed the development and implementation of biological, cultural, and paleontological resource monitoring programs; risk management plan; traffic and transportation management plan; waste reduction program; and an electromagnetic force evaluation for project construction.

**Application for Certification, East Altamont Energy Center, Calpine Corp., Tracy, CA.** Managed the preparation of the East Altamont Energy Center AFC for a 1,100-MW power plant in Tracy. Mr. Salamy also prepared the alternative site and generating technologies analyses, ammonia risk assessments, and provided general licensing support. This project included a 4 mile transmission line to interconnect the project to the Western Tracy Substation.

**Application for Certification, Metcalf Energy Center, Calpine Corp., San Jose, CA.** Assisted in the management of the preparation of the Metcalf Energy Center AFC. Mr. Salamy was responsible for the development and tracking of data response submittals requested by the CEC. Mr. Salamy also authored data responses for hazardous materials management.

**MID Electric Generation Station (MEGS), Modesto Irrigation District, Ripon, CA.** Assistant project manager for the SPPE to license a nominal 95-MW natural-gas-fired, simple-cycle generating facility consisting of two natural-gas-fired combustion turbines with approximately 0.25 mile of new 69 kV power line and fiber optic cable; 0.25 mile of new 8-inch diameter natural gas pipeline; and water supply and wastewater tap lines into City of Ripon lines in Stockton Avenue. The project would occupy 8 acres within a 12.25-acre parcel. This plant had noise and land use issues to resolve. Plant is nearing completion of construction.

**Walnut Energy Center, Turlock Irrigation District, Turlock, CA.** Assistant project manager for the licensing of this 250-MW combined-

**Jerry Salamy**

PRINCIPAL PROJECT MANAGER

cycle generating facility configured using two natural-gas-fired combustion turbines and one steam turbine. Managed the ammonia risk assessment, preparing a detailed analysis showing the probability of and potential effects of an accidental release on nearby residential receptors. Also assisted in responding to numerous hazardous materials handling issues.

**Vernon Power Plant, City of Vernon, California.** Prepared the air quality permit and Application for Certification for 913 megawatt (MW) base load facility consisting of three natural-gas-fired turbines and heat recovery steam generators, one steam turbine, and associated equipment. The project will employ Siemen combustion turbine generators (CTG) that integrate new "fast start" technology to decrease the combustion turbine's start up duration and air emissions.

**Application for Certification, Salton Sea Unit 6 Geothermal Power Plant, Mid American Energy Holding Company, Imperial County, CA.** Mr. Salamy managed the licensing of a 185-MW geothermal power plant in Imperial County, California. The power plant design was based on the flash geothermal power plant process, which produces both solid and liquid byproducts (brine cake and spent brine) that required disposal. The project site was located in a rural area of Imperial County, but was adjacent to a National Wildlife Refuge that supports significant populations of avian species. The licensing process involved the review of all environmental areas, specifically focused on waste disposal, air quality, hazardous materials handling, and biological resources. Mr. Salamy managed preparation of over 500 data responses to requests submitted by the State and the public. The project was successfully completed, with a license issued by the California Energy Commission.

In addition to the power plant license, a Biological Assessment (BA) was submitted to United States Fish and Wildlife Service for the Section 7 consultation due to potential wildlife impacts. The primary wildlife species addressed in the BA were Yuma Clapper rails, Burrowing Owls, Mountain Plover, and California Brown Pelicans. Extensive Yuma Clapper rail protocol surveys were performed to support the BA development and subsequent compliance with the Biological Opinion.

Project components required the fill of a small portion of the Salton Sea and several ephemeral streams associated with the 31 mile transmission lines. These fill activities required the preparation of a Bureau of Land Management (BLM) Plan of Development and wetland delineations that were submitted to the Corp of Engineers in support of the Section 404 permit applications and California Department of Fish and Wildlife Section (CDFW) 1600 Lake and Streambed Alteration permit.

Mr. Salamy also prepared an amendment to the California Energy Commission license to allow for the generation of an additional 35 megawatts of electricity through increased geothermal fluid extraction combined with the use of an organic rankin cycle (ORC) system. The ORC was designed to use waste heat from the geothermal fluid after passing though the steam generation portion of the binary type geothermal process. The modification to the project required CH2M to complete the reanalysis of the impacts to all environmental areas.

# Matthew L. Muell

4075 West 105<sup>th</sup> Place  
Westminster, Colorado 80031

303.961.7965  
matt.muell@edgecore.com

## Senior Real Estate Development Executive

Results and detail-oriented manager with an impressive track record of driving financial and operational performance. Relentless earnings-focused leader with a career history of exceeding corporate goals by uncovering and executing upon investment opportunities that support aggressive growth and surpass challenging financial goals. Core competencies include:

- Mergers & Acquisitions
- Strategic Financial Modeling & Planning
- Initial Public Offerings
- Contract Negotiation
- Land Entitlement and Permitting
- Investment Centric P&L Management
- Product Pricing Strategies
- Capital Structure Planning

## Work Experience

### EdgeCore Internet Real Estate

Denver, CO

Founding Partner and Member of Senior Leadership Team

#### Senior Vice President, Investments (November 2017 - present)

- Responsible for all land acquisition, development, design, and construction activities across EdgeCore's North American data center platform

### CoreSite Realty Corporation (NYSE: COR)

Denver, CO

#### Vice President of Acquisitions (June 2012 - March 2017)

- Responsible for the solicitation, review, underwriting, market research, and negotiations of acquisitions made on behalf of the company
- Responsible for sourcing and underwriting transactions consistent with investment guidelines
- Ensures transactions are consistent with the company's investment guidelines and public market expectations
- Participates in all due diligence activities, processes and documentation
- Participates in Investment Committee meetings and responsible for Investment Committee presentations
- Responsible for maintaining broker and owner relationships and professional and technical knowledge
- Keep senior management regularly informed regarding the status of all potential acquisitions and dispositions

#### General Manager, Central Region (June 2013 - March 2017)

- Manage business operations of CoreSite Chicago and Denver to accomplish strategic and economic objectives
- With product, sales operations, and senior management execute upon the strategic plan
- Oversee the development of inventory both initially and over time to insure it aligns with strategic objectives
- Oversee the presentation of product to customers to ensure our value proposition is presented as the closest possible match to the customer's desired solution
- Know the market and provide input to the pricing of all deal components
- Track and negotiate key deals in the sales funnel and provide accurate projections
- Coordinate and suggest activities in region that increase the probability of within budget operating expenses
- Meet region quarterly earnings objectives

Financial Analyst and Senior Financial Analyst, Associate, Senior Associate, Director, and Senior Director of Acquisitions (September 2006 - June 2012)

## Education

### Iowa State University - The Ivy College of Business

Ames, IA

Bachelor of Science, Class of 2006  
Major: Finance (with distinction)  
Cumulative GPA: 3.84

### Iowa Western Community College

Council Bluffs, IA

Associate of Arts, Class of 2002  
Major: Criminal Justice (with honors)  
Cumulative GPA: 3.90

## Technical Skills

Advanced in Microsoft Office (Word, Excel, PowerPoint, Project), Argus

# Christina Alonso, M.A., RPA

## Senior Archaeologist



Ms. Alonso has 10 years of archaeological experience. She completed her Master's degree in Anthropology at San Francisco State University with an archaeological thesis dealing with bioarchaeological implications of metabolic diseases in Peru. Ms. Alonso has 12 years of experience specifically in cultural resource management with investigations in support of the California Environmental Quality Act, Section 106 of the National Historic Preservation Act, and the National Environmental Policy Act. Ms. Alonso has conducted projects involving gas and electric, utilities, private developers, and in cooperation with agencies such as Bureau of Land Management, California Energy Commission, US Army Corps of Engineers, United States Forest Service and the Bureau of Land Management. Cultural Resources investigations have primarily been conducted in California; additional studies have been conducted in Arizona, and Utah.

### EDUCATION

M.A., Anthropology Emphasis in Bioarchaeology, San Francisco State University, 2013

B.A., Anthropology, California State University, Chico, 2010

### YEARS OF EXPERIENCE

12

### YEARS WITH FIRM

2

### REGISTRATIONS/CERTIFICATIONS

Register of Professional Archaeologists (2015)

### PROFESSIONAL MEMBERSHIPS

Society for California Archaeology

## Distinguishing Qualifications

- Meets Secretary of Interior Professional Qualification Standards (36CFR61)
- Experienced in cultural resource management and Section 106 of the National Historic Preservation Act consultation
- Experienced in the National Environmental Policy Act (NEPA) and California Environmental Quality Act analyses (CEQA)
- 12 years of Cultural Resources Management experience

## Professional Positions Held

Senior Archaeologist/Project Manager 2016 to present  
Cultural Resources Specialist, 2014-2016

## Select Project Experience

**Dry Creek Bridge Replacement Project, Napa County, California, Caltrans District 4.** Project Manager responsible for a Phase I cultural resource investigation for bridge replacement. The Phase I investigation included a literature search, tribal and agency consultation, an intensive pedestrian survey, and technical report. This work was conducted in compliance with CEQA and Caltrans regulations, including the January 2014 First Amended Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federally-Aided Highway Program in California. Work was begun in March 2019 and is ongoing.

**Chiles Pope Valley Bridge Replacement Project, Napa County, California, Caltrans District 4.** Project Manager responsible for a Phase I cultural resource investigation for bridge replacement. The Phase I investigation included a literature search, tribal and agency consultation, an intensive pedestrian survey, and technical report. This work was conducted in compliance with CEQA and Caltrans regulations, including the January 2014 First Amended Programmatic Agreement Among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act, as it Pertains to the Administration of the Federally-Aided Highway Program in California. Work was begun in March 2019 and is ongoing.

**Downtown Oakland EIR/Specific Plan, Alameda County, California.** Client: Urban Planning Partners. December 2018 to March 2019. Completed a desktop cultural resources literature search review, Native American outreach, and recommendations for the proposed Specific Plan Area. Responsibilities included tribal consultation draft letters, literature search and review, directing the pedestrian survey, and authoring report and associated documents.

**Hyatt House EIR, San Mateo County, California.** Client: Circlepoint. June 2017 to August 2017. Completed a desktop cultural resources literature search review, and peer review for the proposed new development.

**Byron Hot Springs, Contra Costa County, California.** Client: Regal Financial and Development Corporation. September 2017 to November 2017. Completed a desktop cultural resources literature search review, Native American outreach, and recommendations for the proposed Specific Plan Area.

**Lawrence Station Area Plan, Santa Clara, California.** Client: Circlepoint. Served as project manager and field supervisor for all field work, cultural resource and sensitivity assessment, preparation of mitigation measures, and technical report preparation for the City of Santa Clara. Responsibilities included tribal consultation draft letters, literature search and review, preparing mitigation measures, directing the pedestrian survey, and authoring report and associated documents for the Area Plan.

**Shlaga Phase 4, San Francisco, California.** Client: Universal Paragon. May 2019 to June 2019. Served as project field supervisor Senior Staff and Osteologist and worked directly under the Project Director during excavation of 32 prehistoric burials, conducted osteological analysis, and preparation of the final technical report. Duties extended to the laboratory post excavation where responsibilities included supervising analysis, quality assessment, cataloging, DPR forms, archiving all archaeological data, and preparation of California Department of Parks and Recreation DPR 523 forms and eligibility recommendations.

**Calabria Development, Fremont, California.** Client: Van Daele. September 2015 to June 2018. Served as project field supervisor Senior Staff and Osteologist and worked directly under the Project Director during excavation of 32 prehistoric burials, conducted osteological analysis, and preparation of the final technical report. Duties extended to the laboratory post excavation where responsibilities included supervising analysis, quality assessment, cataloging, DPR forms, archiving all archaeological data, and preparation of California Department of Parks and Recreation DPR 523 forms and eligibility recommendations.

**Project Manager, D.R. Horton - Cheyenne, Vacaville, California.** Served as project manager and field supervisor for field survey, and Section 106 technical report preparation for the United States Army Corps of Engineers. Completed a desktop cultural resources literature search review, and peer review for the proposed new development. Responsibilities changed with the needs of the project and

everyday duties included crew management, field direction, data management, documentation, and report preparation.

**Project Manager, Ward and Associates – Unity Plaza, San Francisco, California.** Served as project director and field supervisor for archaeological monitoring, and technical report preparation for a new community plaza.

**Project Manager, Stanford - Middle Plaza, Menlo Park, California.** Served as project manager and field supervisor for the preliminary cultural resources assessment of the Middle Plaza Project. Responsibilities included supervising all field work, providing cultural resource assessment, and technical report preparation for the Stanford University.

**Project Manager, BKF Engineers – Danville Village Theater Parking Lot, Danville, California.** Served as project manager and field supervisor for survey, archaeological testing, and the preparation of technical reports for parking lot improvement project for the Town of Danville.

**Project Manager, RMC – SFPUC Auxiliary Water Pump Station No. 2, San Francisco, California.** Served as project manager and field supervisor for monitoring, and the preparation of technical reports for the seismic retrofit of the auxiliary water pump station.

**Nichelini Vineyards, St. Helena, California.** Client: Triad/Holmes Association. November 2017 to March 2018. Served as project manager and field supervisor for field survey, cultural resource assessment, and Section 106 technical report preparation for the United States Army Corps of Engineers. The site investigated was a surface artifact scatter. Evaluations of eligibility for the National Register of Historic Places were conducted. Responsibilities changed with the needs of the project and everyday duties included crew management, field direction, data management, documentation, evaluation of site boundaries and placement of STPs, and the report write up for DPR forms. Prepared technical reports and eligibility recommendations for new archaeological sites.

**Project Manager, Nova Partners – 750 Moffett Blvd., Mountain View, California.** Served as project director and field supervisor for archaeological monitoring, and technical report preparation for a new community plaza.

**Project Manager, RMC – SFPUC Regional Groundwater, South San Francisco, California.** Served as project manager and completed a desktop cultural resources literature search review for the proposed new development.

**Project Manager, Restoration Design Group, Inc.- Three Creeks Parkway, Brentwood, California.** Served as project manager and field supervisor for field survey, and Section 106 technical report preparation for the United States Army Corps of Engineers. Responsibilities changed with the needs of the project and everyday duties included crew management, field direction, data management, documentation, and report preparation. Recorded a section of channelized creek as part of the Marsh Creek Watershed. Drafted a Monitoring and Post Review Discovery Treatment Plan to conform with SHPO standards and USACE requirements.

**Project Manager, Restoration Design Group, Inc.- Wildcat Creek Restoration, San Pablo, California.**

Served as project manager and field supervisor for field survey, and a CEQA as well as Section 106 technical report preparation for the United States Army Corps of Engineers. Responsibilities changed with the needs of the project and everyday duties included crew management, field direction, data management, documentation, and report preparation.

**237 Express Lanes, Santa Clara, CA.** Client: Santa Clara Valley Transit Authority. April 2018 to April 2019. Project director, duties included coordination with contractors, scheduling of paleontological monitors, and final reporting.

**Moraga Adobe, Orinda, CA.** Client: J & J Ranch LLC. September 2018 to current. Project director, duties included coordination with contractors, scheduling of paleontological monitors, and site inspections for archaeological discoveries.

**350 8<sup>th</sup> Street, San Francisco, CA.** Client: AERC. July 2016 to July 2018. Project Archaeologist responsible for report edits, data management, analysis of features, further contributions to the technical report included field, and analysis methods, eligibility recommendations, and an appendix for the site records which were submitted to the CHRIS information center.

**Moffett Federal Airfield Bayview Campus, CA.** Client: Paige and Turnbull. May 2016 to June 2016. Cultural Resources Lead responsible for archaeological assessment, pedestrian survey, cultural documents and report of findings in support of NEPA Section 101(b)(4), 42 U.S.C. § 4331.

**ISI Engineering Campus, Sunnyvale, CA.** Client: Intuitive Surgical. February 2016 to March 2016. Cultural Resources Lead responsible for archaeological assessment, pedestrian survey, cultural documents and report of findings in support of CEQA.

## EDUCATION/QUALIFICATIONS

M.S., Environmental Engineering,  
William Marsh Rice University,  
Houston, Texas, 1997

B.S. (*cum laude*), Environmental  
Engineering, Cal Poly, San Luis  
Obispo, California, 1994

## PROFESSIONAL REGISTRATIONS

Professional Acoustical Engineer:  
Oregon (No. 58990AC)

Professional Environmental Engineer:  
Oregon (No. 58990EN)

Professional Civil Engineer: Oregon,  
(No. 58990PE)

Board Certified, Institute of Noise  
Control Engineering (INCE Bd. Cert.)

## MEMBERSHIPS AND AFFILIATIONS

Member, Institute of Noise Control  
Engineering (INCE)

Member, Acoustical Society of America

Organizer, INCE-E Wind Turbine Noise  
Conference Series

## AWARDS/HONORS

2010 CEO Excellence Team Award  
Winner

2016 CEO Excellence Career  
Achievement Award Nominee

2018 Joseph J. Jacobs Master Builder  
Award Project Team Member

# Mark Bastasch, P.E., INCE

## PRINCIPAL ACOUSTICAL ENGINEER

Mr. Bastasch has more than 20 years of experience conducting acoustical evaluations and working with multimedia environmental permitting and design teams. For over a decade, Mr. Bastasch has provided technical leadership on acoustical matters related to renewable energy facilities. He has been an invited speaker to organizations such as Harvard Law School's Consensus Building Institute, the U.S. Department of Energy's (USDOE) Wind Powering America, the International Energy Agency/USDOE National Renewable Energy Laboratory, National Wind Coordinating Council, Law Seminars International, Midwest Energy Bar Association, American Wind Energy Association, and USDOE's New England Wind Energy Education Project; and he has served as plenary speaker or session chair at conferences in Australia, Japan, Italy, and England. Mr. Bastasch has acoustical permitting and design experience in the U.S. power and infrastructure sectors and he has supported multiple design and engineer, procure, construct (EPC) efforts both domestically and internationally, each of which has fully complied with applicable regulatory limits. He served as lead acoustical consultant on Australia's largest coal seam, gas-fueled, air-cooled, combined-cycle power plant and on Power Engineering's Best Gas-fired Project for 2013 (the Empire Generating Project in Rensselaer, New York).

Mr. Bastasch's work on wind energy has been cited by officials from Oregon to Maine. He provided acoustical expertise on the first major wind projects in Oregon, including the Stateline facility, which when permitted in the early 2000s was the largest wind project in the world. Mr. Bastasch was also acknowledged by the Oregon Health Authority for providing technical input to their "Strategic Health Impact Assessment on Oregon Wind Energy Developments."

## Areas of Expertise

- Specializes in industrial noise measurements, modeling, and control for power, industrial, and transportation clients.
- Has prepared acoustical analyses or expert testimony for more than 15,000 megawatts (MW) from gas-fired power facilities and more than 5,000 MW from wind generation facilities.
- Appointed by Oregon State Board of Examiners for Engineering and Land Surveyors to develop and grade the Professional Engineering (P.E.) exam in Acoustics. Oregon was the only state to issue a P.E. in acoustics.
- Experienced in analyzing noise levels for no-build and build alternatives; supporting feasibility, design, and siting analyses of industrial, high-tech, and data center facilities; and preparing noise and vibration impact assessment reports.
- Has served as an acoustical technical lead for numerous transportation projects in Alaska, California, Colorado, Oregon, Washington, and Idaho; tasks include monitoring, modeling, and mitigation recommendations in accordance with applicable state laws.

**Mark Bastasch, P.E., INCE**

PRINCIPAL ACOUSTICAL ENGINEER

- Has conducted numerous noise studies in conjunction with National Environmental Policy Act (NEPA) documents and the energy facility siting requirements of various states.

**Representative Project Experience***Power Plants***Lead Acoustical Engineer; Application for Certification; Alamitos Energy Center; AES Southland Development LLC; California.**

Authored acoustical analysis for a 1,040-MW repower of the existing Alamitos Beach Generating Station located within the coastal zone of Long Beach, California. Tasks included ambient monitoring, acoustical modeling of operational and construction noise, regulatory evaluation, and participation in California Energy Commission (CEC) workshops. The CEC issued the final decision for the project in May 2017.

**Lead Acoustical Engineer; Application for Certification; Huntington Beach Energy Project; AES Southland Development LLC; California.**

Authored acoustical analysis for an 840-MW repower of the existing Huntington Beach Generating Station located within the coastal zone of Huntington Beach, California. Tasks included operational monitoring, acoustical modeling of operational and construction noise, regulatory evaluation and participation in CEC workshops. Mobilized team to provide expert testimony on potential impacts of sound levels on sensitive species. The CEC issued the final decision for the project in May 2017.

**Lead Acoustical Engineer; Licensing and Permitting for San Francisco Electric Reliability Project (SFERP); San Francisco Public Utilities Commission.** Led acoustical tasks to develop a 145-MW simple-cycle plant in southeast San Francisco, using three LM 6000 turbines.

**Lead Acoustical Engineer; Hermiston Power Project, Calpine Corporation, Hermiston, Oregon.** Conducted acoustical and vibration monitoring to determine if steam turbine generator, heat recovery steam generators, stacks, and combustion turbine generators complied with warranted levels within a time critical schedule. Prepared detailed environmental noise monitoring to demonstrate that the facility complied with permit conditions and minimized the time full load operation was needed during off-peak hours. Oregon Department of Energy accepted the report without comment.

**Lead Acoustical Engineer; Walnut Energy Center; Turlock Irrigation District; Turlock, California.** Led acoustical tasks for a combined-cycle power plant, which included developing detailed noise model; comparing expected noise levels with the city of Turlock, County of Stanislaus, and the CEC's noise guidelines; preparing Application for Certification and subsequent amendments submitted to the CEC.

**Lead Acoustical Engineer; MEGS; Modesto Irrigation District; Ripon, California.** Led acoustics for a LM6000 (Norway package) power plant. Tasks included coordinating measurements of operating Norway Package with General Electric; developing detailed noise model; comparing expected noise levels with the City of Ripon, County of Stanislaus, and CEC noise guidelines; preparing Application for

**Mark Bastasch, P.E., INCE**

PRINCIPAL ACOUSTICAL ENGINEER

Certification and subsequent amendments submitted to the CEC; and review of Conditions of Certification, testimony at CEC evidentiary hearings.

**Lead Acoustical Engineer; Humboldt Bay Repowering Project; Pacific Gas & Electric; Humboldt, California.** Prepared application for certification to the CEC. Facility is a load-following power plant consisting of 10 natural gas-fired Wärtsilä 18V50DF 16.3-MW reciprocating engine-generator sets and associated equipment with a combined nominal generating capacity of 163 MW. Developed and executed operational compliance monitoring strategy. Compliance assessment was accepted by the CEC without comment.

*Noise Analysis for Various Sectors*

**Acoustic Lead, Embarcadero-Potrero 230 kV Transmission Project. PG&E, San Francisco County, California.** Acoustical technical lead for the development and filing of the Proponent's Environmental Assessment (PEA) for a new 3.5-mile 230-kV underground and submarine cable. This critical infrastructure project is designed to maintain power to San Francisco under a major seismic event scenario.

**Acoustical Engineer; Water Storage Reservoir; Windsor, California.** Prepared acoustical analysis of the construction and operation of the reservoir to support the supplemental environmental impact report for CEQA compliance. Also developed responses to comments received during the permitting process. Project involved comprehensive preliminary engineering and environmental services for a new water storage reservoir to provide seasonal storage needed by the Town's recycled water system.

**Acoustical Task Leader; Tehachapi Transmission Line; Southern California Edison; California.** Prepared acoustical analysis to support regulatory permitting requirements. This multimillion-dollar proponent's environmental assessment (PEA) included preparation of and support activities for a PEA submitted to the California Public Utilities Commission for an approximate 170-mile transmission line and substation project on federal, state, and private property.

**Representative Publications and Presentations**

Moderator, Conference Organizer, and Instructor for "Introduction to Acoustics" at INCE-Europe Wind Turbine Noise 2017. Rotterdam, Netherlands. May 2017.

Plenary Speaker. Acoustics 2016. "Wind Turbine Sound: Past, Present and Future." Brisbane, Australia. November 2016.

"Glad to Hear It! A Brief Update on Wind Turbine Sound." Canadian Wind Energy Association Annual Conference. Calgary, Alberta. November 2016.

"Glad to Hear It! Wind Turbine Sound." American Wind Energy Association Wind Power Project Siting and Environmental Compliance Conference and Wind Power Conference. March and May 2016.

Wind Turbine Noise Topic Organizer. InterNoise 2014. Melbourne, Australia. November 2014.

**Mark Bastasch, P.E., INCE**

PRINCIPAL ACOUSTICAL ENGINEER

Plenary Speaker. INCE-USA Noise-Con 2013. Denver, Colorado. August 28, 2013.

Instructor: "Introduction to Acoustics." INCE-Europe Wind Turbine Noise 2013. Denver, Colorado. August 27, 2013.

"Criteria." Wind Turbine Noise. Bowdler & Leventhall, editors. Multi-Science Publishing Co. Ltd. ISBN 978-1-907132-30-8. January 2012.

"AWEA/CanWEA Expert Sound Panel and Wind Turbine Sound Regulations." University of Tokyo, Tokyo, Japan. September 12, 2011.

"Wind Turbine Sound." Consensus Building Institute Workshop of Facilitating Wind Energy Siting, Harvard Law School, Cambridge, MA. March 23-25, 2011.

"Wind Turbine Sound and Health – An Expert Panel Review." American Wind Energy Association, Windpower 2010. Dallas, TX, May 24-27, 2011.

"Wind Turbine Noise." American Wind Energy Association Wind Power Project Siting Workshop, Milwaukee, WI. February 28 – March 2, 2007.

"Wind Turbine Noise – An Overview." Mark Bastasch, Jeroen van Dam, Bo Søndergaard, and Anthony Rogers. *Journal of the Canadian Acoustical Association*. June 2006. Vol. 34 No. 2.

"Wind Turbine Generator Noise Prediction - Comparison of Computer Models." Tickell, C. E., J. T. Ellis, and M. Bastasch. Proceedings of ACOUSTICS 2004, 3-5 November 2004, Gold Coast, Australia.

## EDUCATION/QUALIFICATIONS

M.E., Civil Engineering, University of California, Berkeley, 1994

M.S., Civil Engineering, University of California, Berkeley, 1993

B.S., Systems Engineering, University of Virginia, 1989

## PROFESSIONAL REGISTRATIONS

Professional Engineer: California, 2000 (No. 2060)

## DISTINGUISHING QUALIFICATIONS

- Nationally recognized for transportation modeling and analysis for local areas, corridors, and entire regions
- Experienced in practical and theoretical applications of traffic operations, and emerging transportation technologies for connected and automated vehicles (CAV), road charging, and managed/express lanes
- Broad background in transportation planning, conceptual design, and multimodal transportation systems analysis
- Extensive experience in delivering transportation elements of environment documents, including mitigation strategies

# Loren D. Bloomberg, PE

## TRAFFIC ENGINEERING GLOBAL TECHNOLOGY LEADER

Loren is a Principal Technologist, Senior Project Manager, and Jacobs' Global Technology Leader for Traffic Engineering and Operations. He is based in Irvine, California. With over 25 years of experience (and 21 years at combined CH2M/Jacobs), he has led or played a key role in numerous large-scale planning and operations analyses. He has conducted studies and developed plans for local areas, corridors, and entire regions including roadways, maritime facilities, and airports. Loren's technical expertise is in traffic engineering and operations, with a particular focus on conceptual engineering and traffic modeling, as well as emerging transportation technologies like connected and automated vehicles (CAVs), road user charging, and priced managed lanes. He has worked on projects in 28 states, as well as internationally in New Zealand, Saudi Arabia, Abu Dhabi, Iraq, Dubai, Mexico, and Canada.

Loren is often called on as a technical expert for Jacobs' traffic engineering and planning projects and as a project manager for his ability to guide multi-disciplinary studies, particularly in the planning and preliminary engineering stage. He is well-versed in environmental requirements for traffic analysis, with extensive delivery experience in both NEPA and CEQA. Loren has broad project experience with maintenance of traffic, Transportation Management Plans (TMPs), and signing/stripping, as well as cost-benefit analysis for transportation projects. As the Traffic Engineering/Operations Global Technology Leader, Loren promotes coordination and connections between 400 traffic engineers in nine countries. He also plays an active role in Transportation Research Board (TRB) committees: Highway Capacity and Quality of Service (AHB40), Managed Lanes (AHB35), and the Joint Subcommittee on Simulation (AHB45(1)).

## Representative Projects and Dates of Involvement

**Transportation Management Plan (TMP) Lead; I-10 Corridor Contract 1; San Bernardino County Transportation Authority (SBCTA); San Bernardino County, California; 2018 to present.** The TMP is supporting the maintenance of traffic (MOT) efforts on this design-build project to implement two Express Lanes in each direction of I-10 in Claremont, Montclair, Upland, and Ontario. A four-stage construction approach is being applied to minimize impacts from pavement rehabilitation, bridge replacement and widening which will require mainline, ramp, and local street lane closures, as well as mainline crossovers and traffic splits. Lead author on the baseline TMP, which was a condition of approval for NTP2, and was approved after one set of comments from SBCTA and Caltrans. The baseline TMP is the master

**Loren D. Bloomberg, PE**TRAFFIC ENGINEERING GLOBAL  
TECHNOLOGY LEADER

plan document to set policy and guide traffic management activities in later phases via specific TMPs. TMP activities include analysis of impacts (supported by traffic analysis), development of mitigation strategies (including detours and alternate routes) and extensive stakeholder coordination support.

**Project Manager; I-5 Managed Lanes Project Study Report; California Department of Transportation (Caltrans) District 12; Orange County, California; 2018 to 2019.** CH2M worked with Caltrans District 12, in cooperation with OCTA, LA Metro, TCA and Caltrans District 7, to develop innovative solutions to address HOV degradation and improve mobility on I-5. Alternatives studied included widening the HOV lanes (from one to two lanes in each direction), and converting the HOV lanes to priced managed (“Express”) lanes. Loren directed CH2M’s activities on the PSR, including helping to develop alternatives, traffic analysis and modeling, environmental evaluation, hydrology studies, geotechnical assessment, and a multimodal evaluation. He was the technical lead for traffic analysis, including forecasting and traffic operations analysis of Express lane alternatives.

**Project Manager and Transportation Task Lead; Arroyo Seco Safety and Operational Improvements Project Report and Environmental Document; Caltrans District 7; Los Angeles, CA; June 2018 to present.** Jacobs is working with Caltrans to develop and analyze alternatives to enhance safety along a 4.8-mile segment of the Arroyo Seco Parkway (SR 110), north of downtown LA. The Arroyo Seco Parkway is a winding scenic roadway that was the first freeway built in the western United States. It was listed in the National Register of Historic Places in 2011 and designated a National Scenic Byway in 2002. As such, any physical improvements (including signs) will be subject to intense scrutiny from stakeholders. The study is considering a range of improvements including ITS strategies to manage lane control (hard shoulder running and dynamic lane control) as well as interchange improvements to address design deficiencies. Loren is directly a multi-disciplinary team conducting the engineering and environmental analysis, with a particular focus on design standards and safety, historic resources and visual impacts, and traffic and safety analysis.

**Transportation Analysis Lead and Project Manager; SR-710 North Alternative Analysis EIR/EIS; Los Angeles County Metro Transportation Authority; Los Angeles, California; 2011 to 2019.** CH2M conducted alternatives analyses, preliminary engineering, and environmental studies for improvements centered on the State Route 710 (SR 710) freeway. The study area is bordered by SR 2, I-10, I-210, and I-605. A multimodal transportation system was conducted, with a focus on a freeway tunnel, light rail (tunnel and elevated) and Bus Rapid Transit (BRT). Mr. Bloomberg led the transportation analysis including supporting the purpose and need, evaluation approach for vehicles/transit/bicycle/pedestrian/parking, and alternatives evaluation. Evaluation tools include the SCAG and Metro regional travel models and simulation and operations tools. He provided verbal and written technical summaries of technical information to the Technical Advisory Committee, stakeholder groups, and Metro/Caltrans and led the cost-

**Loren D. Bloomberg, PE**TRAFFIC ENGINEERING GLOBAL  
TECHNOLOGY LEADER

benefit analysis using the Cal-B/C tool. Served as project manager for the last stage of the project, leading the team through the acceptance of the final environmental document.

**Traffic Lead, Data Center, Data Center Campus, Undisclosed Client, 2019.** Jacobs is working with a confidential client to construct and operate a data center campus in the San Francisco Bay Area. It will consist of three data center buildings totaling over 484,000 square feet of space. The facility design will require up to 99 MW of electrical power, and will be supported by 42 emergency generators. Leading the traffic analysis to support the environmental document, including application of VMT-based CEQA evaluation, following new guidelines of the local jurisdiction.

**Task Lead; Huntington Beach Energy Center Project; Huntington Beach, California; 2012 to 2014.** Traffic lead for the application for certification (AFC) for a new 939-megawatt (MW) combined-cycle power plant. Led the analysis to evaluate the construction and permanent potential effects of the new facility, which is located in a beach community, directly adjacent to a popular beach. Assessed traffic operations impacts, transport of hazardous materials and public safety to support the owner's successful efforts to secure licensing of the new facility.

**Almond 2 Power Plant (A2PP) Application for Certification (AFC); Turlock Irrigation District; Ceres, California; 2009 to 2011.** Directed the development of the Traffic and Transportation section for the A2PP AFC. The project consisted of a natural gas-fired, simple-cycle peaking facility rated at a gross generating capacity of 174 megawatts. The analysis focused on construction activities and traffic management strategies.

**Project Manager; I-5/710 Alternatives Analysis; Commerce, California; 2005 to 2006.** Guided CH2M HILL's efforts on this project to improve the preliminary design concepts for the I-710 corridor, as part of the pre-National Environmental Policy Act (NEPA)/California Environmental Quality Act (CEQA) planning. The overall purpose of the effort was to build consensus from project stakeholders by addressing two key technical issues: reducing right-of-way impacts and developing a better understanding of the traffic operations of the proposed solutions. Directed and participated in two separate teams (design and traffic) to accomplish these objectives. The design team reduced the residential property takes at the I-5/I-710 interchange and improved the functionality of the concepts. The traffic team analyzed the full I-710 corridor using the regional travel demand model and a focused operational analysis using the Synchro model.

**Project Engineer; Walnut Energy Center Traffic Control and Implementation Plan (TCIP); Turlock, California; 2004 to 2005.** Developed the traffic control plan for the utility (potable and recycled water) lines for the Walnut Energy Center in Turlock, California. The TCIP addressed the mitigation of traffic impacts to the existing transportation facilities to satisfy the requirements of the California Energy Commission (CEC) Conditions of Certification.

## EDUCATION/QUALIFICATIONS

Master of Planning, University of Wyoming

B.A., Geography, Wittenberg University

## DISTINGUISHING QUALIFICATIONS

- Senior Environmental Planner, with over 20 years of experience preparing CEQA and NEPA environmental analyses
- Senior Project Manager, with over 18 years of experience managing increasingly complex and controversial projects
- Extensive experience with linear project permitting and construction (transmission lines, pipelines, roadways)
- Extensive experience with solid waste planning and permitting
- Recent and extensive experience with large, complex, and controversial CEQA/NEPA projects with multiple stakeholders

# Brenda Grogg Eells

## SENIOR PROJECT MANAGER

Brenda Eells is a senior environmental planner and project manager located in Jacobs' Southern California geography with greater than 20 years of experience in effectively managing and conducting CEQA and NEPA environmental analysis projects for solid waste and water projects, private and public utilities, and power generation projects, as well as experience with agency coordination and public outreach. Ms. Eells has experience with providing quality support to diverse projects and Programs and with environmental compliance support/monitoring during construction.

**Senior Environmental Planner and Permitting Lead, San Jose Data Center, San Jose, CA. March 2019 – Present.** Author of several technical discussions for Small Power Plant Exemption (SPPE) before the California Energy Commission (CEC) for a data center within the City of San Jose, including Land Use and Planning and Environmental Justice. Lead for permitting the data center with the City of San Jose, including obtaining a Special Use Permit for the project.

**Senior Environmental Planner, Laurelwood Data Center, Edgecore, Santa Clara County, CA. January 2019 – Present.** Author of several technical discussions for Small Power Plant Exemption (SPPE) before the California Energy Commission (CEC) for a data center within the City of San Jose, including Aesthetics, Land Use and Planning and Environmental Justice.

**CEQA Project Manager, Western Placer Waste Management Authority, Renewable Placer: Waste Action Plan.** Managing development of comprehensive EIR for the Renewable Placer: Waste Action Plan, a 30+ year waste management plan, which includes traditional waste disposal, recycling and landfill diversion, opportunities for industrial innovation and economic growth, compliance with expanding regulations, and compatibility with current and future neighboring land uses. EIR development requires active engagement with a wide range of stakeholders and interested parties.

**Project Manager and NEPA/CEQA Lead, Southern California Edison (SCE), Lake Success Transmission Project.** Project Manager and NEPA/CEQA Lead for preparation of the Proponents Environmental Assessment (PEA) which evaluates the replacement of transmission lines crossing Lake Success in Tulare County, California, under the jurisdiction of the United States Army Corps of Engineers. Responsible for all technical, quality, and project delivery aspects of the project.

**Senior Environmental Planner, Idaho Transportation Department, I-15 Environmental Study Environmental Assessment.** Provided senior-level planning support to revise and update the NEPA Environmental Assessment for the I-15/I-86 System Interchange upgrades in Bannock County, Idaho, with an emphasis on evaluating land use and growth issues.

**Senior Technical Consultant, Southern California Edison (SCE), Doble Overhead Distribution Line Rebuild Project.** Senior technical

**Brenda Grogg Eells**

SENIOR PROJECT MANAGER

consultant and reviewer for the Doble Project Environmental Assessment. Provided CEQA and NEPA review for the 15-mile project, which crosses land owned and managed by the San Bernardino National Forest and Bureau of Land Management in the Lucerne Valley, California.

**CEQA Lead, Senior Technical Consultant, QA/QC, Southern California Edison (SCE), Tehachapi Renewable Transmission Project (TRTP) – Segments 4-11 Compliance Monitoring.**

Extensively involved in all aspects of the SCE TRTP Segments 4-11 Compliance Monitoring project, as Senior Technical Consultant and CEQA Lead. CH2M HILL provided environmental compliance support to SCE during construction of the TRTP in accordance with the National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA). The TRTP included construction of 173 miles of new and upgraded transmission lines, construction of one new substation, major upgrade of one existing substation and upgrade of other ancillary facilities. When complete the TRTP will deliver up to 4300 MW of renewable energy to the Los Angeles Basin and the western Inland Empire.

Activities CH2M provided for the TRTP during construction include: engineering, environmental, and regulatory review, and technical evaluation and strategy support to comply with CEQA and NEPA. Additional environmental compliance support includes technical consulting, mitigation monitoring and reporting, agency coordination support, variance support, mitigation plan preparation, environmental P6 scheduling, and photographic documentation.

Additionally, CH2M provided review and comment support of the TRTP Draft and Final EIR/EIS, TRTP Supplement Draft and Final EIS, and TRTP Supplemental Draft and Final EIR/EIS (FAA marker balls and lighting). CH2M also provided CEQA/NEPA review and comment support during preparation testimony associated with undergrounding of the TRTP in Chino Hills, as well as review and comment on the TRTP Addendum prepared for undergrounding the TRTP through Chino Hills.

**Senior Technical Consultant, Southern California Edison (SCE), West of Devers Upgrade Project.** Reviewed and coordinated review of the Draft EIR/EIS for the West of Devers Upgrade Project and provided recommendations to SCE for responding to the CPUC.

Recommendations included how the document could be modified to reflect how potential impacts were characterized, how alternatives were evaluated, and whether mitigation measures identified were appropriate to the impacts. Also reviewed and coordinated review of the Final EIR for the West of Devers Upgrade Project on behalf of SCE. Review comments focused on incorporation of previously provided comments into the Final EIR and additional CEQA concerns.

**Project Manager, Southern California Edison (SCE), Eldorado-Ivanpah 220 kV Transmission Line Upgrade Project, CA and NV.** Project manager for the preparation of the aesthetics/visual resources and noise section of the Proponent's Environmental Assessment (PEA). The PEA was prepared to address the California Environmental Quality Act (CEQA) and National

**Brenda Grogg Eells**

SENIOR PROJECT MANAGER

Environmental Policy Act (NEPA) because a portion of the line is located on land under the jurisdiction of the U.S. Department of the Interior, Bureau of Land Management (BLM).

**Project Manager, Solar PV Development, Los Angeles County, CA.**

Project Manager for permitting and CEQA analysis for a nominal 139-MW solar PV project in northeastern Los Angeles County. Prepared land use permit applications and managed field studies and preparation of technical reports to support the project's Environmental Impact Report.

**Project Manager, Solar PV Development, Kern County, California.**

Project Manager for permitting and CEQA analysis for a nominal 126-MW solar PV project in southeastern Kern County. Prepared land use permit applications and managed field studies and preparation of technical reports to support the project's Environmental Impact Report.

**EDUCATION/QUALIFICATIONS**

BS Chemical Engineering,  
Massachusetts Institute of  
Technology (MIT), 2007

**REGISTRATION**

- Engineer in Training, California..

## Elyse Engel

**PROJECT MANAGER; AIR QUALITY SPECIALIST**

Elyse Engel is a chemical process engineer, specializing in air quality. She is experienced in air quality compliance, including preparing greenhouse gas (GHG) emissions inventories, construction and operational air emissions estimates in support of California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) evaluations, air dispersion modeling, human health risk assessments (HHRAs), and risk management plans (RMPs). Elyse has prepared CEQA and NEPA permitting documentation using both URBEMIS2007 and CalEEMod to estimate construction and operation-related emissions for purposes of demonstrating a project's less-than-significant impacts relative to the available thresholds.

**Areas of Expertise**

- Experience managing multi-media compliance projects
- Experience preparing CEQA/NEPA Air Quality Analyses
- Air permitting experience
- GHG reporting experience

**Relevant Project Experience****Small Power Plant Exemption (SPPE) Application Preparation; California**

**Client:** Laurelwood Data Center

**Title:** Task Lead

**Start/End Dates:** 2019 to present

**Responsibilities:** Estimated short- and long-term emissions associated with construction and operation, respectively, of a data center using CalEEMod methodology and emission factors from EMFAC. Drafted and revised the Air Quality and Greenhouse Gas sections of the SPPE and the accompanying appendices, including evaluations of applicable federal, state, and local air and GHG regulations. Supported preparation of human health risk assessments to evaluate potential risk of short- and long-term exposure to emitted toxic air contaminants. As part of the California Energy Commission (CEC) review process, prepared additional technical evaluations to respond to CEC Staff inquiries, including an evaluation of the project's ability to comply with the Bay Area Air Quality Management District's (BAAQMD) new policy regarding the potential to emit for emergency backup power generators.

**Compliance Assistance; Vernon, CA**

**Client:** City of Vernon (City)

**Title:** Project Manager

**Start/End Dates:** 2008 to present

**Responsibilities:** Collected site data and prepared GHG emissions inventories for the City, including emissions from fleet vehicles, city offices and buildings, the power plant, and transmission lines. Performed

**Elyse Engel**PROJECT MANAGER; AIR QUALITY  
SPECIALIST

emissions calculations according to the California Climate Action Registry (CCAR), The Climate Registry (TCR), the California Air Resources Board (ARB), and the U.S. Environmental Protection Agency (EPA) protocols. Provided verification assistance, which included site visits and communication with a third party verifier. Established a compliance calendar to capture the City's air quality, industrial wastewater and storm water, hazardous materials, and GHG reporting requirements under various agencies. Managed a team, including CH2M and City personnel, to implement the compliance calendar. Coordinated preparation and submittal of various compliance reports, including Quarterly Certification of Emissions Reports and Annual Permit Emissions Program Reports for the South Coast Air Quality Management District (SCAQMD). Prepared a Title V Permit Renewal Application for the City, which was submitted to the SCAQMD. Researched developments to the ARB's Cap-and-Trade Program for relevance to the City and provided assistance in preparing for the first allowance auction, held in 2012. Received written, positive feedback from the City regarding successful management of and commitment to quality for the Compliance Assistance Project.

**Air Issues and Regulations (AIR) Committee; Oakland, CA****Client:** Bay Area Clean Water Agencies (BACWA)**Title:** Project Manager**Start/End Dates:** 2013 to 2017

**Responsibilities:** Managed regulatory services to BACWA's AIR Committee, which includes agencies that own and operate publicly-owned treatment works (POTWs) in the San Francisco Bay Area. Conducted bi-monthly meetings to inform agencies of local, state, and federal air quality and climate change regulations that may impact POTWs. Advocated on behalf of agencies to the ARB, BAAQMD, and other regulatory agencies. Prepared a comment letter on behalf of agencies to encourage the BAAQMD to consider cross-media regulatory issues in their proposed Climate Protection Strategy (e.g., nutrient removal's impact to GHG emissions and air toxics regulations that discourage the use of renewable biogas).

**Risk Management Plan (RMP) Updates; Nationwide****Client:** Various**Title:** Project Manager**Start/End Dates:** 2010 to present

**Responsibilities:** Participated in process hazard analyses for chlorine and ammonia processes used for wastewater treatment and/or emissions control. Audited facilities' RMPs and Process Safety Management Plans to assess compliance with the California Accidental Release Prevention Program, EPA, and Occupational Safety and Health Administration regulations. Assisted facilities with the creation and/or update of Risk Management Program documents, including performing offsite consequence analyses using RMP\*Comp, ALOHA, and engineering calculations, as appropriate.

**Application for Certification (AFC) Preparation; California**

**Elyse Engel**

PROJECT MANAGER; AIR QUALITY  
SPECIALIST

**Client:** AES

**Title:** Task Lead

**Start/End Dates:** 2012 to present

**Responsibilities:** Estimated short- and long-term emissions associated with repowering a natural gas-fired power plant using CalEEMod methodology and emission factors from EMFAC. Drafted and revised the Air Quality and Public Health sections of the AFC and the accompanying appendices, including evaluations of applicable federal, state, and local air and GHG regulations. Interfaced with client and regulatory agencies during this effort to resolve disagreements surrounding appropriate mitigation, potentially significant impacts, methodology, etc. Led team members to complete tasks for multiple sites simultaneously with very truncated delivery schedules. As part of the CEC licensing process, participated in evidentiary hearings as an air quality and public health technical expert.

**CEQA and NEPA Evaluations; California**

**Client:** Various Clients

**Title:** Task Lead

**Start/End Dates:** 2011 to present

**Responsibilities:** Estimated short- and long-term emissions associated with various remediation projects, new construction projects, and modification of existing interstates and roadways within California using CalEEMod methodology and emission factors from EMFAC and/or CT-EMFAC. Completed regional-level and project-level conformity analyses, including qualitative evaluations of mobile source air toxics and particulate matter hot-spots. Performed carbon monoxide (CO) hot-spots analyses using the CALINE4 and CAL3QHC air dispersion models. Revised model runs quickly to incorporate new data or methodology to meet an accelerated schedule. Completed a general conformity analysis for several of these projects.

## EDUCATION/QUALIFICATIONS

M.S., Colorado State University,  
Ecology, 1999

B.S., Colorado State University,  
Environmental Health, 1995

## REGISTRATIONS/ CERTIFICATIONS

Professional Wetland Scientist  
(PWS# 2107)

## LOCATION

Oakland, CA

## DISTINGUISHING QUALIFICATIONS

- Certified Professional Wetlands Scientist (PWS) with 20 years of experience working on natural resource management and infrastructure projects in the western United States.
- Expert in Clean Water Act (CWA) Section 404 and 401 regulations and wetland mitigation planning.
- Successfully managed 404/401 permit acquisition and compliance for a broad range of projects including utility pipelines, flood control facilities, water reservoirs, habitat restoration, transportation, and residential/commercial land development projects.
- 15 years of CEQA/NEPA compliance expertise ranging from categorical exemptions to complex, statewide program EIR/EIS documents.
- Extensive ESA compliance experience including leading section 7 consultations with USFWS and NMFS for complex projects as well as preparation of section 10 documentation.

# Kevin T. Fisher, M.S., PWS

## PRINCIPAL BIOLOGIST

### Relevant Project Experience

**Principal Biologist, Line 109 Replacement Project – Gas Transmission Group, PG&E; San Mateo County, CA.** This project involves replacement of 2.7 miles of a gas transmission line that traverse sensitive habitats along the San Francisco Peninsula. Mr. Fisher has been responsible for scheduling and managing subcontractor field activities, managing and tracking project budgets, and overseeing Jacobs' field health and safety protocols. At the onset of construction, he provided PG&E staff with daily and weekly status updates on biological constraints and their implications on construction progress. He worked diligently and effectively to provide staffing resources to address biological constraints, thereby avoiding delay of construction progress. He continues to provide PG&E with regular status updates and coordinates subcontractor work activities

**Phoenix Lake Restoration and Preservation Plan: Tuolumne Utilities District, Sonora, CA (2010–2012, 2015–present).** Phoenix Lake is an 88-acre water supply reservoir located in the foothills of the Sierra Nevada. Sedimentation in the lake has degraded water quality and reduced storage capacity. Kevin led an interdisciplinary team of engineers, geomorphologists, water quality specialists and wetland scientists to develop lake and watershed-based management actions that will improve storage capacity, water quality and ecological functions. Major tasks included: (1) sediment source evaluation and development of control measures, (2) development of lake dredging and wetland enhancement plans, (3) water and sediment quality testing, and (4) hydrologic data collection and analysis. Kevin is currently managing development of construction documents, CEQA compliance, and obtaining regulatory approvals for the project.

**North Valley Regional Recycled Water Program: Del Puerto Water District and Cities of Modesto and Turlock, Stanislaus County, CA (2014–present).** This project will deliver recycled water produced by the cities of Modesto and Turlock to agricultural lands and wildlife refuges on the west side of the San Joaquin River. Kevin led a team of biologists to prepare biological resource sections for CEQA/NEPA compliance, ESA section 7 compliance documentation, a wetland delineation, CWA 404 and F&GC 1602 and 2081 permit applications. These assessments and permits covered over 1,000 acres and 20 miles of pipeline right-of-way. Kevin led environmental compliance for the \$65-million first phase of construction, which was substantially complete in December 2017.

**Delta Research Station Site Planning, EIR/EIS, and Technical Studies: California Department of General Services, Sacramento–San Joaquin River Delta (2013–2017).** The Delta Research Station (DRS) is a proposed science and research center that would provide improved and additional facilities for monitoring the health of the San Francisco Bay-Delta ecosystem. Kevin served as deputy project manager and lead biologist for site screening, conceptual site planning, EIR/EIS, ESA section 7 compliance, and other technical studies. Kevin led preparation of Biological Assessments that considered

**Kevin T. Fisher, M.S., PWS**

PRINCIPAL BIOLOGIST

hydroacoustic effects on listed fish species including Delta smelt, salmonids, and green sturgeon. Kevin successfully assisted the federal lead agency with obtaining Biological Opinions within the desired timeframe.

**San Joaquin River Restoration Program—Salmon Conservation and Research Facility EIR and Permitting: California Department of Fish and Wildlife, Fresno, CA (2012–present).** The California Department of Fish and Wildlife is planning several related actions to support the implementation of the San Joaquin River Restoration Program (SJRRP). A key component of the SJRRP is the construction of a Salmon Conservation and Research Facility (SCARF) capable of producing spring-run Chinook salmon for reintroduction to the river. Kevin is serving as deputy project manager for all aspects of environmental compliance, including preparation of a Programmatic EIR and obtaining all federal, state and local permits for construction of the SCARF.

**Hinman Dam Investigations: California Department of General Services, Yountville, CA (2016–present).** Hinman Dam impounds a small reservoir on the California Department of Veterans Affairs (CDVA) property in Yountville, CA. The Division Safety of Dams (DSOD) has determined the dam is unsafe and has ordered CDVA to develop a plan to repair the dam or rendered it inoperable. Kevin is leading an interdisciplinary team of engineers, hydrologists, geologists, and biologists to develop alternatives that will meet the DSOD requirements. Major tasks include (1) reservoir sediment characterization, (2) flood attenuation assessment, (3) water rights investigation, and (4) biological constraints analysis.

**Madera Canal Capacity Restoration Study NEPA and ESA Compliance: Bureau of Reclamation, Madera County (2014-2016).** As part of the San Joaquin River Restoration Program (SJRRP), the Bureau of Reclamation committed to restoring capacity to the Madera Canal. Kevin served as lead biologist for a feasibility study that evaluated alternatives for capacity restoration. After Reclamation selected the preferred alternative, Kevin prepared the biological resources analysis for NEPA compliance and led ESA section 7 consultation for the project.

**Napa River Restoration Project: Napa County, CA (2011–2016).** Served as the lead biological monitoring for construction over a period of 5 years. Tasks included: baseline vegetation surveys, preparation of inspection reports, and coordination with contractors and design engineers. Also led a wetland delineation for 9 miles of the Napa River.

**Surface Water Supply Project: Stanislaus Regional Water Authority (2016-present).** This project would provide a new surface water supply for the Cities of Turlock and Ceres by activating an existing infiltration gallery in the Tuolumne River and constructing a new raw water pump station, water treatment plant, and pipelines and transmission mains. Kevin is serving as lead biologist for CEQA compliance and permitting.

**J&J Ranch Residential Development: Orinda, CA (2015-Present).** The 20-acre J&J Ranch includes the historic Joaquin Moraga Adobe, which was built in 1841 and is the oldest surviving building in Contra Costa County. J&J Ranch, LLC plans to construct infrastructure to support the development of 13 residential homes. Kevin served as project manager to secured CWA 404 and 401 permits and a California

**Kevin T. Fisher, M.S., PWS**

PRINCIPAL BIOLOGIST

Department of Fish and Wildlife Streambed Alteration Agreement to support the planned development. Kevin prepared a Biological Assessment (BA) that considered the project's potential effects to Alameda whipsnake and California red-legged frog. Construction began in summer 2017 and Kevin is leading all aspects of environmental compliance during construction.

**Arroyo Mocho Floodplain Restoration Project: Zone 7 Flood Control, Livermore, CA (2016–present).** This project aims to enhance the ecological and flood control value of Arroyo Mocho's floodplain. Kevin is managing several tasks to plan the restoration activities including CEQA compliance, survey of invasive plant species, pre-restoration CRAM evaluation, and a study of riparian bird use in the project area.

**Oakville Bridge Replacement Project. Napa County, CA (2015).** Kevin served as the lead biologist for replacement of the Oakville Crossroad bridge over the Napa River. Biological monitoring tasks include: environmental awareness training, pre-construction bird surveys, vegetation removal inspection, relocation of special-status species including steelhead, preparation of inspection reports, and coordination with contractors and design engineers.

**Colma Creek Sediment and Wetlands Evaluation: San Mateo County Department of Public Works (2013–2014).** Kevin led several technical assessments aimed at understanding sedimentation rates and wetland processes in the Colma Creek flood control channel. This effort included measurements of sedimentation rates, mapping of wetland habitats, and evaluation of sediment reuse to create mudflat habitat.

**Suction Dredge Permitting Program Subsequent EIR: California Department of Fish and Game (2009–2012).** Kevin was responsible for managing a team of biologists to develop statewide regulations for suction dredge gold mining. Biological analyses included compilation and evaluation of range and distribution data for all special status fish and amphibians in the state of California. Kevin participated in the development of Program regulations and preparation of Biological Resources, Hydrology and Geomorphology chapters of the EIR.

**Napa River Restoration, Oakville to Oak Knoll Reach IS/MND: Napa County Planning Department (2013).** Kevin led a team of biologists to evaluate potential project impacts and developed detailed mitigation measures to avoid and minimize impacts related to restoration of riparian and floodplain habitat along the Napa River. Key issues included impacts on endangered California freshwater shrimp and threatened salmonids and raptors.

**Napa River Oakville to Oak Knoll Restoration Project, Napa River Ecological Reserve Biological Resources Study: Napa County (2013).** The Napa River Ecological Reserve (NRER) is a 73-acre natural area located in the heart of the Napa Valley. The NRER protects the valley's largest remaining stand of riparian forest. Kevin led a team of biologists to characterize the NRER's biological resources to guide and inform the planning of restoration projects along the Napa River. The study also provided resource management recommendations for the NRER.

**Mare Island Strait Outfall: Vallejo Sanitation and Flood Control District, Vallejo, CA (2012–2014):** This project involved construction of a new wastewater outfall in Mare Island Strait. The District's main outfall

**Kevin T. Fisher, M.S., PWS**

PRINCIPAL BIOLOGIST

historically discharged to the Carquinez Strait, which required the District to pump the effluent a considerable distance. The new outfall will require substantially less pumping, and therefore would have long-term environmental benefits. Kevin led environmental compliance for the CWA 404 permit, CESA ITP and F&GC 1602 Streambed Alteration Agreement, and BCDC permitting. He also led all environmental compliance tasks for construction of the new outfall.

**Newell Creek Dam Intake Gate Repair: City of Santa Cruz, CA (2012).** Responsible for oversight of all biological monitoring compliance activities including surveys for Western Pond Turtle, protection of steelhead habitat, and minimization of impacts to resident freshwater fishes.

**Redwood Creek Watershed Assessment: National Parks Service (2009–2011).** Conducted independent technical review of a watershed assessment prepared for Redwood Creek, a coastal stream in the Golden Gate National Recreational Area with high natural resource values. Review consisted of technical assessments of hydrology, geomorphology, and biological resources. Participated in a multi-disciplinary process to develop priorities for watershed management and restoration.

**Lateral 1 Spillway Pipeline Repair: Modesto Irrigation District, Modesto, CA (2011–2012).** Prepared a Biological Assessment to evaluate the effects of a pipeline repair in the Tuolumne River floodplain near Modesto. The BA evaluated potential project effects on Central Valley (CV) fall-run Chinook salmon, CV steelhead and valley elderberry longhorn beetle (VELB). Led Section 7 consultation with USFWS on behalf of MID, and coordinated the purchase of VELB credits from a mitigation bank.

**Water Master Plan Update Program EIR: Town of Windsor, CA (2010–2012).** Participated in assessment of baseline biological conditions to support the preparation of Program EIR for water infrastructure improvement projects. Work included habitat suitability assessments for several ESA-listed species including California tiger salamander and California freshwater shrimp.

**Stonehurst Creek (Zone 12, Line N) Flood Protection Improvement Project: Alameda County Public Works Agency (2011).** Prepared a Biological Resources Report to document existing conditions and evaluate the effects of proposed flood control improvements. The Biological Resources Report evaluated potential impacts to special status species including Central California Coast DPS steelhead.

**Shingle Mill Gulch Fish Passage Improvement Project: County of Santa Cruz, CA (2007–2008).** Permitting Task Manager for CEQA compliance, Clean Water Act section 404 Nationwide permitting, 401 Water Quality Certification, and California Department of Fish and Game Section 1602 permitting. Prepared Biological Assessment which considered project effects to South-Central California Coast DPS steelhead. Successfully obtained all permits within the Client's desired timeframe.

**Wetland and Hydrology Management Plan for the Watsonville Slough Ecological Reserve: California Department of Fish and Game (2007–2008).** Successfully acted as project manager for a team of consultants to complete a Wetland and Hydrology Management Plan for the Watsonville Slough Ecological Reserve. This Management Plan

**Kevin T. Fisher, M.S., PWS**

PRINCIPAL BIOLOGIST

focused on identifying hydrologic and biological management actions that would improve habitat for California red-legged frog. Coordinated with various scientists, land managers and stakeholders to refine the collective understanding of the slough's hydrologic and ecological function and the actions necessary to improve ecosystem health.

**Tally Ho Creek Enhancement Plan; Arroyo Grande, California; Coastal San Luis Resource Conservation District (2009).** Prepared a biological resource assessment of Tally Ho Creek to characterize existing habitat for California red-legged frog and other special status species. Evaluated potential impacts associated with stream restoration and flood control improvements. Developed recommendations for creek enhancement projects.

**Secret Ravine Fish Passage Improvement Project, Roseville, CA (2008).** Permitting Task Manager for CEQA compliance, Clean Water Act section 404 Nationwide permitting, 401 Water Quality Certification, and California Department of Fish and Game Section 1602 permitting. Prepared Biological Assessment which considered project effects to Central Valley DPS steelhead and Central Valley ESU fall-run Chinook salmon. Successfully obtained all permits within the Client's desired timeframe.

**Peyton Slough Remediation Project, Martinez, CA (2002–2006).** Worked with a team of biologists, hydrologists and engineers to plan, permit and construct a 100 acres wetland restoration and remediation project. Produced technical documents relevant to biological conditions and project implications for environmental compliance and permit applications. Conducted pre-construction surveys for sensitive species. Provided biological monitoring and construction management support.

**Kinder Morgan Energy Partners, Various Pipeline Projects (2002–2006).** Conducted biological monitoring and pre-construction surveys for pipeline repairs, construction, and emergency response projects throughout California. Tasks included pre-construction nesting bird surveys, burrowing owl monitoring, and general biological oversight.

**Solano County HSS Building Wetland Mitigation and Permitting: Solano County Department of Public Works, Solano County, CA (2001–2006).** Coordinated and executed a 5-year monitoring plan for vernal pool mitigation. Implemented successful remedial seeding action to enhance native plant establishment in constructed vernal pools. Conducted hydrologic and biological monitoring of constructed wetlands. Prepared monitoring reports and memorandums for resource agencies and client.

## EDUCATION/QUALIFICATIONS

B.S., Environmental Policy Analysis and Planning, UC Davis

## OFFICE LOCATION

- Sacramento, CA

## DISTINGUISHING QUALIFICATIONS

- Experienced in preparing environmental documents to fulfill California Environmental Quality Act (CEQA), National Environmental Policy Act (NEPA), and other resource agency requirements
- Specialized experience in permitting and application leadership activities with various municipal, state, and federal entities
- Specialist in applying environmental regulations to water infrastructure and water resources projects
- Expertise in the comprehensive analysis of project impacts to surface water hydrology, groundwater, water supply, wastewater treatment, and drainage and stormwater quality

# Matt Franck

## PROJECT MANAGER

Environmental planner with 30 years of experience managing and writing environmental impact assessment documents that comply compliance with NEPA and CEQA.

## Project Experience

**Water Resources Task Manager; Huntington Beach Energy Project; AES Corp, Inc.; Huntington Beach, CA.** Prepared Water Resources analysis for a project to repower the existing Huntington Beach Generating Station in Huntington Beach, CA. A key feature of the repowering project was to remove the existing plant from using once-through ocean cooling. The project involved study of potential recycled water availability from the nearby wastewater treatment plant, requiring study of various pipeline alignments and advanced treatment options ultimately resulting in a determination that using recycled water for this project was environmentally undesirable and economically unsound. Issues of concern also included changes in ocean discharges and site redevelopment to incorporate advanced stormwater pollution controls.

**Water Resources Senior Technical Reviewer; Ivanpah Solar Electric Generating System; Bright Source Energy, Inc.; Mojave Desert, CA.** Assisted in the preparation of a Water Resources analysis as a Senior Technical Reviewer. The project included constructing a concentrated solar thermal facility on 1,843 acres of land in the Mojave Desert. Key water resources issues of concern were availability of groundwater for the thermal facility and the disturbance to hydrology from the large construction site.

**Water Resources Task Manager; Hidden Hills Solar Electric Generating System; Bright Source Energy, Inc.; Mojave Desert, CA.** Prepared the Water Resources analysis for a project to construct a concentrated solar thermal facility on 3,277 acres of land in eastern California, near Pahrump, NV. Key water resources issues of concern were availability of groundwater for the thermal facility, associated drawdown impact to deep-rooted plants such as mesquite, and the disturbance to hydrology from the large construction site.

**Water Resources Task Manager; Carlsbad Energy Center Project; NRG, Inc.; Carlsbad, CA.** Prepared Water Resources analysis for a project to repower the existing Encina Power Station in Carlsbad, CA, using natural gas turbines. The project involved the use of reclaimed water from the nearby wastewater treatment plant, with an alternative source to use desalinated seawater. Key issues included marine impacts from seawater intake, brine disposal, and the capacity of the existing reclaimed water distribution system.

**Water Resources Task Manager; Lompoc Wind Energy Project; Pacific Renewable Energy Generation, LLC.; Santa Barbara, CA.** Prepared Water Resources analysis for a project to install 60 to 80 wind turbines and ancillary facilities on 2,950 acres in Santa Barbara County, CA. Key water resources issues of concern included disturbance to onsite water resources from the large extent of construction activities,

**Matt Franck**

PROJECT MANAGER

stormwater quality control, and development of an onsite facilities (including a well and septic system) for the operations units.

**Water Resources Task Manager; Eastshore Energy Project; Tierra Energy, Inc.; Hayward, CA.** Prepared Water Resources analysis for a new natural gas power plant in Hayward, CA, using 14 reciprocating engine generators. Key water resources issues of concern included the development of structural features for onsite stormwater quality control, and process wastewater discharges to a municipal system.

**Water Resources Task Manager; Humboldt Bay Repowering Project; Pacific Gas and Electric, Company; Eureka, CA.** Prepared Water Resources analysis for a project to repower the existing Humboldt Bay Power Plant south of Eureka, CA, using ten natural gas powered reciprocating engine generators. Key water resources issues of concern included stormwater quality to an extended detention basin, process wastewater discharges to a municipal system, and the decrease in lagoon flows because of reduced use of the existing once-through cooling system.

**Water Resources Task Manager; Application for Certification for San Francisco Electric Reliability Project; Public Utilities District for the City and County of San Francisco, CA.** Prepared the Water Resources section of an Application for Certification, a California Energy Commission process that is functionally equivalent to CEQA. The CEQA-equivalent evaluation focused on water, wastewater, and stormwater generation and was used by the proposed facility in the context of Citywide compliance with the federal Clean Water Act and state Porter-Cologne Water Quality Control Act. Work efforts included testimony at evidentiary hearings.

**Water Resources Task Manager; Vernon Power Plant; City of Vernon, CA.** Prepared Water Resources analysis for a new natural gas power plant in Vernon, CA, using three gas-fired turbines and one steam turbine. The project would redevelop an existing industrial site in this highly industrial community. Key water resources issues of concern included calculating drainage credits based on changes to the existing site drainage patterns, stormwater quality control during construction and operation, availability of recycled water, and the quantity and quality of wastewater discharges.

**Water Resources Task Manager; Westley-Marshall Substation and Transmission Line Project; Turlock Irrigation District; Stanislaus County, CA.** Prepared Water Resources analysis for an approximate 12-mile transmission line project in rural Stanislaus County, CA. The project also involved nine potential substation sites. Key water resources issues of concern included floodplain risks and stormwater quality control during construction.

**Task Manager; South Bay Replacement Project; LS Power Generation, LLC.; Chula Vista, CA.** Task Manager for Water Resources. Prepared Water Resources analysis for a project to repower the existing South Bay Power Plant in Chula Vista, California, using two natural gas turbines and one steam turbine. The project resulted in the abandonment of the existing once-through cooling system used at the

**Matt Franck**

PROJECT MANAGER

power plant. Key water resources issues of concern included stormwater quality during construction, plant operations, and wastewater discharges (quantity and quality).

**Senior Technical Reviewer; Chula Vista Energy Upgrade Project; MMC Energy, Inc.; Chula Vista, CA.** Senior Technical Reviewer for Water Resources. Assisted in the preparation of a Water Resources analysis. Project replaced existing units with two newer, more efficient natural gas turbines. Efforts included testimony at evidentiary hearings.

**Task Manager; Critical Issues Review—Various Sites; Ramco Energy, Inc.; CA.** Task Manager for Water Resources. Prepared water resources portion of Critical Issues Review report in support of a Request for Offer by Pacific Gas and Electric Company. The critical issues review covered various sites in Northern California and addressed critical water resources topics, such as water supply availability, wastewater disposal capacity, and discharge limitations.

**Task Manager; Modesto Irrigation District Electric Generation Station; Modesto Irrigation District; Ripon, CA.** Task Manager for the preparation of the Water Resources section of this Small Power Plant Exemption, a California Energy Commission process that is functionally equivalent to CEQA. The CEQA-equivalent evaluation focused on water, wastewater, and stormwater generation and was used by the proposed facility in compliance with the federal Clean Water Act and state Porter-Cologne Water Quality Control Act.

**Task Manager; Applications for Certification for Walnut Creek Energy Park and Sun Valley Energy Project; Edison Mission Energy; City of Industry/Romoland, CA.** Provided support for two Applications for Certification before the California Energy Commission for similarly designed 500-MW natural gas-fired peaking power plants, using the GE LMS100 advanced gas turbine technology.

**Task Manager; Application for Certification for Roseville Energy Park; Roseville Electric; Roseville, CA.** Provided support for an Application for Certification before the California Energy Commission for a 160-MW natural gas-fired power plant in Roseville, CA.

**Senior Technical Reviewer; GWF Energy Tracy Combined Cycle Conversion Project; San Joaquin County, CA.** Senior Technical Reviewer for Water Resources. Assisted in the preparation of a Water Resources analysis. The project updated an existing peaking plant to a combined-cycle facility. Key water resources issues of concern included availability of groundwater for the thermal facility and the disturbance to hydrology and water quality.

## EDUCATION/QUALIFICATIONS

B.S., Environmental Toxicology, UC Davis

## OFFICE LOCATION

- Sacramento, CA

## DISTINGUISHING QUALIFICATIONS

- Over 19 years of experience in project management and environmental compliance for multiple utilities throughout California.
- Expert ability for development of CEQA compliant documents utilizing large multidisciplinary teams composed of internal and external team members
- Experience with permitting, licensing, and construction of natural gas, nuclear, solar, wind, and hydroelectric facilities and associated linear facilities throughout California
- Skilled in data collection and permit analysis for large multifaceted facilities.
- Technical expertise in multimedia compliance audits.

# Sarah Madams

## SENIOR PROJECT MANAGER

Over nineteen years of professional experience including project management, regulatory compliance, permitting, data collection and analysis, audits, and technical writing.

### Natural Gas Power Plant Permitting and Construction Experience

**Deputy Project Manager; Laurelwood Data Center; Edgecore; Santa Clara County, California.** Deputy Project Manager for the Small Power Plant Exemption (SPPE) before the California Energy Commission for a data center within the City of Santa Clara. Oversaw the preparation of several technical discussions including Geology, Population & Housing, and Utilities. Prepared the Hazardous Materials and Energy sections of the SPPE. Coordinated biological and cultural surveys of the project area. Addressed multidisciplinary issues received from state and local agencies.

**Project Manager, Almond 2 Power Plant, Turlock Irrigation District, January 2009 - June 2012.** Preparation of license application and construction oversight for a 174-megawatt simple-cycle power plant, including construction and permitting of an 11.6-mile-long Pacific Gas and Electric Company natural gas pipeline, and 2.9-mile-long rerouted transmission line within Stanislaus County, CA.

Managed a multidisciplinary team of scientists, planners, and engineers in preparing and filing the license application before the California Energy Commission and preconstruction and construction compliance documents including biological, cultural, paleontological, worker safety, stormwater, water resources, and waste management. Coordinated efforts between CEC project management, local and state agencies and project staff. The plant is currently in operation.

**Project Manager, Redondo Beach Energy Project, Redondo Beach, California.** Managed the preparation of the Redondo Beach Energy Project AFC for a 546-MW combined cycle repower of the existing Redondo Beach Generating Station located in a densely populated area of Redondo Beach, CA. The project is actively opposed by several public groups and the City of Redondo Beach. Managed a multidisciplinary team of scientists, planners, and engineers in preparing and filing the license application. Coordinated biological, cultural, paleontological, visual and noise surveys of the project area. Attended public workshops and hearings.

**Project Manager, Lodi Energy Center, Northern California Power Agency, January 2008 - November 2012.** Preparation of license application and construction oversight for a 255-megawatt combined-cycle power plant including a 1.6 mile-long Pacific Gas and Electric Company natural gas pipeline within San Joaquin County, CA.

Managed a multidisciplinary team of scientists, planners, and engineers in preparing and filing the license application and preconstruction and construction compliance documents for the California Energy Commission. Coordinated efforts between California Energy Commission project management, local and state agencies

**Sarah Madams**

SENIOR PROJECT MANAGER

and project staff. Conducted FAA airspace analysis for construction of facility and gas line. The Plant is currently in operation.

**Deputy Project Manager; Application for Certification; Alamos Energy Center; AES Southland Development LLC; Long Beach, California.** Deputy project manager for the licensing for a 1,950-MW combined cycle repower of the existing Alamos Beach Generating Station located in Long Beach, CA. The project includes a 1,000-foot-long pipeline. Assisted with managing a team of planners and scientists preparing documents in support of the California Energy Commission Application for Certification. Addressed multidisciplinary issues received from state and local agencies.

**Deputy Project Manager; Russell City Energy Center Amendment; Calpine; Alameda County, California.** Deputy Project Manager for the Application for Certification before the California Energy Commission for a 600-megawatt power plant. Prepared and provided written testimony for the waste management, alternatives, worker health and safety and hazardous waste sections of the Application for Certification. Coordinated biological and cultural surveys of the project area. Addressed multidisciplinary issues received from state and local agencies. Attended public workshops and hearings. The plant is currently in operation.

**Project Manager; Los Esteros Critical Energy Facility, Phase 2 Construction Calpine, San Jose, California.** Project Manager for 180-megawatt conversion to combined cycle. The project required the preparation of numerous studies and documents to satisfy California Energy Commission Conditions of Certification. These studies/documents included the preparation of archaeological and paleontological survey reports, and biological resource protection permits. Assisted with the development and implementation of biological, cultural, and paleontological resource monitoring programs; risk management plan; and traffic and transportation management plan. The plant is currently in operation.

**Renewable Energy Permitting and Construction Experience**

**Project Manager, Pahnamid Wind Energy Project, Confidential Client, October 2011 - December 2013.** Preparation of studies and documents to satisfy Kern County, California Environmental Quality Act and National Environmental Policy Act processes for a 411-megawatt wind power project adjacent to the Tehachapi wind resource area.

Project manager for the environmental permitting and Project included conducting paleontological, cultural and biological resources surveys, evaluating potential project impacts and identifying mitigation measures through consultations with local, state and federal agencies including Kern County, California Department of Fish and Game and the U.S. Fish and Wildlife Service.

**Deputy Project Manager; Rice Solar Energy Project Licensing and Preconstruction Compliance; SolarReserve, LLC; Riverside County, California.** Deputy project manager for licensing and preconstruction compliance for a 150-megawatt concentrating solar

**Sarah Madams**

SENIOR PROJECT MANAGER

energy project featuring a mirror field of 17,500 heliostats, solar receiver tower, and integral thermal storage using a liquefied salt mixture. The project design includes a 1,410-acre project site, air-cooled condenser, steam turbine generator, hot and warm salt storage tanks, and 9.2-mile-long 230-kilovolt transmission line. Assisted with managing a team of planners and scientists preparing documents in support of the California Energy Commission Application for Certification. Managed preparation of preconstruction compliance documents under review by the CEC and other agencies, including Bureau of Land Management, Western Area Power Administration, U.S. Fish and Wildlife Service, California Department of Fish and Game, and other agencies.

**Utility Project Experience**

**Task Lead. PG&E MW Solar PV Program San Joaquin County, June 2010-September 2010.** Preparation of Project Environmental Assessment Reports for four separate solar photovoltaic farms located throughout San Joaquin County. Involved complete CEQA analysis for each facility and coordination with local, state, and federal agencies.

**Task Lead, Diablo Valley Power Plant, PG&E, January 2018-May 2018.** Prepared analysis of discretionary and ministerial permits currently in place at the DCPD and assisted with development of a Project Management Plan for the Future Land Use Plan related to the decommissioning of the DCPD. Involved review of existing permits, leases, and future permits needed after DCPD shutdown, as well as anticipated schedule for future decommissioning activities.

**Project Manager, Upper American River Project FERC License Recreation Implementation, Sacramento Municipal Utility District; November 2015 - January 2018.** Project Manager on the UARP Recreation Implementation team. Duties included the management of multiple recreation project improvement and construction projects on US Forest Service land within the Eldorado National Forest.

Permitting, engineering, and contracting for multiple recreation facilities within the Eldorado National Forest including the reconstruction of the 100+ site Sunset campground; a 9.3-mile-long back country trail, composting toilet installation, and a 1.6-mile-long Class II bike trail. Also prepared the UARP Safety During Construction Plan for recreation implementation and developed contractor safety documents for working in remote locations. Conducted regular project reviews with project teams (both internal staff and contractors). Coordinated multiple meetings with USFS and agency staff to gain concurrence on project design and schedule.

**Initial Study, August Substation, Turlock Irrigation District, California (2004).** Managed the preparation of an Initial Study for the construction and operation of a proposed substation in Hilmar. The IS evaluated all environmental resources and identified mitigation for significant impacts. She also prepared the hazardous materials portion of the IS.

**EDUCATION/QUALIFICATIONS**

MS, with Distinction, Biological Sciences, Marine and Freshwater Fisheries, California Polytechnic State University, 2011

BS, Ecology and Systematic Biology, Environmental Studies Minor and Biotechnology Minor, California Polytechnic State University, 2006

**OTHER**

Length of Service in the Profession:  
13 Years

Office Location: Oakland, California

**David Rasmussen****BIOLOGICAL TECHNICAL CONSULTANT**

David excels as an experienced biologist, project manager, and consultant SME who applies his expertise as a Regulatory Specialist to serve a variety of environmental projects. Interacting with numerous regulatory agencies, he prepares effective CDFW Streambed Alteration Agreements and Incidental Take Permits, USFWS and NMFS Biological Assessments and Letters of Concurrence, HCPs, USACE Section 404 Nationwide Permits and Individual Permits, RWQCB Board Section 401 Certifications, and BCDC Permits. He also has experience across a wide range of projects with obtaining Coastal Development Permits and working with the State Lands Commission. Aware of your preferences and expectations from presently serving as the lead biologist and project manager for your Oakland J-East Shore 115 kV Reconductoring Project and the Maple Creek-Hoopa Reliability Project, the deputy project manager for your Bay Towers Program, and as a regulatory specialist and SME at several of your other sites, David supplies his technical expertise and proven leadership to collaborate with you to meet your environmental goals and to drive project success.

**Relevant Experience**

**Project Manager and Lead Biologist, Oakland J- Eastshore 115 kV Reconductoring Project, PG&E, Oakland, California.** Managing project and serving as lead biologist for project involving reconductoring, re-routing lines, and providing structural upgrades for a 115 kV transmission line running along the San Francisco Bay shoreline. Leading budget forecasting, completion estimates, and weekly meetings with project team to discuss project status. Coordinated field surveys and prepared a draft PEA and NOC. All documents required for a PEA and a NOC being prepared concurrently to speed project permitting timeframe.

**Project Manager, Maple Creek-Hoopa Reliability Project, PG&E, Various Locations, Trinity Mountains, Hoopa Reservation, Maple Creek, and Humboldt County, California.** Providing constructing reliability upgrades on 27-mile stretch of 60 kV electrical transmission lines extending from Maple Creek to the Hoopa Reservation in the Trinity Mountains. Led budget forecasting, completion estimates, weekly meetings with the project team to discuss project status, and the permitting strategy. Project currently being released to construction with construction activities anticipated in late July 2019.

**Deputy Project Manager and Lead Biologist, Bay Towers Program, PG&E, San Francisco Bay Area, California.** Assessing various power line and transmission line structures and performing subsequent permitting for maintenance on or to replace those structures. Project currently on hold. Upon resuming, poised to lead biological field surveys and to work directly with engineering and construction management teams to design work areas to minimize environmental impacts. Scope intended to transition into project permitting through various federal, state, and local agencies, including preparation of California Environmental

**David Rasmussen**

BIOLOGICAL TECHNICAL CONSULTANT

Quality Act documents and potential National Environmental Policy Act documents, depending on the project impacts.

**Lead Biologist, Embarcadero-Potrero 230 kV Transmission Project, PG&E, San Francisco Bay Area, California.** Produced and reviewed a biological constraints analysis and biological section of the Proponents Environmental Assessment (PEA) and Initial Study/Mitigated Negative Declaration (IS/MND) sent to California Public Utilities Commission (CPUC) for transmission line project. Through conducting a PEA and several meetings with the CPUC, the CPUC finalized and accepted the IS/MND approximately 6 months ahead of the expected date. Also, prepared relevant resource agency permits, including United States Army Corps of Engineers (USACE) Nationwide Permits involving coordination with the Dredged Material Management Office; and performed a biological assessment for potential affects to longfin smelt, steelhead, coho salmon, Chinook salmon, North American green sturgeon, and several marine mammals protected under the Marine Mammal Protection Act, with scope including discussions and negotiations with resource agencies. Observed potential marine, estuarine, and terrestrial biological impacts for proposed submarine and underground utility line. This information was used to prepare supporting documentation and permitting for the State Lands Commission Lease for the transmission line. Identified potential special-status species and sensitive resources along all potential routes using expertise in marine, estuarine, and freshwater species. Conducted a CNDDDB and literature searches, and performed habitat assessments. Identified approved seasonal work windows to avoid sensitive life stages for Chinook salmon, Coho salmon, steelhead, and Pacific herring. Evaluated potential for special-status species and sensitive habitats to be found along potential routes, including eelgrass beds, oyster beds, and habitats for anadromous fish, marine mammal, and migratory bird species. Also, conducted literature analyses to identify potential issues associated with horizontal directional drilling and hydroplow cable installation within the San Francisco Bay.

**Lead Biologist, Consultant Subject Matter Expert, and Regulatory Specialist, PSEP Program, PG&E, Various Sites, Vacaville, San Luis Obispo, and Arcata, California.** Designated as lead biologist and consultant subject matter expert for a majority of the PG&E hydrostatic test segments west of Vacaville, north of San Luis Obispo, and south of Arcata. Performed approximately 75-90 hydrotesting miles per year. Managed scheduling and coordination of biological monitors for hydrotest program and confirmed projects complied with resource agency permits and appropriate AMMs implementation. This also included obtaining Coastal Development Permits for three projects in the Arcata area, and navigating the intricacies of how local jurisdictions implement the Coastal Act in Santa Cruz and San Luis Obispo Counties. As lead biologist, conducted biological assessments, focused surveys, and pre-construction surveys for each test segment, as well as managing and coordinating with other biologists and sub-consultants. Scope also entailed writing biological constraints reports and resource agency

**David Rasmussen**

BIOLOGICAL TECHNICAL CONSULTANT

permit applications and reviewing biological survey reports and biological monitoring reports. Also, regularly coordinated with resource agencies throughout the permitting process.

**Lead Biologist North San Joaquin Power Connect, PG&E, Stockton and Lodi, California.** Constructed a new double circuit 230 kV transmission line between Stockton and Lodi. Project currently in siting stage. Working to refine potential corridors and to identify constraints and opportunities for siting of the new line. Role to transition into overseeing staff preparing the Biological Resources section of the PEA.

**Lead Marine Biologist; Confidential Client.** Led the review and response for marine and terrestrial biology impacts for an IS/MND that was prepared by a third party for the dismantling and removal of several offshore intake and outflow structures associated with a nuclear power plant. Worked closely with the client's biologists and legal team to prepare scientifically rigorous technical memorandums to dispute multiple measures in an IS/MND. The technical memorandums presented alternative measures that would better protect species, be easier to implement and enforce, and remove several major construction constraints including extending seasonal work windows.

**Lead Fisheries Biologist; San Mateo Wastewater Treatment Plant Upgrade; San Mateo, California.** Mr. Rasmussen was the lead fisheries biologist and author for the Biological Assessment for aquatic species for the upgrade and expansion of the San Mateo Wastewater Treatment Plant, and supported documentation regarding an extension of the State Lands Commission lease for an outfall pipeline and diffuser. Work involved conducting literature reviews on project impacts, research on species that may occur in the project area, and preparation of Biological Assessments for species under the jurisdiction of USFWS and NOAA Fisheries. Mr. Rasmussen also met with regulators from the RWQCB and NOAA Fisheries to discuss the project and to speed the permit approval process.

## EDUCATION/QUALIFICATIONS

B.S., Geological Sciences, UC Santa Barbara

## OFFICE LOCATION

- Sacramento, CA

## DISTINGUISHING QUALIFICATIONS

- Over 13 years of experience in project management and environmental compliance for multiple utilities throughout California.
- Expert ability for development of CEQA compliant documents utilizing large multidisciplinary teams composed of internal and external team members
- Experience with permitting, licensing, and construction of natural gas facilities throughout California

# Megan Sebra

## PROJECT MANAGER

Over thirteen years of professional experience including project management, regulatory compliance, permitting, data collection and analysis and technical writing.

### Relevant Project Experience

#### **Project Manager. Bloodlines Vineyard Environmental Impact Report, Napa County, October 2017-March 2019.**

Preparation of Project Environmental Assessment Reports for the 278-acre Bloodlines Vineyard Erosion Control Plan EIR. Involved complete CEQA analysis for the 278-acre property and coordination with local, state, and federal agencies.

#### **Project Manager. Heiser-West Lane Vineyard Environmental Impact Report, Napa County, October 2017-March 2019.**

Preparation of Project Environmental Assessment Reports for the 5-acre Heiser-West Lane Vineyard Erosion Control Plan EIR. Involved complete CEQA analysis for the 21-acre property and coordination with local, state, and federal agencies.

#### **Project Manager. LeColline Vineyard Environmental Impact Report, Napa County, October 2017-March 2019.**

Preparation of Project Environmental Assessment Reports for the 33-acre Heiser-West Lane Vineyard Erosion Control Plan EIR. Involved complete CEQA analysis for the 88-acre property and coordination with local, state, and federal agencies.

#### **Application for Certification, Mariposa Energy Project (MEP), Mariposa Energy, LLC., Alameda County, California (2009 to 2011).**

Project Coordinator for the AFC for a 200-MW power plant. The project required the preparation of numerous other studies/documents to satisfy the CEC staff request. She reviewed applications, coordinated multidisciplinary data requests and responses, attended public workshops, and prepared a site investigation report for the process water route. Assisted in preparation of Hazardous Materials, and Worker Health and Safety sections of the AFC, and authored the Construction and Operational Waste Management Plans. In addition, she served as liaison and coordinated efforts between CEC project management and staff and completed FAA Notice of Proposed Construction or Alteration (Form 7460-1) as required.

#### **Application for Certification, Oakley Generating Station, Contra Costa Generating Station LLC., Oakley, California (2009-2011).**

Assisted with several aspects of the AFC for a 500-MW combined-cycle power plant. Assisted in preparation of Geology Section for the AFC and prepared the Construction Waste Management Plan.

**Task Manager, Almond 2 Power Plant, Turlock Irrigation District, January 2009 - June 2011.** Preparation of license application and construction oversight for a 174-megawatt simple-cycle power plant within Stanislaus County, CA.

**Megan Sebra**

PROJECT MANAGER

Review of applications, coordination of multidisciplinary data requests and responses, attend public workshops, and preparation a site investigation report for the process water route. Assisted in preparation of Alternatives Sections for the AFC and prepared the Construction Waste Management Plan. Served as liaison and coordinated efforts between CEC project management and staff and completion of the FAA Notice of Proposed Construction or Alteration (Form 7460-1) as required.

**Task Manager, Lodi Energy Center, Northern California Power Agency, January 2008 - November 2012.** Preparation of license application and construction oversight for a 255-megawatt combined-cycle power plant within San Joaquin County, CA.

Managed a multidisciplinary team of scientists, planners, and engineers in preparing and filing the license application and preconstruction and construction compliance documents for the California Energy Commission. Coordinated efforts between California Energy Commission project management, local and state agencies and project staff. Conducted FAA airspace analysis for construction of facility and gas line. The Plant is currently in operation.

**Deputy Project Manager, Carlsbad Energy Center Project, NRG Energy, 2007 - 2011.** Preparation of the AFC for a 558-MW simple-cycle power plant. Review of applications, coordination of multidisciplinary data requests and responses, and served as liaison and coordinated efforts between CEC project management and staff. Completion of FAA Notice of Proposed Construction or Alteration (Form 7460-1) as required.

**Task Lead, GWF Tracy Combined Cycle Power Plant Project, GWF Energy LLC., 2008.** Assisted with several aspects of the Application for Certification for a 314-MW combined-cycle power plant. Review of applications, coordination of multidisciplinary data requests and responses, and served as liaison and coordinated efforts between CEC project management and staff. Completion of the FAA Notice of Proposed Construction or Alteration (Form 7460-1) as required.

**Geologist; Union Pacific Railroad; 2007-2008; San Timoteo, and Wendel, CA.** Perform task management for the preparation of field events to support site closure. Tasks include data analysis, field work, and planning activities for derailment sites at San Timoteo and Wendel, California. Fieldwork included soil, and groundwater sampling, the installation of groundwater monitoring wells. These tasks aided in the preparation of RI reports and delineation of contamination.